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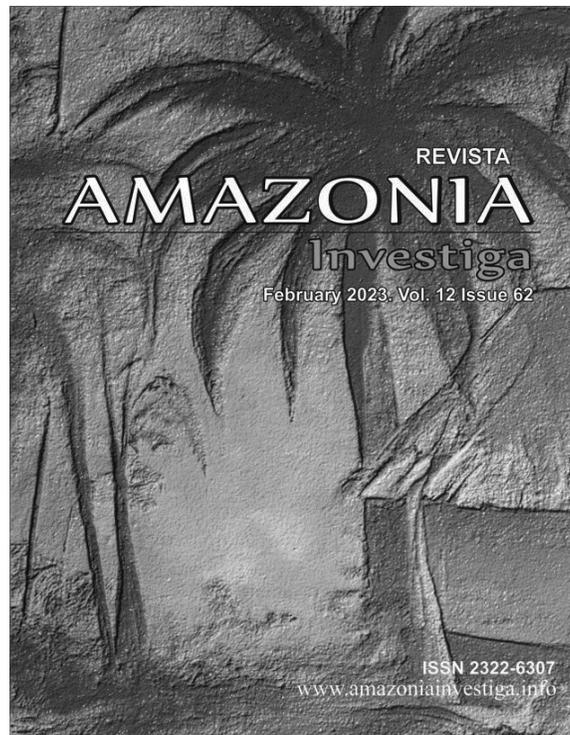


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## Editorial

### La intersección entre la adquisición del lenguaje y la inteligencia artificial: explorando el potencial de los modelos de lenguaje natural

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La adquisición del lenguaje humano y la Inteligencia Artificial han ido unidos de la mano en las últimas décadas. Ha sido uno de los grandes retos de la lingüística computacional, así como también el ser humano. Actualmente, nos encontramos que el proceso de la adquisición del lenguaje está asociado a la psicología cognitiva, así como también han aparecido en escena diferentes sistemas, tales como los *Large Language Models*.

Según estudios antropológicos, los seres humanos nos diferenciamos del resto de los animales en que hemos desarrollado sistemas de comunicación propios que se basan fundamentalmente en la oralidad, pero que también se apoyan en lo visual (Sinha & Jensen de López, 2019). De esta forma, la comunicación humana es propia de la necesidad de la especie y ha evolucionado a lo largo del tiempo para convertirse en un sistema altamente sofisticado. El lenguaje natural humano posee un alto grado de variación, ya que no solo se basa en el sistema oral, sino que también cuenta con un aspecto visual, utilizando señales gestuales y posturales similares a las de los primates (Tomasello, 2019). Sin embargo, a diferencia de estos, el lenguaje humano no depende de ellas en tan gran medida, y ha logrado desarrollar una complejidad única y una capacidad de expresión sin precedentes. Dicho de otro modo, el lenguaje natural humano tiene un componente biológico, en tanto que nuestro cerebro interviene en su adquisición de manera innata.

De este modo, se ha recurrido a la psicología cognitiva para analizar y estudiar el lenguaje humano. Así, el uso de ordenadores para obtener modelos del comportamiento cognitivo es un desarrollo actual en psicología cognitiva que ofrece interesantes perspectivas en el estudio del comportamiento inteligente o social del ser humano (López-González & Guerrero-Bote, 2012). Esta disciplina se encuentra en la interfaz psicología-computación y está asociada a la inteligencia artificial en el estudio de los procesos cognitivos (Russell & Norvig, 2010). Así pues, se ha llevado a cabo un estudio del lenguaje natural humano y su aplicación en sistemas informáticos, puesto que se pretende desarrollar modelos formales y computacionales de la gramática y del habla para que las máquinas puedan producir y entender el lenguaje humano de manera eficiente.

En este contexto, hay que tener en cuenta la cibernética, que surge en la interfaz computación-neurociencia. Así, su objetivo fundamental es el desarrollo de modelos de comunicación y control en el tiempo del comportamiento de sistemas dinámicos (seres vivos o máquinas) (Wiener, 1948). Asimismo, su aplicación computacional al razonamiento humano y a la resolución de problemas incide directamente en la investigación en ciencia cognitiva (Luger & Stubblefield, 2014).

Teniendo en cuenta esto, la lingüística computacional se encuentra en la interfaz lingüística-computación, la cual se dedica al procesamiento del lenguaje natural mediante modelos formales y computacionales de la gramática y del habla (Gómez-Rodríguez & Vilares, 2019). Como consecuencia, esta disciplina busca implementar en los ordenadores la capacidad de producción y entendimiento del lenguaje natural humano, por lo que el análisis y síntesis de voz, así como la traducción automática, son centrales en su estudio (Chomsky, 2019). Sin embargo, desde el punto de vista de la ciencia cognitiva, las gramáticas formales desarrolladas en las últimas décadas ofrecen modelos computables de la complejidad estructural de los sistemas lingüísticos, siendo mucho más interesantes (Pinker, 2020).

Siguiendo esta línea, cabe destacar el uso de *Large Language Models*. Estos modelos se basan en redes neuronales y algoritmos de aprendizaje profundo para analizar, entender y generar el lenguaje humano. Por lo general, son capaces de aprender patrones complejos en grandes conjuntos de datos de texto, lo que les permite producir texto coherente y coherente de alta calidad. Además, los *Large Language Models* han demostrado ser muy útiles en una variedad de tareas de procesamiento de lenguaje natural, como la traducción automática, la generación de texto y la comprensión del lenguaje natural. Dentro de este sistema destaca Generative Pre-trained Transformer 3 (GPT-3) desarrollado por OpenAI (Brown et al., 2020). Este modelo de lenguaje tiene 175 mil millones de parámetros, lo que lo hace

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significativamente más grande que otros modelos de lenguaje previamente desarrollados. GPT-3 ha demostrado ser capaz de realizar tareas de lenguaje natural que antes se consideraban demasiado difíciles para los modelos anteriores, como generar texto coherente y bien formado de alta calidad y traducir idiomas en tiempo real. Otro modelo de lenguaje popular es Bidirectional Encoder Representations from Transformers (BERT) desarrollado por Google (Devlin et al., 2018). BERT se ha utilizado con éxito en una variedad de tareas de procesamiento de lenguaje natural, como la clasificación de texto y la respuesta a preguntas.

A pesar de todo, todavía queda mucho por hacer en todo este proceso. Si tenemos en cuenta a C. Hockett (1960) y W. H. Thorpe (1974), podemos ver que el lenguaje natural humano tiene unas características específicas, según las cuales nos diferencia de cualquier otro sistema vivo o máquina. De este modo, el lenguaje humano tiene una capacidad reflexiva que le permite desarrollar una función metalingüística de la lengua, es decir, de poder reflexionar sobre diferentes aspectos, incluido el propio lenguaje natural. Asimismo, también cuenta con una gran capacidad creativa, en tanto que puede crear elementos lingüísticos nuevos, así como también estructurar los elementos existentes de una manera diferente para generar mensajes completamente novedosos. Este hecho, por tanto, todavía no se encuentra dentro de la Inteligencia Artificial, puesto que por el momento los diferentes sistemas de adquisición del lenguaje se han basado en la repetición de parámetros, de ahí que muchas veces cometa fallos y no desarrolle la información correcta.

Por otro lado, otro aspecto que también obvia la Inteligencia Artificial actualmente es la semántica y la pragmática. Es preciso tener en cuenta que el lenguaje natural humano se desarrolla en su contexto, es decir, contamos con libertad para controlar el estímulo, por lo que existe una adecuación contextual con un alcance ilimitado (Chomsky, 1987). Asimismo, una de las características propias del ser humano es la capacidad de inventar expresiones inéditas, de manera que no estamos expuestos a un proceso exclusivo de imitación, sino que tenemos una base genética que favorece la generación de un lenguaje desde que nacemos dividido en diferentes etapas (Pinker, 1994).

Por todo ello, si verdaderamente se quiere generar un lenguaje aplicado y asociado a la Inteligencia Artificial, hay que centrarse netamente en la capacidad del ser humano para adquirir y desarrollar el lenguaje. Actualmente, todo se está basando en un sistema algorítmico, dejando a un lado las etapas de la adquisición del lenguaje humano. El procesamiento del lenguaje humano en Inteligencia Artificial se centra básicamente en textos, por lo que se ignora la parte oral. El lenguaje oral y el lenguaje escrito son muy diferentes en términos de estructura y gramática, lo que hace que el procesamiento de texto sea insuficiente para entender la comunicación humana de manera completa. Asimismo, los diferentes sistemas usados para dividir la diferentes partes lingüísticas es insuficiente, en tanto que no se tienen en cuenta diferentes estímulos tales como la cuestión pragmática y situacional. Así, el uso del sarcasmo o el tono irónico en una conversación puede cambiar completamente el significado de lo que se está diciendo, algo que las máquinas pueden tener dificultades para detectar y comprender. Por esta razón, con el fin de superar los diferentes desafíos que presenta hoy por hoy la Inteligencia Artificial, el procesamiento de lenguaje natural debe ser utilizado al mismo nivel que los humanos, es decir, es preciso que no sólo se dividan en estructuras morfológicas y sintácticas, sino también en unidades semánticas y pragmáticas con el fin de que el mensaje emitido sea perfecto.

#### الطبيعية اللغة نماذج إمكانات استكشاف: الاصطناعي والذكاء اللغة اكتساب تقاطع

اكتساب اللغة الإنسانية والذكاء الاصطناعي يديران جنبًا إلى جنب في العقود الأخيرة. إنها كانت واحدة من التحديات الكبرى للغة الحاسوبية والإنسان على حد سواء. حاليًا ، نجد أن عملية اكتساب اللغة مرتبطة بعلم النفس الإدراكي ، وظهرت أيضًا نظم مختلفة مثل نماذج اللغة الكبيرة (Large Language Models).

وفقًا للدراسات الأثنولوجية ، يختلف الإنسان عن بقية الحيوانات في أنه قد وضع أنظمة اتصالات خاصة به تعتمد في الأساس على الشفوية ، ولكنها تستند أيضًا إلى الجانب البصري. (Sinha & Jensen de López, 2019) ولذلك ، فإن التواصل البشري يعد ضروريًا للجنس البشري وتطور مع مرور الوقت ليصبح نظامًا متطورًا للغاية. يتميز اللغة البشرية الطبيعية بدرجة عالية من التباين ، حيث لا تعتمد فقط على النظام الشفوي ، بل تتضمن أيضًا جانبًا بصريًا ، باستخدام إشارات الإيماءات والحركات الجسدية المشابهة لتلك التي يستخدمها البرمائيات. (Tomassello, 2019) وعلى عكس ذلك ، لا يعتمد اللغة البشرية إلى هذه الدرجة عليها ، وتمكنت من تطوير تعقيد فريد وقدرة تعبير لا مثيل لها. بمعنى آخر ، يحتوي اللغة الطبيعية الإنسانية على مكون حيوي ، حيث يتدخل دماغنا في اكتسابه بطريقة فطرية.

فإن اللغة الطبيعية راقت الإنسان إلى درجة أراد تساويها مع الآلات. وهكذا ، تم اللجوء إلى علم النفس الإدراكي لتحليل ودراسة اللغة البشرية. وبالتالي ، فإن استخدام الحواسيب للحصول على نماذج للسلوك الإدراكي هو تطور حديث في علم النفس الإدراكي يوفر أفقًا مثيرة في دراسة السلوك الذكي أو الاجتماعي للإنسان (López-González & Guerrero-Bote, 2012). تتواجد هذه التخصصات في واجهة علم النفس والحوسبة وترتبط بالذكاء الاصطناعي في دراسة العمليات الإدراكية (Russell & Norvig, 2010). تم إجراء دراسة حول اللغة الطبيعية الإنسانية وتطبيقاتها في الأنظمة الحاسوبية ، حيث يهدف الباحثون إلى تطوير نماذج رسمية حاسوبية للنحو والكلام لتمكين الآلات من إنتاج وفهم اللغة البشرية بكفاءة.

في هذا السياق ، يجب أن نأخذ في الاعتبار السيبرنياتيكا التي تنشأ في واجهة الحوسبة وعلم الأعصاب. وبالتالي ، يكمن الهدف الأساسي للسيبرنياتيكا في تطوير نماذج للاتصال والتحكم في وقت سلوك الأنظمة الديناميكية (الكانونات الحية أو الآلات). (Wiener, 1948) بالإضافة إلى ذلك ، يؤثر تطبيقها الحوسبي على الاستدلال الإنساني وحل المشكلات مباشرة في البحث في العلوم الإدراكية. (Luger & Stubblefield, 2014)

وبالنظر إلى ذلك ، فإن علم اللغة الحاسوبية يقع في واجهة اللغة-الحاسوب ، التي تهتم بمعالجة اللغة الطبيعية باستخدام النماذج الرسمية والحاسوبية للنحو والكلام (Gómez-Rodríguez & Vilares, 2019). نتيجة لذلك ، تسعى هذه الدراسة إلى تحقيق القدرة على إنتاج وفهم اللغة الطبيعية البشرية في الحواسيب ، لذلك فإن تحليل الصوت والتركييب ، وكذلك الترجمة الآلية ، هي مركزية في دراستها. (Chomsky, 2019) ومع ذلك ، من وجهة نظر العلوم الإدراكية ، تقدم النحويات الرسمية التي وضعت في العقود الأخيرة نماذج قابلة للحساب للتعقيد الهيكلي للأنظمة اللغوية ، وهي أكثر إثارة للاهتمام. (Pinker, 2020)

باستمرار على هذا المنوال ، يجب التأكيد على استخدام نماذج اللغة الكبيرة (Large Language Models). تستند هذه النماذج على شبكات عصبونية وخوارزميات التعلم العميق لتحليل وفهم وتوليد اللغة البشرية. عموماً ، فهي قادرة على تعلم الأنماط المعقدة في مجموعات كبيرة من بيانات النص ، مما يتيح لها إنتاج نص متسق وعالي

الجودة. بالإضافة إلى ذلك، فقد ثبت أن نماذج اللغة الكبيرة تكون مفيدة للغاية في مجموعة متنوعة من مهام معالجة اللغة الطبيعية، مثل الترجمة الآلية وإنتاج النص وفهم اللغة الطبيعية. يبرز في هذا النظام المحول المدرب تدريباً توليدياً (GPT-3) (*Generative Pre-trained Transformer 3*) الذي تم تطويره من قبل OpenAI (Brown et al., 2020). يتكون هذا النموذج اللغوي من 175 مليار معلمة، مما يجعله أكبر بكثير من النماذج اللغوية الأخرى التي تم تطويرها سابقاً. وقد أثبت GPT-3 قدرته على أداء مهام اللغة الطبيعية التي كانت تعتبر صعبة جداً بالنسبة للنماذج السابقة، مثل إنتاج نص منسجم وجيد الصياغة وعالي الجودة وترجمة اللغات في الوقت الفعلي. ويعتبر نموذج اللغة الآخر الشائع هو تمثيلات المشفر المزدوج المستنبطة من المحولات (*Bidirectional Encoder Representations from Transformers*) أو BERT الذي تم تطويره من قبل شركة Google (Devlin et al., 2018). تم استخدام BERT بنجاح في مجموعة متنوعة من مهام معالجة اللغة الطبيعية، مثل تصنيف النصوص والإجابة على الأسئلة.

على الرغم من ذلك، لا يزال هناك الكثير مما يتعين القيام به في هذه العملية. إذا ما أخذنا بعين الاعتبار الخصائص المحددة التي يتميز بها اللغة الطبيعية البشرية، وفقاً لـ Hockett (1960) و W.H. Thorpe (1974)، فإننا نجد أنها تميزنا عن أي نظام حي آخر أو جهاز آلي. وبهذه الطريقة، فإن اللغة البشرية لديها قدرة تأملية تتيح لها تطوير وظيفة تعريفية للغة، وهذا يعني القدرة على التأمل في جوانب مختلفة، بما في ذلك اللغة الطبيعية ذاتها. بالإضافة إلى ذلك، فإنه يتمتع أيضاً بقدرة إبداعية كبيرة، حيث يمكنه إنشاء عناصر لغوية جديدة، وكذلك تنظيم العناصر الحالية بطريقة مختلفة لإنتاج رسائل جديدة تماماً. لذلك، فإن هذه الحقيقة لا تزال خارج نطاق الذكاء الاصطناعي، حيث أن مختلف أنظمة اكتساب اللغة حتى الآن تعتمد على تكرار المعلمات، ومن هنا فإنها ترتكب العديد من الأخطاء ولا تطور المعلومات الصحيحة.

من ناحية أخرى، فإن جانب آخر يتجاهله الذكاء الاصطناعي حالياً هو المعنى والبراغماتية. يجب مراعاة أن اللغة الطبيعية البشرية تتطور في سياقها، أي أننا نمتلك حرية التحكم في المحفز، لذا فهناك تكيف سياقي ذو نطاق غير محدود. (Chomsky, 1987) كما أن إحدى صفات الإنسان هي القدرة على اختراع تعبيرات جديدة، بحيث لنسا عرضة لعملية التقليد الحصرية، بل لدينا قاعدة وراثية تشجع على توليد لغة منذ الولادة وتنقسم إلى مراحل مختلفة (Pinker, 1994).

لذلك، إذا كنت حَقاً ترغب في إنشاء لغة تطبيقية مرتبطة بالذكاء الاصطناعي، فيجب التركيز بشكل صريح على قدرة الإنسان على اكتساب وتطوير اللغة. حالياً، يعتمد كل شيء على نظام خوارزمياتي، متجاهلاً مراحل اكتساب اللغة الإنسانية. يتمحور معالجة اللغة الإنسانية في الذكاء الاصطناعي بشكل أساسي حول النصوص، مما يجعل الجانب الشفوي مهملاً. اللغة الشفوية والكتابية مختلفتان بشكل كبير من حيث الهيكل والقواعد النحوية، مما يجعل معالجة النصوص غير كافية لفهم التواصل الإنساني بشكل كامل. بالإضافة إلى ذلك، فإن الأنظمة المختلفة المستخدمة لتقسيم الأجزاء اللغوية غير كافية، حيث لا تأخذ بعين الاعتبار مختلف المحفزات مثل المسألة البلاغية والموقفية وبالتالي، يمكن أن يؤدي استخدام السخرية أو النبرة الساخرة في المحادثة إلى تغيير معنى الكلام تماماً، مما قد يصعب على الآلات الكشف عنه وفهمه. لهذا السبب، من أجل التغلب على التحديات المختلفة التي تواجهها الذكاء الاصطناعي في الوقت الحالي، يجب استخدام معالجة اللغة الطبيعية على نفس المستوى الذي يستخدمه البشر، أي أنه من الضروري أن لا يتم تقسيمها فقط إلى الهياكل المورفولوجية والصرفية، ولكن أيضاً إلى الوحدات الدلالية والبراغماتية من أجل جعل الرسالة المرسله مثالية.

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## Reflections of Levant and Mesopotamia gods and goddess on Cyprus cylinder seals

### LEVANT VE MEZOPOTAMYA TANRI VE TANRIÇALARININ KIBRIS SİLİNDİR MÜHÜRLERİ ÜZERİNDEKİ YANSIMALARI

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#### Abstract

The aim of the research is to determine the similarities between the Cyprus and Levant & Mesopotamian cylinder seals, on which god and goddess figures are engraved on them. The research is important in terms of showing the effects and similarities of mainland cultures and artistic products through Levant & Mesopotamian mainland and Cyprus island cultures. The research stems from a case study model, which will involve qualitative research methods. Visual analysis was carried out in two stages. In the first stage, 67 seal images were given to six creative education experts. Experts stated that there are figures of a god and goddess on 34 cylinder seals. In the second stage, 34 seal images were examined by three visual arts experts. The infographic analyses have shown that the god-goddess figures on the Levant & Mesopotamian and Cyprus cylinder seals are similar or bear close resemblances. This result shows that ancient civilisations shared the material and spiritual values of the culture in a "fluid and sticky" character. This sharing feature should be accepted, supported and protected as a guide to the way of living together, which today's people need.

**Keywords:** Cylinder seals, Cyprus, god, goddess, Levant & Mesopotamia, religion.

#### Introduction

The first human being existence in Cyprus was mentioned to be in 12,000 BC (Simons, 2012). The places where human beings were present, can be mentioned to be in the Late Epipaleolithic period, on the island of Cyprus, were Aetokremnos and Akamas. Throughout the history, islands have always been influenced by

#### Özet

Araştırmanın amacı, üzerlerine tanrı veya tanrıça figürlerinin işlendiği Kıbrıs ve Levant&Mezopotamya silindir mühürleri arasındaki benzerlikleri saptamaktır. Araştırma, Levant&Mezopotamya ve Kıbrıs adası kültürleri örnekleri üzerinden, anakara kültürlerinin ve sanatsal ürünlerinin ada kültürlerine etkilerini ve benzerliklerini göstermesi açısından önemlidir. Araştırma, nitel araştırma yöntemlerinden olan durum çalışması modelinde tasarlanmıştır. Görsel analizler iki aşamada gerçekleştirilmiştir. İlk aşamada, 67 adet mühür görseli, yaratıcılık eğitimi alanında uzman 6 eğitimci tarafından incelenmiştir. Uzmanlar, 34 tane silindir mühür üzerinde, tanrı veya tanrıça figürü olduğunu belirtmişlerdir. İkinci aşamada 34 tane silindir mühür görseli üç görsel sanatlar uzmanı tarafından incelenmiştir. Yapılan infografik analizler, Levant&Mezopotamya ve Kıbrıs silindir mühürlerindeki tanrı veya tanrıça figürlerinin kesin benzerlikler veya yakın benzerlikler taşıdığını göstermiştir. Bu sonuç, eski uygarlıkların, kültürün maddi ve manevi değerlerini "akıcı ve yapışkan" bir karakterde paylaştığını göstermektedir.

Bu paylaşma özelliği, günümüz insanının ihtiyaç duyduğu, birlikte yaşama biçimi için bir rehber olarak kabul edilmeli, desteklenmeli ve korunmalıdır.

**Anahtar kelimeler:** Silindir mühürler, Kıbrıs, Tanrı ve Tanrıçalar, Levant&Mezopotamya, Din.

the life on the mainland and continents close to them. After the occupation of the people, on the mainland, signs of human existence on the island of Cyprus, were found in the archaeological studies carried out in Aetokremnos (Swiny, 2001). According to the findings obtained from these archaeological settlements, the first settled

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human life on the island, began in the Neolithic Age (8500-3900 BC in the New Polished Stone Age) in these two settlements (Karageorghis, 2002). The human being presence on the island before the Late Epipaleolithic period continued also in the Palaeolithic periods. The seals were produced to perform tasks such as identifying identity, determining property, representing persons, conveying a message, and carrying a talisman feature. In particular, it is seen that, the relations between kings and gods or goddess were reflected in the engravings on the seals. The first examples of seals used on the island of Cyprus were found during excavations at Kissonerga-Mosphilia and Lemba-Lakkous. The seal found at Kissonerga-Mosphilia is a Late Chalcolithic Age IV limestone seal, with diagonal lines engraved on it. Another example is the seal with linear and curvilinear motifs found in Area II at Lemba-Lakkous. (Webb & Weingarten, 2012; Reyes, 2001).

The Neolithic Age in Cyprus is dated approximately between 7000 BC and 3000 BC. The same period covers the years 8200-3900 BC, according to Karageorghis. The Chalcolithic period is dated to be 3900-2500 BC (Karageorghis, 2002). According to Kyrris, the Early Bronze Age on the island is dated between 3000-1800 BC (Kyrris, 1985). Karageorghis accepts this period to be between 2500-1900 BC and divides it into three periods, as Early Bronze Age I-II and III (Karageorghis, 2002). After the Early Bronze Age, the Middle and Late Bronze Ages took place on the island of Cyprus. But again, according to the same sources, these ages are dated between 1900 BC and 1050 BC. The seals examined in this study consist of seals obtained from Late Bronze Age settlements in Cyprus. The settlement areas mentioned are Enkomi, Hagia Irene, Kition, Kalavassos-Ayios Dimitrios, Ankastina, Toumba Tou Skourou, Dromolaxia-Vyzakia (Hala Sultan Tekke).

The use of cylinder seals in Cyprus, along with the Middle East, took place between the end of 3000 BC and the beginning of 2000 BC (Reyes, 2001). According to the data obtained from the dating of cylinder seals obtained from archaeological excavations and exhibited in museums, the use of cylinder seals in Cyprus dates back to 3000 BC (Karageorghis, 2002). In this research, the cylinder seals used in Cyprus, engraved with images of gods or goddess, will be investigated and compared with the images of gods or goddess engraved/drawn on different materials in Levant & Mesopotamian cultures.

In this research, seals with images of god or goddess on the archaeological cylinder seals used in Cyprus and exhibited in Cyprus archaeology museums, British Museum, John Hopkins Museum, Medelhavsmuseet and the Metropolitan Museum's Cyprus artifacts sections were investigated. For this purpose, two hundred and fourteen (214) cylinder seals were visually analysed in order to identify seals having human body images (god and goddess) on them. With this method, it was aimed to investigate how many different gods or goddess images were engraved on the cylinder seals. In this context, the similarities with the images of gods or goddess in Levant & Mesopotamian cultures were examined.

Therefore, in the context of god or goddess images on archaeological cylinder seals, it is aimed to determine the similarities and differences between the spiritual-cultural structure of the country and the spiritual culture of Levant & Mesopotamian cultures.

This research is based on the seals used in the archaeological periods on the island of Cyprus. Research is important because it aims to determine the diversification of god or goddess images on seals, which has not been investigated as a primary subject in studies conducted until today and to examine them in a categorising mode. In addition, to the fact that there are connections regarding the images of gods or goddess, their engraving or drawings on different materials in neighbouring cultures are also within the scope of the research and this increases the importance of the research.

The fact that cylinder seals were used in a limited region in the world (Levant & Mesopotamia and cultures around the Mediterranean) and for a limited time (approximately between 3000-500 BC) makes them highly important. In the context of their importance, in those days; the fact that they were the best examples of art of relief, engraving and printmaking, creates the need to introduce them to the world and puts them on the agenda of today's art research.

It is thought that they deserve to be known more closely by today's artists and researchers because of their important place in both art and social life and trade of that period.

The subject of this research is limited to the archaeological cylinder seals used in Cyprus, which are exhibited in the archaeology museums in Cyprus and in the sections of the British Museum at John Hopkins Museum,

Medelhavsmuseet and the Metropolitan Museum where artifacts related to Cyprus are exhibited. In addition to the above limitations, another limitation is experienced, and that is, because the seals in museums located outside of Cyprus are included in the research, by using the web pages of the museums as an only possible source. Unfortunately visiting the museums abroad was not possible because of the Covid 19 pandemic, and this also created a limitation to this study.

### Method

This research was conducted as a qualitative case study. The seals used in Cyprus were selected based on those engraved with god and goddess images. These images were examined through iconographic and content analysis, categorizing them and comparing them to images of gods and goddess on cylinder seals from neighboring cultures. The iconographic approach, a qualitative research technique, was used to reveal the customary meanings of motifs, allegories, and personalizations that are no longer available in today's societies. This approach emphasizes that images characterized as iconographic should be evaluated within the context of the society, audience, history, and period they are associated with. Content analysis, on the other hand, involves the explanation of images through coding or using codes in order to ensure the scientific validity of the images. Thus, it is a technique that allows the researcher to approach reality without prejudices about the subject being studied. For these reasons, both iconographic and content analysis techniques were employed in this research (Bedir Erişti, 2019). In addition, the images comprising the study's sample were analyzed using the "visual analysis method."

During the data acquisition and analysis process, 214 seals were collected and included in the sample. Among these seals, those on display at the British Museum, John Hopkins Museum, Medelhavsmuseet, and the Metropolitan Museum were accessed through the museums' websites and their visuals were obtained. Photographs of the specimens on display in Paphos, Larnaca, Nicosia, Limassol Archeology Museum, Morphou Archeology and Nature Museum were taken. The researcher visually analyzed the printed images of the 214 seals comprising the sample in terms of the imagery engraved on them. This sample was selected to include seals used and exhibited in Cyprus, and the dataset was limited by this exhibition criterion. As a result of visual analysis, human or human-bodied images were found on 67 seals. These seal images, comprising a limited sample,

were tabulated with images of Levantine and Mesopotamian gods and goddess. Paintings consisting of seal images and god and goddess images were presented to six creativity education specialists for validity and reliability testing, and they were asked to identify which god or goddess images were on each seal.

Six creativity education experts identified gods and goddess on 34 seals from the Levantine and Mesopotamian regions out of the 67 seals. In the second stage of expert opinion collection, the 34 seals identified by the creativity education experts were presented to three visual arts professionals. The visual arts professionals were asked to determine how many seals had "definite similarity" and "likelihood similarity" in terms of the gods and goddess depicted on them.

Based on the opinions of the visual arts professionals, a comparison was made with seals from neighboring cultures of Cyprus, where similar images of gods and goddess are known to exist.

### Belief System Process in Cyprus

Cyprus is located in a geographical location that can be considered the centre of the old world (Asia-Africa-European continents). This important geographical position has caused it to maintain its strategic importance throughout the ages and today. In addition to the strategic importance of Cyprus due to its location, another feature that is at least as important as location is that it is adjacent to the geography where monotheistic religions originated. Cyprus has been a frequent destination for a very high percentage of those who want to reach the region where monotheistic religions originated, known as the holy lands. The emergence of monotheistic religions in this region is not accidental. It is important that the history of human life has not been interrupted in this geography by periods of warming and cooling of the earth. "From the first days of human being existence in the world; he has formed belief systems by establishing emotional ties with especially with very strong phenomena. That time of human being was worshipping to the phenomena that he was not having any idea why it happened or why it is so. For example, thunder, rain fall and many similar natural events, or a high mountain or a tall tree that he cannot climb or a very fruitful tree were the things that they were out of their imagination though they were accepting them as go or goddess. (Hañcerlioğlu, 2005)." The religion originated from the weakness of the first human being because of the forces of nature (Teber,

2013). Ancient religions have tried to be defined and understood by today's people, with the contribution of the writings and archaeological findings on the written materials of those periods. They also found new rituals as new data become available. The materials providing these data, are the findings obtained from the cultures lived mostly around Mesopotamia and the Mediterranean. The findings obtained during the research, on the cultures of this region, play an active role in defining the religious structure of that period in other parts of the world. In the light of these data, Demirci, in his book titled "Introduction to Ancient Levant & Mesopotamian Religions"; "We know that ancient Levant & Mesopotamian beliefs were largely based on animistic and naturistic foundations," he says. Many phenomena in nature are associated and equipped with either divine power or creatures with demonic character, or structures with supernatural vitality such as 'mana' (Demirci, 2013, p. 12). During this period, settlements (cities) belonging to different cultures that lived in Levant & Mesopotamia had their own gods. The gods who have undertaken the same tasks could be named in different ways between cultures and cities. It should also be noted that the religions in these cultures do not limit the relationships between gods and humans to a simple and archaic order. The relations between gods and humans of this period has developed very rich ideas with a lifestyle fed by the religious structure, such as the universal order, systems of worship, dedication and sacrifice, rituals and its place in the creation of man. With the animistic and naturistic approach in the form of religious thought, people living in Levant & Mesopotamian cultures engraved or drew the images of the gods as human bodies on the surfaces they worked on. In Cyprus, which was in interrelationship with Levant & Mesopotamian cultures, during the periods when this way of thinking continued, the images of gods on the cylinder seals, where religious scenes were studied, were also engraved in the same way. In addition, the Mitanni winged sun disk, one of the religious symbols, is among the common forms engraved on cylinder seals (Bender, 2007). In this context, it should be stated that they show close similarities.

As stated in the introduction of the research, the first human existence in Cyprus was mentioned since 12,000 BC (Simons, 2012). The places where the human presence can be mentioned in the Late Epipaleolithic period on the island of Cyprus are Aetokremnos and Akamas. Throughout the history, the islands have always been influenced by life on the continents or

motherlands close to them. Signs of human being existence on the island of Cyprus, were found by the occupation of people on the mainland with the archaeological studies carried out in Aetokremnos (Swiny, 2001).

It is thought that the belief system on the island, whose existence was determined after the above-mentioned years, is also related to the mainland and neighbouring cultures.

According to the data obtained from the findings reached today, the oldest known belief system of Cyprus is the 'Mother Goddess Cult'. The concrete assets of this belief system, which is dating back to the 8th millennium BC, are the conical stones found in many excavations. The belief system of the Mother Goddess was structured in Eastern cultures and spread into Western cultures. The belief system philosophy (belief, worship, ritual structuring) of the Mother Goddess, which is given different names in Eastern and Western cultures, overlaps with the Eastern and Western culture's philosophy at a very high level (Frankfort, 1939).

The Mother goddess, named in different forms according to cultures, was also imaged in different forms in this context. This structure, which constitutes the belief systems of the regional cultures in today's conditions, has also been adopted by the people living in Cyprus who were in contact with them. For representation of this belief system, which we can say came from outside with the influence of the mainland, Cypriots have placed and continue to keep the conical stones in place of the Mother Goddess since the Neolithic age. These stones were found in archaeological excavations carried out in many Neolithic and Bronze Age settlements, most intensely in Hirokitia excavations (Bağışkan, 2015).

It is possible to say that, it is the Mother Goddess Cult who adapted to Cyprus, the oldest belief system of the people in Cyprus. The system had relations with the Anatolian, Eastern Mediterranean, Egyptian and Levant & Mesopotamian cultures. This is thought so because since those dates are the times of the mentioned cultures. Worship systems to the Mother Goddess have appeared in many cultures around the Mediterranean and in Levant & Mesopotamian cultures. It took different names according to the culture in which it is accepted. Mother Goddess, "Kubaba" in Hittites, "Isis" in Egypt, "Kybebe" in Lydia, "Kybele" in Phrygia, "Inanna" in Sumer, "Artemis" in Greece, "Astarte" in Syria and Babylonian sources

(“Astart” or “Ishtar”) (Ishtar is also referred to as “Savshga” in Hittite sources), “Ishtar” in Phoenician sources, “Artemis (from Ephesus)” in Ephesus, “Kouklia (Paphos) Aphrodite” in Cyprus. She also worshipped as “Venus” by the Romans and “Virgin Mary” in the Christian era. Images symbolising her in paintings and engravings; the moon, star, dove, Eurasian collared dove, sparrow, myrtle tree and rose (Bağışkan, 2015).

It is possible to say that with the cult of the Mother Goddess, which is the oldest known belief system in Cyprus, the islanders who formed the system increased their communication between the cultures of the region with the opportunity to travel in the following years. The people of Cyprus, who have been in the common belief system of the cultures of the region with the same cult since 8000 BC, intensified their relations with the cultures in the nearby geography with the improvement in trade in the region. In this context, cylinder seals, which were an important element of the trade of that period, it has been circulated among the cultures of the region, both as seals and as seal impressions on clay. It is also believed that cylinder seals, which can be hang in the form of a necklace on the neck and engraved with a god or goddess have a talisman feature that ensures success in trade.

Due to the intensifying relations of the Cypriot people, who have had partnerships with neighbouring cultures, since the first belief system; it is possible to say that, there are also similarities in the figures of gods and goddess engraved on cylinder seals brought to the island,

produced on the island, or on which additional figures were worked on, after being brought to the island. In addition, it is thought that there are similarities in the figures of gods and goddess on the seals made by the masters who made seals on the island (Yazgin, 2017).

In order to determine these similarities, the cylinder seals in the samples of the research were visually examined. The similarities of the gods and goddess figures on the seals in Levant & Mesopotamian cultures and Cyprus cylinder seals were determined by the visual analysis method. Cylinder seals used in Cyprus between 3000-600 BC, which has exactly similar god and goddess figures on them, and seals used in Levant & Mesopotamian cultures between about the same time span, were also determined and the figures on them were compared.

### The Cyprus Seals Engraved with Human-Bodied Images

Two hundred and fourteen (214) seals exhibited in the archaeology museums in Cyprus and in the sections of the British Museum, John Hopkins Museum, Medelhavsmuseet and the Metropolitan Museum where artifacts related to Cyprus are exhibited have been examined in terms of images engraved on them. As a result of this examination, sixty-seven (67) seals with human body images engraved on them, were found to be in accordance with the limitation and criteria expressed in the sample and visual analyses made. The author photographed images from 20 to 44 both included, Maria Soutzi photographed image 49 and Orkem Yazgin photographed image 67.

**Table 1.**

*Photographs of cylinder seals visually analysed.*

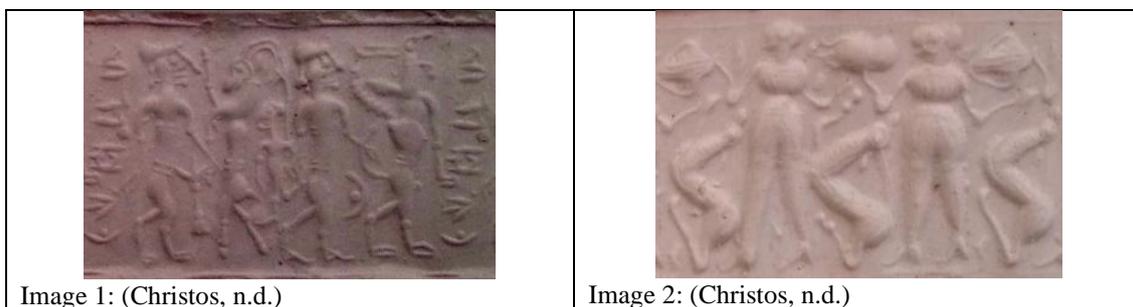




Image 3: (Cylinder Seal; Intaglio | British Museum, n.d.)



Image 4: (Cylinder Seal | British Museum, n.d.)



Image 5: (Cylinder Seal; Intaglio | British Museum, n.d.)



Image 6: (Cylinder Seal | British Museum, n.d.)



Image 7: (Cylinder Seal | British Museum, n.d.)



Image 8: (Cylinder Seal | British Museum, n.d.)



Image 9: (Cylinder Seal | British Museum, n.d.)



Image 10: (Cylinder Seal | British Museum, n.d.)



Image 11: (Cylinder Seal | British Museum, n.d.)



Image 12: (Cylinder Seal | British Museum, n.d.)



Image 13: (Cylinder Seal | British Museum, n.d.)



Image 14: (Cylinder Seal | British Museum, n.d.)

 <p>Image 15: (Cylinder Seal   British Museum, n.d.)</p>	 <p>Image 16: (Cylinder Seal   British Museum, n.d.)</p>
 <p>Image 17: (Cylinder Seal   British Museum, n.d.)</p>	 <p>Image 18: (Cylinder Seal   British Museum, n.d.)</p>
 <p>Image 19: (Cylinder Seal   British Museum, n.d.)</p>	 <p>Image 20: (The Cyprus Museum, n.d.)</p>
 <p>Image 21: (The Cyprus Museum, n.d.)</p>	 <p>Image 22: (The Cyprus Museum, n.d.)</p>
 <p>Image 23: (The Cyprus Museum, n.d.)</p>	 <p>Image 24: (The Cyprus Museum, n.d.)</p>
 <p>Image 25: (The Cyprus Museum, n.d.)</p>	 <p>Image 26: (The Cyprus Museum, n.d.)</p>



Image 27: (The Cyprus Museum, n.d.)



Image 28: (The Cyprus Museum, n.d.)



Image 29: (The Cyprus Museum, n.d.)



Image 30: (The Cyprus Museum, n.d.)



Image 31: (The Cyprus Museum, n.d.)



Image 32: (The Cyprus Museum, n.d.)



Image 33: (The Cyprus Museum, n.d.)



Image 34: (The Cyprus Museum, n.d.)



Image 35: (The Cyprus Museum, n.d.)



Image 36: (The Cyprus Museum, n.d.)



Image 37: (The Cyprus Museum, n.d.)



Image 38: (The Cyprus Museum, n.d.)

 <p>Image 39: (The Cyprus Museum, n.d.)</p>	 <p>Image 40: (The Cyprus Museum, n.d.)</p>
 <p>Image 41: (The Cyprus Museum, n.d.)</p>	 <p>Image 42: (The Cyprus Museum, n.d.)</p>
 <p>Image 43: (The Cyprus Museum, n.d.)</p>	 <p>Image 44: (The Cyprus Museum, n.d.)</p>
 <p>Image 45: (admin, n.d.)</p>	 <p>Image 46: (2023)</p>
 <p>Image 47: (Christos, n.d.)</p>	 <p>Image 48: (Christos, n.d.)</p>
 <p>Image 49: (Christos, n.d.)</p>	 <p>Image 50: (Cylinder Seal and Modern Impression: Demons and Animals   Late Cypriot II, n.d.)</p>



**Image 51:** (Cylinder Seal and Modern Impression: Seated Figure Holding the Tail of a Griffin | Cypriot | Late Cypriot II, n.d.)



**Image 52:** (Cylinder Seal and Modern Impression: Female Figure, Ibex, Lion | Cypriot | Late Cypriot II, n.d.)



**Image 53:** (Cylinder Seal and Modern Impression: Hunter Spearing a Lion before Deity with Staff | Middle Bronze Age, n.d.)



**Image 54:** (Cylinder Seal and Modern Impression: King before Nude Winged Goddess above Snake; Weather God on Bull | Cypriot | Late Cypriot I-II, n.d.)



**Image 55:** (Cylinder Seal and Modern Impression: Combat between Men and a Lion | Cypriot | Late Cypriot II, n.d.)



**Image 56:** (Cylinder Seal and Modern Impression: Mistress of Animals Flanked by Rampant Horned Animals | Cypriot | Late Cypriot II, n.d.)



**Image 57:** (Cylinder Seal | Cypriot | Late Cypriot, n.d.)



**Image 58:** (Cylinder Seal | Cypriot | Late Cypriot II, n.d.)



**Image 59:** (Cylinder Seal and Modern Impression: Human Figure Flanked by Sphinxes, Birds | Cypriot | Late Cypriot II, n.d.)



**Image 60:** (Cylinder Seal and Modern Impression: Master of Animals between Lions, Griffins, Minoan Genius | Late Cypriot II, n.d.)

 <p>Image 61: (Cylinder Seal   Cypriot   Late Cypriot, n.d.)</p>	 <p>Image 62: (Cylinder Seal and Modern Impression: Animal-Headed Divinities with Prey   Cypriot   Late Cypriot II, n.d.)</p>
 <p>Image 63: (Cylinder Seal and Modern Impression: Confronted Upright Lion and Griffin before a Seated Figure   Cypriot   Late Cypriot II, n.d.)</p>	 <p>Image 64: (Cylinder Seal   Cypriot   Late Cypriot II, n.d.)</p>
 <p>Image 65: (Cylinder Seal   Cypriot   Late Cypriot, n.d.)</p>	 <p>Image 66: (Cylinder Seal   Cypriot   Late Cypriot, n.d.)</p>
 <p>Image 67: (Archeology and Natural History Museum, n.d.)</p>	

### Findings and Interpretation

In the first step of the visual analyses, 67 Cyprus cylinder seal images, having human figures on them, are given to six creative education experts and asked them to analyse these seals under the fixed measures and criteria. Experts were asked to select seals with god-goddess figures and find out which Levant & Mesopotamian god or goddess they were. In this comparing study the book of William Hayes Wards (1910) book “The seal cylinders of Western Asia” is used as the

main source. The experts, naturally, used other sources in their study. They found-out that the god & goddess figures on Levant & Mesopotamian and Cyprus seals have very close similarities, and on both group of seals similar figures were carved.

The experts stated that on 34, cylinder seals out of 67, there are images of Levant & Mesopotamian god & goddess. Especially on the non-worn and perfect seals the similarities were

decisive but they had some little doubts on worn-out ones.

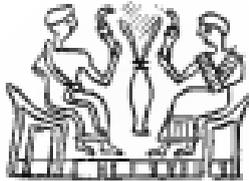
The 34 seal images selected by the creative education experts are presented to three visual art professionals for the second stage of this study and analysis. One of the professionals found out that 24 seals were having god & goddess images decisively similar to the Levant & Mesopotamia gods. He also said that the images on the rest 10 seals, selected by the creative education experts, not decisively but probably are similar to Levant & Mesopotamian gods. The second professional

found 21 seals containing gods similar to Levant & Mesopotamian gods and the third professional said 27 of them have decisive similarities and on 7 of the seals have possible but doubtful similarities.

The images, “possibly not showing” similarities may be because of the carving artist’s mode of design or because the seals have worn out. As a final statement, we can say that the god or goddess figures on the seals are similar to those in Levant & Mesopotamian culture at a high rate.

**Table 2.**

*The order of the images is from exact similar to most likely to be similar.*






	
	
	
	
	
	
	<p>(Department of Antiquities - Museums, n.d.)</p>

**Arguments and Suggestions**

In this research, the cylinder seals of Cyprus having god and goddess images on them are identified. Here, comparisons are made between the samples of cylinder seals of different cultures and regions of Levant & Mesopotamia. As a result of this comparison, it is found-out that the images on Cyprus and Levant & Mesopotamian cylinder seals showed close similarities regarding their religious belief systems.

On the cylinder seals used in Cyprus god and goddess figures are found that, they were the images of god and goddess of the cultures of Levant & Mesopotamia like, Sumerians, Assyrians, Akkadians, Hittites, Babylonians and Kassites, the 17 god and goddess names are listed below as:

1. The drinking goddess on a stool.
2. The naked goddess, Ishara.
3. The god with a wand (Ramman-Martu }
4. The standing goddess with rised hands (Aa or Sala)
5. The vested god, probably Tarkhu, Sandu or Khaldis.
6. The seated, bearded god, Shamas.
7. The naked goddess with the hands below her breasts (Zirbanit)
8. The god with the scimitar (Marduk)
9. The god with Thunderbolt and Bull (Adad)
10. The goddess of agriculture.
11. The archaic seated Deities.
12. The god rising over a mountain (Shamas)

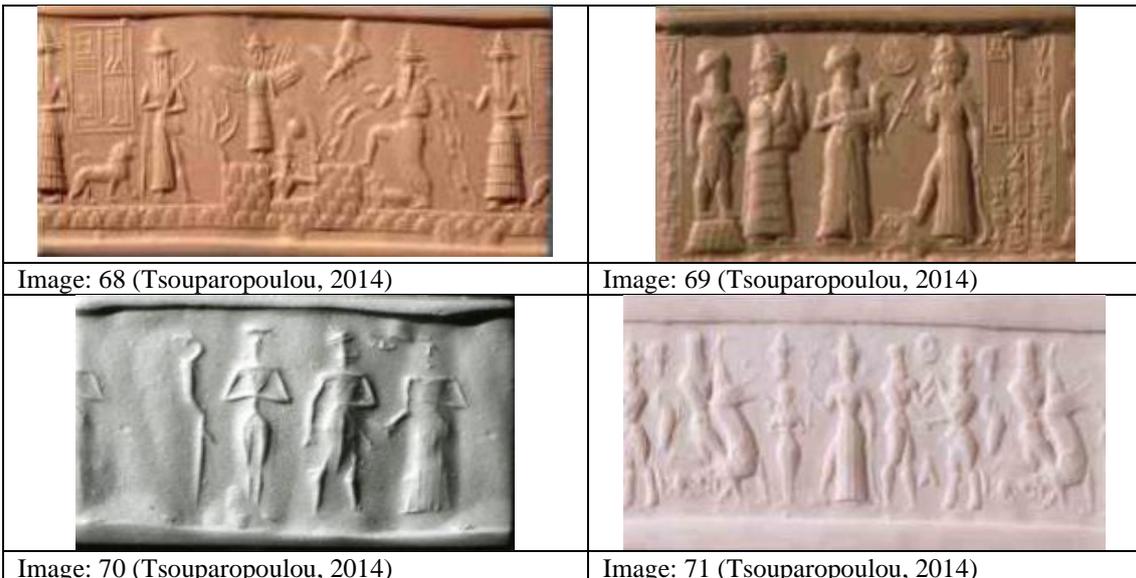
13. The standing Ishtar.
14. Gilgamesh as a standard listener.
15. The eagle-headed god.
16. The serpent god (Siru)
17. The seated goddess (Baru – Gula)

Besides, winged demon, which is very important in Assyrian culture of Mesopotamia ana Egypt - Hittite belief systems and in their mythology, is found on Cyprus cylinder seals. The dragon figure of Assyrian in Babylonian cultures is also found on Cyprus cylinder seals. Also, Gilgamesh figure, with wings and alike to “winged Satan” figures of Assyrian culture, found on Cyprus cylinder seals. Babylonian type Tiamat figure (The Dragon) is another figure found on Cyprus seals.

There are many researchers studying the similarities between the Cyprus and Levant & Mesopotamian spiritual cultures, covering the years BC 3000-600, about the carvings worked on the cylinder seals.

For example:

Tsouparopoulou (2014) Progress Report: In his “An Outline of the Documentation of Seals, Sealings and Seal Impressions in Ancient Near East”, Akkadian seal (image 68) Goddess Ishtar and God Shamas, Old Babylonian seals (image 69), God Marduk, (image 70) Goddess Zirbanit and God Rammon-Martu and (image 71) again the Goddess Zirbanit and the God Ishtar are taking place.



Black and Green (2004), in their book, *Demons and Symbols of Ancient Mesopotamia*, they informed that, on a Neo Assyrian seal the Gilgamesh figure is carved. Also, Ghaempanah

and others (2014) in their paper they published, informed that on a Babylonian seal the figures of Gilgamesh and Enkidu are carved.



Image: 72 (Black and Green, 2004)



Image: 73 (Ghaempanah and others, 2014)

Konstantopoulos (2018) in his book, *Inscribed Kossite cylinder seals in the Metropolitan Museum*, he says that, on two, cylinder seals of

Late Old Babylonian and Early Kassite era the images of Marduk-Sarpanitum (image 74) and Ninsubur-Papsuskal (image 75) are present.



Image: 74 (Konstantopoulos, 2018)



Image: 75 (Konstantopoulos, 2018)

Ornan (2004) in his paper, *The Goddess Gula and Her Dog*, on one of the old Babylonian seals the image of Goddess Gula, and on the other one the Sumerian God Lama is carved. On both of these seals the figures of god and goddess figures are

also presented (image 76a-76b). We also see similar god and goddess engravings in Bakel's article "Identifying Nergal, Nanna, Enbilulu, Ninazu and Enlil on cylinder seals" (Bakel, n.d.).



Image: 76a (Ornan, 2004)



Image: 76b (Ornan, 2004)

According to the Metropolitan Museum sources, the image 77 is said to be an Akkadian seal (2021). The Snake God carved on this seal is also seen on the Cyprus cylinder seals. According to the British Museum sources, on image 78, the

God Tiamat is identified as a dragon (Cylinder Seal | British Museum, n.d.). While in Akkadian culture it is named as Sea God. The same images are presented on the Cyprus cylinder seals as well.



Image: 77 (Wiggermann, 1997)



Image: 78 (Cylinder Seal | British Museum, n.d.)

Middle East geography that our today's religions came out was also covering the geography of Mesopotamia. In the long-last old cultures of Mesopotamia, there was a structure of happenings or creations of religious rituals, belief systems and god-goddess identification that undeniably, they can be models to our today's life. In old cultures of Mesopotamia, not only the countries but even the cities were having their own private gods and goddess. In the times of those cultures, if a culture was giving a duty to its private god or goddess and that was accepted by other cultures, they were naming their god or goddess with the same name and sometimes as the translation of their languages. In different cultures although the names of gods and goddess were different, the images were interpreted similarly by the designers or carving artists. To my opinion the consciousness of the old cultures in sharing their common values, without discrimination and separation, is a big wish of nowadays cultures.

In and with this regard, we can expect that, the research like this one will be guidelines for the improvement of our social and cultural life.

### Conclusion

Two hundred and fourteen (214) cylinder seals with production dates between approximately 3000 BC and 600 BC were examined in the research. Cylinder seals were used in Cyprus and are exhibited in Cyprus Archaeological Museums, British Museum, Metropolitan Museum, John Hopkins and Medelhavs Museum. Among the seals analyzed in terms of figures engraved on them, sixty-seven (67) seals were found to have human or human-bodied figures. These seals were examined by six (6) creativity education experts in order to identify the god and goddess figures engraved on them, which is one of the purposes of the research. Creativity education experts stated that thirty-four (34) of the sixty-seven seals had god or goddess figures on them. The seals, which were determined by creativity education experts to have a god or goddess figure on them, were

examined by three (3) visual arts professionals. From visual arts professionals; the first is 70.58% in twenty-four (24) of thirty-four (34) seals, the second is 61.76% in twenty-one (21) of thirty-four (34) seals, and the third is 79.41% in twenty-seven (27) of thirty-four (34) seals, he stated that there are figures that show definite resemblance to the figures of Levant & Mesopotamian gods and goddess. This high similarity shows that the gods and goddess figures, which are a determinant of religious culture, had a high level of religious relationship between the Levant & Mesopotamian cultures and the Cypriot culture at that time. In line with these views, it was determined which gods&goddess were engraved on the seals in Cyprus.

These gods&goddess; Drinking goddess, Ishara, Ramman-Martu, Aa, Sala, Tarkhu, Sandu, Khaldis, Shamas, Zirbanit, Marduk, Adad, Goddess of agriculture, Archaic seated Deities, Ishtar, Gilgamesh, Eagle-headed god, Siru and Baru-Gula was found to be. It has been determined that these gods and goddess are common gods that exist in the cultures of the Levant and Mesopotamia region, Sumerians, Assyrians, Akkadians, Hittites, Babylonians and Kassites. It has been observed that the seal scrapers of these cultures neighboring Cyprus also engraved similar god and goddess figures on cylinder seals.

The island of Cyprus has been an important center for trade routes in the Eastern Mediterranean. Cylinder seals; They were used to identify individuals, to control production by rulers (king and the like), in barter transactions, and in trade between different groups of people. Cylinder seals, which also function in terms of cultural transfer between neighboring cultures, contributed to the transfer of religious culture between societies.

As a result, it can be said that the god and goddess figures engraved on the cylinder seals used in Cyprus show a high similarity with the Levant & Mesopotamian god and goddess figures.

In this context, it can be stated that the communities formed by the people living in the region between 3000 BC and 600 BC generally communicated in every aspect of culture. Depending on this cultural relationship, the similarities determined in terms of god and goddess figures, which are important in terms of religious culture, show that they have a high level of relationship and interaction in terms of religion.

This research provides insight into the cultural exchange and influence between Cyprus and the Levant & Mesopotamian regions in ancient times, highlighting the importance of understanding and appreciating cultural diversity.

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## The arab cartoon: from arab spring to arab spring 2.0

### La caricatura árabe: de la Primavera Árabe a la Primavera Árabe 2.0

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#### Abstract

Political cartoons in the Arab world have been regarded as an alternative form of media. They have been viewed as a means of peaceful protest, which gained significant momentum during the Arab Spring of 2011. Furthermore, the development of political cartoons was heavily influenced by Web 2.0, which facilitated the emergence of a synthetic society online. Despite this, political cartoons have continued to evolve and have become an essential tool for demonstrations and protests in the Arab world following the Arab Spring. One noteworthy example is Algeria, where a wave of demonstrations in February 2019 saw political cartoons wielded as an extremely powerful tool.

As a result, the main objectives of this research are to study political cartoons in the context of the Arab Spring and to analyze whether there exists an Arab Spring 2.0, in which political cartoons have been further consolidated. To achieve these objectives, a qualitative methodology was employed, involving the analysis of various documents. In addition, a visual ethnographic method was utilized to describe the sample population under investigation.

Ultimately, this research represents an attempt to analyze a new phenomenon characterized by evolution. In other words, it seeks to determine whether the Arab Spring 2.0 represents a new version of revolution, in which political cartoons play a key role.

**Keywords:** Cartoons, Arab, mass media, cultural revolution, cultural identity.

#### Introduction

The political cartoon in the Arab world has been characterized since its inception as an alternative means of communication. It emerged as a weapon of peaceful protest, which was

#### Resumen

La caricatura procedente del mundo árabe se considera como un medio de comunicación distinto al tradicional. Fue considerado un medio de protesta pacífica y se consolidó en la Primavera Árabe. Asimismo, la web 2.0 influyó bastante a su desarrollo, generando una sociedad sintética en red. No obstante, este arte siguió evolucionando y se convirtió en un elemento esencial en todas las manifestaciones y protestas del mundo árabe que surgieron después de la Primavera Árabe. Destaca el caso de Argelia, donde en febrero de 2019 se desató una ola de manifestaciones y la caricatura pasó a tener un protagonismo esencial y clave. Así, este trabajo pretende estudiar la caricatura en la Primavera Árabe, así como también ver si existe una Primavera Árabe 2.0 en la que la caricatura se ha consolidado y se ha hecho aún más fuerte. Para ello, se ha empleado como metodología básica una tipología de metodología cualitativa a través de la cual se han estudiado diferentes fuentes y se han analizado diferentes caricaturas, usando un método visual etnográfico como referencia. Con todo, este trabajo trata demostrar que verdaderamente se ha producido un fenómeno según el cual la Primavera Árabe ha evolucionado, dando lugar a una nueva etapa, donde la caricatura es esencial.

**Palabras clave:** Dibujos, Árabe, medios de comunicación de masas, revolución cultural, identidad cultural.

consolidated with the development of the Arab Spring. This was reinforced by the development of Web 2.0 and the synthetic society online, which contributed to the importance of the

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political cartoon, becoming a form of resistance art. However, this art has continued to evolve and solidify to the point where it has become an essential element in recent social and political movements in the Arab world. One significant case is that of Algeria, after the revolution initiated against the president's intention to run for re-election and continue in office. In some way, this fact has materialized in the political cartoons, as the cartoonist Ali Dilem was concerned with transmitting the revolts using cartoons as a reference on social networks such as Facebook or Twitter. Thus, gradually, a virtual community has been created whose origin is in the Arab Spring, but in this case, it has gone beyond, as their cartoons have comments and the participation of citizens in the political-creative process.

Therefore, this work presents a series of objectives that have been developed. The objectives set for this work are: (1) to study the political cartoon in the Arab Spring; (2) to analyze its evolution after the Arab Spring; (3) to observe if there is a consolidated Arab Spring 2.0; and (4) to study the political cartoon in these new revolutions that are taking place.

### Theoretical Framework

As a primary source, the most recent cartoons of Ali Dilem have been used. These cartoons were chosen because they best reflect the situation of the revolutions in Algeria. Furthermore, these cartoons had the most impact as they went viral thanks to the development of social media. Therefore, they have been analyzed, observed, and studied in order to see how society has reacted to them.

The objective of this study is to demonstrate that the Arab Spring is still alive and has evolved, giving way to a new phase in which cartoons have become the protagonists. This has been driven by the use of social media, indicating a clear second phase that is likely to continue evolving.

### Methodology

To carry out all of this, a theoretical approach to the state in question has been developed. On the one hand, a qualitative research based on data collection has been carried out in order to study and analyze them. Once this was done, an analysis and synthesis process was developed to help organize all that information and subsequently create new information. On the other hand, a visual ethnographic method has

also been employed to analyze the images, not only looking at the forms and structures but also the meaning and impact these images have on society.

### Results and Discussion

#### The Arab Spring 2.0: The Awakening of Algeria.

The emergence of the Arab Spring was contingent upon the utilization of the internet. Novel technologies played a critical role in facilitating the various revolutions that transpired across multiple Arab nations in 2010. Phrases such as "Facebook Revolution" and "Twitter Revolution" were employed to depict the seamless and decentralized exchange of information among numerous online users, while efforts to constrain the dissemination of information proved futile. Furthermore, mainstream media outlets took note of the developments once they recognized the events that were transpiring on social media platforms. The movements were coordinated and structured in virtual space before materializing into revolutionary action on the streets. (Martínez, 2018).

Thus, a network society had emerged that presented a social structure composed of networks activated by digital communication and information technologies based on microelectronics (Castells, 2009). The networked society was structured around a realm of communication channels that facilitated the technological and organizational feasibility of practicing synchronicity without proximity, and thus, without the requirement for physical co-location. Additionally, it was sustained by a social construct of time that, to some extent, obliterated chronology by disrupting sequentiality through the utilization of information technologies, thereby amalgamating the present, past, and future in a haphazard manner (Castells, 2009). Similarly, society can be conceptualized as an array of cultural creations that strive to identify their cultural heritage as a historical marker, and endeavor to establish a culture of communicative protocols across all cultures worldwide, founded on a shared conviction in the potential of networks and the benefits of mutual exchange. Consequently, the utilization of social media and information and communication technology (ICT) is aimed at reinforcing Arab culture and introducing a fresh perception of culture that encompasses the entire Arab world, while simultaneously engaging with a global culture

that mitigates apprehension towards others. (Castells, 2009). Thus, it can be said that the development of the internet during the Arab Spring was an innovative fact because it gave way to mobile computing capable of developing and improving communication standards, while creating a significant virtual community.

However, the impact of the popular movement aimed at achieving greater democratization varied across different countries. In the case of Algeria, although the movement had an impact, the regime took measures to mitigate its effects by publicly acknowledging the need for reforms, particularly in its Constitution. The first measure taken was to lift the State of Emergency that had been in place since 1992. In addition, President Buteflika made statements in favor of normalizing relations with Morocco as part of its foreign policy. However, these actions were largely a response to the unstable environment in North Africa and a desire to project an image of the Algerian government as willing to listen to the voices calling for fundamental changes. Nonetheless, in May 2012, elections were held in which the former ruling party, the National Liberation Front (FLN), led by Abdelaziz Buteflika, won a clear victory with 221 out of 462 seats in the National People's Assembly. The second party was the National Democratic Rally (RND), which was also closely aligned with the government, with 70 seats. On the other hand, the Islamists, who had presented a joint candidacy called the "Green Alliance," were the biggest losers. Consequently, the regime emerged strengthened despite the reported irregularities committed during the electoral process by the opposition, low turnout, and a high number of blank or null votes. (Torres, 2013).

However, the state of passivity did not endure for long. Protests against Buteflika began to emerge in soccer stadiums. In 2018, the chant of a group of USM Alger team supporters, named "Casa del Muradia," garnered over a million views on YouTube. The song played on the name of the presidential palace, Muradia, and the title of the Spanish series "La casa de papel," which was broadcast overseas by Netflix, alluding to the Algerian civil war, the country's crisis, and Buteflika's health. Moreover, in the last months of December 2018, there was a surge in the detention of journalists, artists, footballers, and others. As for the president's response, the presidency had announced that Buteflika would travel to Geneva for a "routine medical check-up." Buteflika had not made a public appearance in a long time. In 2012, he gave a speech, and in 2013, he suffered a stroke, so his public

appearances had been infrequent since then. As a result, many believed that he would not seek reelection, but on February 10, 2019, he expressed his intention to run in a letter addressed to Algerians. This set off an unrelenting wave of demonstrations. (Peregil, 2019). After weeks of protests, Abdelaziz Buteflika renounced his bid for a fifth term and postponed the presidential elections, although the protests continued. Therefore, the president's withdrawal was more symbolic than anything else (La Vanguardia, 2019).

All of this situation led to the development of a new form of Arab Spring known as Arab Spring 2.0. It seems that the revolutionary spirit of Arab youth had not died down, as the protests that developed were similar. In addition to this, it should be noted that the economic situation had not improved much in the years following the Arab Spring, which somewhat exacerbated the development of the protests (Shankar IAS Academy, 2019).

However, the analogy to other revolutions during the Arab Spring is pertinent. In fact, the crisis in Algeria is rooted in the history of the Arab Spring, where social issues were left unresolved, subsequent political reorganization was irregular, and voters and institutions were bribed to accept the extravagance and promises of oil revenues. Nonetheless, challenges to leadership also began to emerge in neighboring nations. Political protests arose in Sudan, while a military coup was attempted in Libya. In Egypt, a strict security regime and brutal repression suppressed dissent, but civil society eventually rose up. Similarly, various countries exhibited comparable symptoms of illness and maturity for change. Their economies showed excessive dependence on revenues from resource extraction, high levels of debt, socioeconomic imbalances and poverty, a weak safety net, informal labor markets, and low business competitiveness. In their political spheres, they tended to have a strong clique of commercial or military interests directing the country and selecting weak, elderly, and distant leaders. Moreover, civic groups throughout the Arab region were closely monitoring the Algerian struggle to evaluate their own prospects for achieving political change. Algeria is the largest country in the Arab region, and indeed Africa, by geography, and one of the largest by population. The outcome of events in Algeria would have ramifications for the economy and politics of the region as a whole. (Hlasny, 2019).

## Cartooning in the Arab Spring

The Arab Spring is understood as a revolutionary wave of demonstrations and protests that began on December 18, 2010 in the Arab world. The events took place on December 17 of the same year, when a Tunisian man posted a small video on his Facebook wall. This video depicted a nonviolent protest against the Tunisian government, which was instigated by a striking communicative gesture: the self-immolation of the protagonist's cousin as a form of dissent against economic hardship and the oppressive actions of the authoritarian police regime in Tunisia. As a consequence, the Tunisian government had imposed an information blockade on the massive demonstrations, so posting the video on the Facebook social network was considered an act of informational resistance (Eko, 2012).

This wave of demonstrations spread to other countries, such as Egypt, Yemen, Libya, and Syria. Thus, Egypt, Tunisia, and Yemen entered a period of uncertain transition, while Syria and Libya became embroiled in civil conflict, while the wealthy Gulf monarchies remained virtually unchanged by the events. Hence, it is probable that characterizing the rebellions in these nations as a catalyst for enduring transformation would be more advantageous. The principal inheritance of the Arab Spring lay in dispelling the notion of political and governmental elite's apathy. Consequently, states steered clear of public uprisings by endeavoring to maintain societal placidity and torpor. (Manfreda, 2019).

In this particular context, art facilitated a revolutionary shift from singularity to multiplicity and diversity, with the aim of establishing equilibrium between the newfound liberty and considerable fragility. Its scope extended beyond the manifestation of political and social upheavals, encompassing a transition towards an artistic revolution. Furthermore, this form of art was geared towards expressing the release from former restrictions on art and culture, brought on by political and social limitations associated with the previous regime. Therefore, not only does it show the ambivalence and tension experienced in these countries, but also the instability and fragility of the democratic transition process. Thus, the goal of these artists was to become alternative voices of the revolution, through visual and multisensory forms, combining semiotics, politics, and poetics, with the participation of the viewer incorporated into the formation of discourse (Shilton, 2013).

Thus, cartoons found an ideal space to develop. The Arab Spring provided immense inspiration to regional cartoonists, enabling them to break free from the fear that had been haunting them and sharpen their pencils in order to provoke reflection among the various dictatorial governments (AFP, 2011). These drawings sketched out the events happening on the streets and their aim was to incite the population to react against the different regimes. Therefore, young people in these countries used cartoons to fuel anger against the dictators and to urge society to take to the streets to demand peace and freedom, as a single image could better reach all sectors of the population. Thus, during the Arab Spring, cartoons continued to evolve, as they not only criticized the government but also became a symbol of revolution (Kushkush, 2013).

During the Arab Spring's development, opposition to authoritarian control over information manifested through information activists in cyberspace, who utilized the internet and social networks to mobilize youth and society as a whole in demanding political, social, and economic rights, as well as a change in the governing regime. These information activists harnessed the power of the internet and associated emerging social networks as a novel means of expression. Consequently, social media emerged as a new tool of resistance against informational repression, enabling the population to rally against their respective governments. In response, the governments resorted to communication tactics, including censorship of telecommunications infrastructure, the internet, and social networks, while maintaining control over traditional media. In the face of such control, activists joined forces with hacktivist allies to subvert government efforts to control information, and to report to the world the pressures they were under. These events ultimately redefined the internet and social media, giving rise to new alternative communication channels that enabled the circumvention of state boundaries. (Eko, 2012).

Consequently, cartoons have found the internet to be an ideal medium for criticizing politics and emerging society due to fewer obstacles than those in newspapers and the ability to reach a broader audience. As a result, social networks have become a critical platform for the dissemination of this art. The invention of social networks and their use through the internet has facilitated enhanced communication, enabling individuals worldwide to access this content from any location. (Hicks, 2009).

However, the novelty of this art lies in the fact that for the first time presidents were represented without any taboos. Until then, the representations were impersonal and universal, for the most part, meaning that the caricatures could be applied to any country. However, the development of the Arab Spring led to the creation of drawings that directly represented the presidents, that is, they began to be directly related to each country, while spreading through cyberspace and going around the world, promoting a spirit of unity and identity that had developed in a virtual community that had materialized in the demonstrations (Flores, 2017).

### The Cartoon in the Arab Spring 2.0

Caricature as a form of resistance had become a significant art during the Arab Spring. It had found an ideal means of communication for society to participate in a political and social process, where creativity was key to attracting attention. Thus, caricature had become a way of inciting revolution, and during the course of the Arab Spring 2.0, it was no different. Different cartoonists emerged, but Ali Dilem stood out significantly among them. This artist was already

famous for having been sentenced to a year in prison and a fine of 50,000 dinars (550 euros) for dozens of cartoons he published in the newspaper *Liberté* in 2003 referring to President Bouteflika. Dilem was convicted under Article 144b of the Algerian Criminal Code, which allows for imprisonment for two to twelve months as well as a fine for "insulting" or defaming the president (Memri, 2006). Thus, Ali Dilem was already a well-known cartoonist for his exceptional vision of Algeria's political situation. He had already shown his opinion on the National Liberation Front Party, the army, and Islamist action. In fact, he had been sentenced to death during the civil war, and more than 20 cases had been opened against him (Anónimo, 2019).

Therefore, Ali Dilem began to depict the different protests and the speeches of the president and army in response to such reactions through his drawings. However, this time he used social media as a platform to publish them, as its reach was superior to other media. In addition to this, publishing them on the network allowed him to foster that virtual community that had developed in the Arab Spring, consolidating in this significant upturn.



Figure 1. The Algerians protest against Bouteflika's 5th term (Dilem, 2019a).

In this cartoon, we can see the demonstrations in Algeria during February and March 2019. Two distinct groups can be appreciated. On one side, there are the protesters holding up signs with the number 5 crossed out, referring to Bouteflika's fifth mandate. Others carry Algerian flags while demanding that he leaves. The clothing of these demonstrators also draws attention, as they wear worn-out clothes as an index of the economic problems the country has been suffering for years. On the other side, there is the police force. They are all in uniform and equipped, ready to face the demonstrators. The police leader also carries a megaphone and shouts at the society: "Go back to social media!". Therefore, the objective of this cartoon is to accentuate the repression of the demonstration, as well as the development of the network society that allowed the demonstrations to be organized online. It should not be forgotten that the online community was so strong that it manifested itself on the streets. That is, the network generated a

virtual community in which the subjects organized under the same cultural code to such an extent that it materialized in the streets in an astonishing way.

However, the result of the use of social media was surprising. On one hand, it allowed for public interaction, so that the figure of the presumed solidified. For example, this cartoon was posted on Facebook and has received over 1,200 likes. In addition, users have made more than 55 comments and it has been shared more than 686 times, generating greater reach and creating a space to discuss this topic using the cartoon as a bridge. In other words, this drawing has contributed to the society participating in a creative process, accentuating the sense of art as resistance (Dilem, 2019a). Likewise, this image was also posted on the social media platform Twitter\*.



*Figure 2.* Bouteflika resigns from a 5th 5-year terms (Dilem, 2019c).

\* The favorite social network of the caricaturist is Twitter. Although he has an account on Facebook, he tends to use his Twitter account more frequently, so his most recent cartoons

can be found on Twitter. However, on Facebook, they tend to have a greater impact.

This cartoon, on the other hand, reflects one of the standout events of the revolution: the resignation of President Bouteflika from seeking a fifth consecutive term. The cartoonist plays on the president's illness and ridicules him, taking it to the extreme. In this way, it can be seen that the president is ailing and has an IV bag hanging from the wheelchair. Additionally, the cartoonist has the president speaking, adding some French words, "I will instead do a quarter of a ten-year term." Therefore, this cartoon has a double meaning. On the one hand, it celebrates the fact that the president is not seeking re-election. On the other hand, it underscores the fact that no elections have been called, and he will continue to be in power, hence referring to President Bouteflika as giving a false speech that has little to do with reality. Thus, the objective of this cartoon is to reflect the lies that are told to suppress revolutions.

Regarding its dissemination, this cartoon appeared on different social media platforms and had a social impact. On Facebook, it was shared more than 1,800 times and received over 6,000 likes, as well as having more than 316 comments that support the revolution and the need for a transition where society can vote democratically (Dilem, 2019c). On the other hand, this cartoon also appeared on Twitter, where it also had a significant impact. On Twitter, it had more than 569 likes, as well as more than 378 retweets and over 39 comments (Dilem, 2019b). Therefore, compared to the previous cartoon (Figure 1), it can be seen that it had a great impact, given that the decision not to run for re-election was a revolutionary event. However, this drawing served to highlight the government's lies but also to accentuate the digital revolt of society on the internet. It is true that people were protesting in the streets, but they were also doing so on social media, making the virtual community a reality.

## ENFIN L'ANNONCE QUE TOUT LE MONDE ATTENDAIT

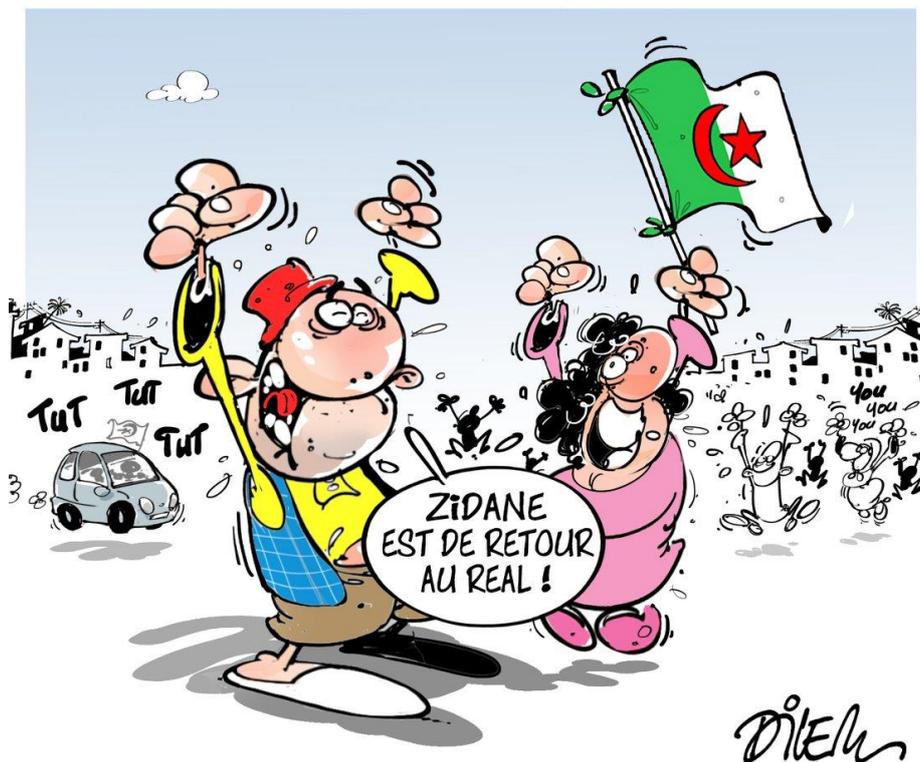


Figure 3. Finally, the announcement that everyone was waiting for. (Dilem, 2019d).

This image was published the day after the previous cartoon (Figure 2) was published. In this case, it reflects society's "happiness" that President Bouteflika has resigned. The society appears in black and white, but in the foreground,

there is a woman dressed in pink holding the Algerian flag, and next to her is a man shouting, "Zidane is back at Real (Madrid)." Therefore, this cartoon is a critique of the part of society that was celebrating that President Bouteflika would

not run for re-election. It criticized the ignorance of people who were more concerned with football than with what was truly happening in the country.

This cartoon, on the other hand, decreased participation even though it was published a day later. In fact, it is difficult to trace this cartoon on Twitter, although it can be seen on Facebook. On Facebook, it received more than 149 likes, 7 comments, and was shared more than 98 times (Dilem, 2019d). Therefore, this cartoon represented a decrease in society's participation in the creative process.

However, despite the passage of several months, there was no announcement regarding the presidential elections. Despite this, in October 2019, the de facto authorities went ahead with the decision to hold the presidential election on December 12, despite the expressed popular will and against all legal and political legitimacy. To achieve this, the regime intensified their campaign of terror against political activists and citizens who were demonstrating. Journalists, political party activists, unions, and members of civil society were targeted with arrests and accusations. This arbitrary behavior was a clear indication that those in power were unwilling to accept any democratic change. In addition to the institutional brutality, the government launched a

seduction campaign aimed at foreign powers, with the aim of hindering solidarity among Algerian civic opinion and benefiting from their silence or protection. In the absence of national support, the government passed financial and hydrocarbon laws, without considering their provisional status and their inherent illegitimacy. The forces of the Pact for Democratic Alternative reiterated that only a democratic transition period, oriented towards a sovereign constituent process, could enable abandonment of the authoritarian system demanded by the Algerian people's aspirations. Therefore, the forces of the Pact for Democratic Alternative remained determined to continue their struggle with Algerians to achieve all the objectives of the February revolution, both before and after December 12, 2019. (Correspondencia de Prensa, 2019).

All of this was, of course, reflected in the cartoons. After March, Ali Dilem continued his own revolution on social media. However, he used Twitter as a bridge to continue his revolution, probably because it is easier to post and users tend to see them more easily thanks to the use of hashtags. For this reason, once the cloud passed, Ali Dilem focused on criticizing society, as well as emphasizing the need for revolution, so that Figure 3 was nothing more than a prelude to what could happen.

## LES ALGÉRIENS MANIFESTENT PENDANT LE RAMADAN



Figure 4. The Algerian protesters during Ramadan (Dilem, 2019e).

This cartoon reflects the need to continue with the protests despite Ramadan. A group of black-colored protesters simulating shadows can be seen, while in the foreground there is a man holding a sign that reads "the hunger for democracy is stronger". This man appears in color, except for his arm and foot which turn black like the rest of the protesters. Therefore, the purpose of this cartoon is to emphasize the need to protest in order to hold elections as soon as possible. In other words, this cartoon is an

attempt to encourage society to achieve everything that had been initiated in February 2019.

Regarding its dissemination, this drawing appeared on Twitter on May 10, 2019. It had a significant impact, with 220 retweets and 657 likes, as well as over 18 comments. Thus, this image represented a new boost for society as it was reacting to a new surge in protests, even if it was from the virtual community (Dilem, 2019e).



Figure 5. He Tunisian Presidential Elections as Seen by Algerians. (Dilem, 2019f).

This drawing plays with the margins to give the impression that the viewer is behind bars. Through these bars, a man with a Tunisian flag is seen entering a room happily, even singing, to cast his vote. The objective of this cartoon is to emphasize the lack of freedom for Algerians. It can be understood that Tunisians have achieved, in some way, the initiatives of the Arab Spring, given that they have the right to vote and can do so freely. On the other hand, the case of Algeria and its Arab Spring 2.0 is different, since they have not properly called for elections, so the situation has not improved, although it has changed. This is due to the change in the way of revolution and demonstrations.

This cartoon appeared on Twitter on September 18, 2019. Its diffusion was quite significant, so it has 6 comments, 55 retweets, and 193 "likes". However, although it has had considerable diffusion, it can be said that it has decreased significantly, as its diffusion has been lower than the rest. However, the revolutionary spirit seems to still be alive and has not died because there are still people fighting for it. Therefore, these recent cartoons show that cartoons have become a significant art of resistance that promotes demonstrations in networked society, accentuating the concept of virtuality and multimedia.

## L'HÉRITAGE DU 5 OCTOBRE



*Figure 6.* The legacy of October 5th (Dilem, 2019g)

This image portrays a man giving a pair of sneakers to a young boy while saying, "they are yours now." The boy looks astonished and enamored with the sneakers. However, the man's intention is to convey the legacy of the protests that began in 1988, when young people in Algiers took to the streets to protest against high unemployment rates, rising prices, and political autocracy. These protests were very similar to those that occurred in 2019, and this cartoon aims to commemorate those who initiated them while also criticizing today's youth, who prefer sneakers over continuing the fight. The dissemination of this cartoon has been lower than the previous one, despite its significance. It has had 51 retweets, 198 likes, and 4 comments (Dilem, 2019g). Nevertheless, it is a very direct criticism that reflects society while also inciting it to continue the struggle.

### Conclusions

Generally, the conclusions have been glimpsed throughout the entire work. Firstly, the Arab Spring was considered a revolution and was highly successful, thanks to the development of social networks. An unprecedented phenomenon

within the Arab world occurred, which led to the development of a network society, united by a space of flows, upon which a cultural code had been established, culminating in a wave of revolutions and demonstrations in different cities of the Arab world, demanding political and social changes. This fact also experienced a resurgence in February 2019 in Algeria, where another wave of demonstrations began, leading to talk of Arab Spring 2.0. However, as seen throughout this work, the case of Algeria has been somewhat different. It is true that the course of the Arab Spring changed in each country where it occurred, so what happened in Algeria in 2019 was probably a different kind of Arab Spring from that of 2011. In other words, the movements that took place in February 2019 in Algeria can be seen as a substitute for that Arab Spring that was still alive and had not yet fully developed in Algeria.

This fact can be appreciated in the cartoons. As seen, the use of cartoons was quite similar. The only difference is that during 2019, the conclusions have been glimpsed throughout the entire work. Firstly, the Arab Spring was considered a revolution and was highly

successful, thanks to the development of social networks. An unprecedented phenomenon within the Arab world occurred, which led to the development of a network society, united by a space of flows, upon which a cultural code had been established, culminating in a wave of revolutions and demonstrations in different cities of the Arab world, demanding political and social changes. This fact also experienced a resurgence in February 2019 in Algeria, where another wave of demonstrations began, leading to talk of Arab Spring 2.0. However, as seen throughout this work, the case of Algeria has been somewhat different. It is true that the course of the Arab Spring changed in each country where it occurred, so what happened in Algeria in 2019 was probably a different kind of Arab Spring from that of 2011. In other words, the movements that took place in February 2019 in Algeria can be seen as a substitute for that Arab Spring that was still alive and had not yet fully developed in Algeria.

This fact can be appreciated in the cartoons. As seen, the use of cartoons was quite similar. The only difference is that during 2011 the cartoon was seeking its place in network society, that is, it was trying to consolidate itself as an art of resistance. It should not be forgotten that the cartoon was already a developed art years before, but the Arab Spring served to consolidate it as an art and give it the strength it needed. Moreover, all this was materialized with the development of the cartoon during the movements in Algeria. The cartoon had become strong and had become the perfect critical system to convey a series of ideas that incited society to fight. However, during the movements in Algeria, transmission through the network had already been consolidated, that is, it was no longer transmitted in a magazine but was easier on social media. In this way, a virtual community had been forged where people could add their relevant comments regarding the country's situation. Therefore, a virtual community had been developed where the cartoon was the nexus of unity given its simplicity and the ability to generate criticism through laughter and humor.

In any case, the cartoon used Arab Spring 2.0 as a bridge to consolidate its territory on Web 2.0. It became a tool capable of generating criticism in society, being used as a weapon against the regime, that is, as an art of resistance. Similarly, the cartoon became a significant forum for debate, so in addition to being used for the revolution itself, it also allowed for the generation of a significant current of opinion that users shared and spread. Therefore, they served

to consolidate the figure of the "prosumer," that is, the cartoonist was not alone but faced his audience, who could also generate their own communicative content.

In this sense, it is also demonstrated that the cartoon is inherent in human beings and adapts to each society. It can be said that it is a cultural block that has specific cultural codes that adapt to any situation that may arise. Therefore, it cannot be said that Arab caricature has stopped evolving. We must wait to see how events unfold in the Arab world to see what happens and what direction the cartoon takes.

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## Marketing in the digital age: cultural values as agents of socially responsible marketing in the digital economy

### Маркетинг у цифрову епоху: культурні цінності як агенти соціально відповідального маркетингу в цифровій економіці

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#### Abstract

The purpose of the article is to determine the relationship between the characteristics of social marketing stakeholders and the degree of development of marketing systems in the digital economy. The results of the study are based on a critical analysis of the tools and processes of functioning of marketing systems in the context of digitalisation, and the changes it causes in marketing systems at basic and extended levels due to specific features inherent in the digital economy. The concept of cultural dimensions by Hofstede (2010) is applied to determine the collective behavioural characteristics of the most numerous stakeholders of social marketing, which are members of society in selected countries. A positive statistically significant correlation between the share of online shoppers against the indulgence

#### Анотація

Метою статті є визначення зв'язку між характеристиками стейкгоल्дерів соціального маркетингу та міри розвитку маркетингових систем у цифровій економіці. Результати дослідження ґрунтуються на критичному аналізі інструментів та процесів функціонування маркетингових систем у контексті діджиталізації, та змін, які вона викликає у маркетингових системах на основному та розширеному рівні через специфічні риси, притаманні цифровій економіці. Застосовано концепцію культурних цінностей Хофстеде (2010) для визначення колективних особливостей поведінки найчисельніших стейкгоल्дерів соціального маркетингу – членів суспільства для низки країн. З'ясовано позитивну статистично достовірну кореляцію між часткою онлайн-покупців та

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index ( $R=.77$ ) and the individualism index ( $R=.73$ ) was found. There is a negative statistically significant correlation between the share of online shoppers against uncertainty avoidance ( $R=-.76$ ), power distance ( $R=-.67$ ), gender culture type ( $R=-.27$ ) and long-term orientation ( $R=-.27$ ). In general, a significant part of the expected impact of uncertainty avoidance is taken over by mechanisms that guarantee the protection of personal data from unauthorised use and security from fraud and crime committed in cyberspace.

**Key words:** social marketing, macro marketing, marketing systems, socially responsible marketing, social stakeholders, digital economy, cultural values.

## Introduction

In a post-industrial society, consumption is becoming particularly important for socioeconomic development, and marketing is becoming an important factor in dominating the global space. Along with the satisfaction of basic consumer needs, there is a fundamental change in their content and nature. Consumption is beginning to be seen as a process of not only economic but also social interaction between members of society. In this regard, since the 60s of the XX century, social marketing has been actively developing, and the concept of social interaction, and social responsibility in marketing, their components and factors have been studied. This research continues to this day.

The development of digital technologies at the present stage has reached a level where the technological structure is changing – economy 4.0 is developing, based on the processes of dating, digitalisation, virtualisation, and generativity. Under their influence, traditional activities and social interaction ways are changing, which affects marketing and consumption. In marketing, there are fundamental changes associated with the transfer of market power to users of information networks, the ability of consumers to create and distribute their content, organise the interaction with other consumers, the possibility of targeted multilateral interactive interaction, and the use of a consumer's digital footprint. At the intersection of the evolution of the marketing concept towards a greater consideration of the social component and technological opportunities arising from modern information and communication technologies (ICT), there is a

показником поблажливості ( $R=.77$ ) та індексом індивідуалізму ( $R=.73$ ). Зафіксовано негативну статистично достовірну кореляцію між часткою онлайн-покупців та уникненням невизначеності ( $R=-.76$ ), дистанцією влади ( $R=-.67$ ), гендерним типом культури ( $R=-.27$ ) та довгостроковою орієнтацією ( $R=-.27$ ). Узагальнено, що значна частина очікуваного впливу ухилення від невизначеності перебирається механізмами, які гарантують захист особистих даних від несанкціонованого використання та безпеку від шахрайства та злочинів, які здійснюються у кіберпросторі.

**Ключові слова:** соціальний маркетинг, макро маркетинг, маркетингові системи, соціально відповідальний маркетинг, соціальні стейкхолдери, цифрова економіка, культурні цінності.

need to study the impact of digital technologies on certain components and types of marketing, including social marketing, to understand its tasks and identify implementation tools.

**Hypothesis.** The authors suggest that depending on the value characteristics of society, the development of marketing systems, including those in the digital economy, reaches different levels. In other words, there is a connection between the ultimate level of social marketing – corporate citizenship, stakeholder orientation, and social/environmental sustainability – and the indicators of the development of marketing systems in the digital economy. The same level of social marketing effectively limits the progress and implementation of digital technologies in marketing: they acquire opportunities for further development if the development of society's value system takes place, which is reflected in the next level of social marketing development.

**The purpose** of the study is to determine the relationship between the characteristics of social marketing stakeholders and the degree of development of marketing systems in the digital economy, which will determine the need to reframe marketing as a social construct in the digital age. Achieving this goal will make it possible to identify tools for influencing the formation and functioning of marketing systems in the digital age, which, in turn, will make it possible to instrumentalise the consistency of the purpose and nature of their development with the interests of society as a whole.

## Literature Review

The development of social marketing is a natural continuation of the classical concept of marketing management, which dates back to the 50s of the XX century. Already in the theory of stages of economic development, W. Rostow (1959) considers marketing as a powerful force that transfers society to mass consumption and leads to the next level – post-industrial society, which was later called the quality-orientated economy. Through mutually beneficial exchange processes between producers and consumers, not only is the efficiency of market activity increased but its effectiveness is also enhanced by the increase in the number of resources at the disposal of producers, achieved through better exchanges and more efficient localisation of resources in activities with the highest potential for return and higher added value.

The act of consumption is changing the consumer (Baker & Sinkula, 2005), and consumer experience increasingly includes social interaction and influences one. Accordingly, since the 1960s of XX century, marketing has gradually recognised its social significance (Alderson, 1964), which can be traced to the impact of collective interaction of exchange participants and influence groups, ties with interest groups, individual communities, and society as a whole, the impact of consumption on behaviour, and the use of consumption as a factor of social identification. The scope of marketing is gradually expanding to include non-profits and governmental organisations (Kotler & Levy, 1969), and it is beginning to be seen as a driver and instrument of social change (Kotler & Zaltman, 1971). The concepts of social and societal marketing emerged (El-Ansary, 1974), where the former covers marketing of non-profit needs, and the latter – marketing activities of all, primarily commercial organisations, aligned with the interests of society. Such an expanded, systemic vision of marketing emphasises the need to ensure benefits not only for the parties to the exchange – the seller and the buyer, as is inherent in classical marketing management – but also for society as a whole and the communities concerned in particular.

Consequently, there is a need to develop a marketing research apparatus at different levels of the socio-economic system. This is how macromarketing emerges, the subject of which is the study of the preconditions, mechanisms, and results of the functioning of marketing systems under the influence of society and the impact of these systems on society (Hunt, 1981; Hunt et al.,

2021), and the object is marketing systems (Layton, 2007). J. Mittelstaedt et al., (2006) consider marketing activity as quintessence and one of the agents of the social life of certain communities, drawing a parallel between the market in the modern economy and the ancient Greek agora as the core of the functioning of society (Mittelstaedt et al., 2006; Mittelstaedt et al., 2015). A great contribution to the study of systemic aspects of marketing and its relationship with other elements of the socioeconomic system belongs to R. Layton (2009), who showed the role of marketing systems in the socioeconomic development of society (Layton, 2009) and defined macromarketing as a social discipline (Layton, 2016). In the same direction, D. Kadirov (2018) defines the marketing system as a public good. The consideration of macromarketing, and therefore partly marketing as a social discipline, raises several specific issues related to values, models, and norms of behaviour in society. In this direction, research is developing on the moral aspects of marketing (Hunt, 2012), the relationship of marketing to public welfare (Luo & Bhattacharya, 2006) and the specific interests of certain social groups; its role in social progress and sustainable development (Mittelstaedt et al., 2014). S. Hunt notes the need for a more detailed study of the dynamic relationship between marketing systems and society: “...this chapter argues for the importance in marketing academy of studying marketing systems and society... for the study of dynamic marketing systems and for the use of brand equity strategies in such systems” (Hunt, 2015: 70). This implies, among other things, clarifying the system of social values and creating an appropriate system of meanings that simultaneously supports consumption and development of society. The creation of such a system of meanings requires alignment of marketing activities, especially from the strategic perspective, with the peculiarities of consumers and, in a broader context, national culture (de Mooij & Hofstede, 2011). Accordingly, any significant change either in the mechanisms or ways of functioning of marketing systems or in the relations observed in society means the need to actualise the relationship of marketing and its components with the socioeconomic system.

The social nature of marketing has made the process of managing it more and more complicated. The complex nature of the basis, tools and effects of marketing, the combination of individual and collective interests, and various forms of interaction between market participants are reflected in the concept of relationship

marketing (Grönroos, 2006; Palmatier & Steinhoff, 2019), which forms the theoretical basis of marketing in modern realities.

Implementing the principles of relationship marketing at the organisational level involves modifying established approaches and methods of managing marketing activities. First, it is about the expansion of the classical marketing complex, which is reflected in the holistic approach to marketing management, which involves the allocation of internal, integrated, productive marketing, and relationship marketing as separate but interrelated elements of marketing policy (Keller & Kotler, 2015). The practical implementation of the holistic approach requires an understanding of the goals and objectives of each element, but both its content and the interrelationships between them remain controversial. This uncertainty is exacerbated by the development of modern information and communication technologies, when, in particular, the technology-driven ability to provide interactive interaction with an individual consumer on a massive scale blurs the line between the usual marketing approach to interaction with *groups of anonymous* consumers (productive marketing) and with *known individual* loyal consumers (affiliate marketing). The management of relationships with internal and external stakeholders, in general, significantly changes the usual ways of implementing marketing policy. It can no longer be limited to the classical marketing complex, as there is a need to interact not only with buyers and consumers but also with other communities and society as a whole. It is the information interaction between an organisation and its various audiences that allows it to “stay on the radar” of stakeholders, making them known to each other and creating a positive experience of information interaction, which is an important prerequisite for success in transactional interaction.

At the same time, there is a noticeable lag between marketing practice and the development of its theoretical concepts. One of the main problems in this way is that issues related to the implementation of social responsibility, socially responsible marketing, consideration, and implementation of sustainable development principles do not have established tools, often remaining at the level of declarations and intentions, while the implementation of the commercial component of exchanges is ensured by the natural desire to obtain benefits. There is no common understanding of the tools that will help social responsibility become a regular

habitual part of marketing policy. S. Hunt and S. J. Vitell (2006), G. R. Laczniak and P. E. Murphy (2019) emphasise that marketing requires not only the description and systematisation of related phenomena and tools but also the definition and adherence to a certain norm, which determines the need to apply normative ethics to macromarketing. Therefore, the author emphasises the need to define the norms related to the interaction of marketing and society and the tools by which social marketing will be implemented in practice in the activities of all market participants, which can be used to institutionalise social responsibility. In this regard, it seems important to distinguish between the concepts of social and societal marketing, as is done in (Vrublevska et al., 2022). In the following, socially responsible marketing and social marketing will be used synonymously, while social marketing refers to marketing activities initially aimed at achieving a social effect.

Laczniak and Shultz (2021) defined the structure of modern socially responsible marketing as a combination of three elements: corporate citizenship, stakeholder orientation, and social/environmental sustainability, postulating an expanded understanding of the concept of sustainable development. The development of digital technologies and the digital economy affects all three of these elements, creating elements of uncertainty in each of them, aspects of concern in terms of social welfare, and issues that need to be addressed. This article is concerned with the study of the relationship between the value orientations of individual members of society and the degree of development of marketing systems in the digital economy. In our opinion, ensuring social responsibility involves, but is not limited to, considering the value orientations of society members. These values should be the basis for “... the use of brand equity strategies in such systems” (Hunt, 2015: 70). Without understanding the value orientations, it is impossible to talk about the application of the normative approach.

## Materials and methods

The realisation of the research objective is based on a critical analysis of the tools and processes of marketing systems through the prism of social interaction based on S-D logic (Vargo et al., 2017), in the context of digitalisation development, and the changes it causes in marketing systems at the basic and extended level (Robul, 2020) due to the specific features

inherent in the digital economy. To achieve this goal, we applied Hofstede's concept of cultural dimensions (Hofstede et al., 2010) to determine the collective behavioural characteristics of the most numerous social marketing stakeholders, which are individual members of society. The model of cultural values defines the areas along which the interests of society members related to ensuring well-being are concentrated. As the practice of applying this methodology shows, it is quite good at describing the behavioural differences of members of different communities through the definition of value orientations and attitudes toward themselves, others, and society as a whole. Following de Mooij and Hofstede (2011), we applied this methodology to consumer behaviour and consumption in the digital economy. As an indicator of the effectiveness of the use of the marketing system in society, we use the share of consumers who make purchases in digital channels (on virtual platforms on the Internet). The search for the relationship was carried out through the study of spatial correlation for a certain group of countries, which includes the following:

1. The leading group of ten countries that, according to UNCTAD, have the highest level of development of marketing systems in the digital economy: The Netherlands, Switzerland, Singapore, Finland, the United Kingdom, Denmark, Norway, Ireland, Germany, and Australia. This group is complemented by the world's leading economies that were not included in the leading group: the USA, France, Japan, and China.
2. Central, Eastern European, and Baltic countries, which are EU members: Estonia, Latvia, Poland, Slovakia, Hungary, Romania, Bulgaria.
3. European countries that emerged in the post-Soviet space: Ukraine, Russia, Belarus, Moldova, and Georgia.

Fundamental empirical studies that outline the transformations of social change and sociocultural vectors of the present are studied. The reviewed works are related to the societal direction and were considered when building the strategy of our empirical research. The reviewed works present the explication of axiopsychological factors (Hulias & Hoian, 2022), axiogenesis of value contradictions (Halian et al., 2021; Halian, 2022), corporate value and motivational components (Bazilenko et al., 2019; Kalenchuk, 2019; Pinkovetskaia et al., 2020; Popovych et al., 2020), studies of anticorruption mechanisms in social processes

(Nosov et al., 2020; Plokhikh et al., 2021; Popovych et al., 2021b) and some modern studies of economic practise (Arbeláez-Campillo et al., 2019; Lytvynenko, 2020; Popovych et al., 2021a).

**Statistical Analysis.** Statistical analysis was carried out using the IBM SPSS Statistics software package version 29.0.0.0 (241). Spearman's correlation coefficient (R) was used to determine statistically significant differences and trends. Data at the level of  $p < .050$  and  $p < .010$  were considered reliable.

## Results and discussion

The state of digital technologies in modern dimensions is a technological transformation, a transition to a new technological mode of production, consumption, and interaction between members of society. It refers to fundamental transformations in the implementation of important social functions, such as the functioning of the society's infrastructure, logistics, labour, distribution, and consumption processes. Technological transformation involves not only technological changes but also changes in elements such as consumption, regulation, supply chains, infrastructure, and symbolic meaning. However, technology does not work on its own. It only produces results through people, social structures, and institutions (Schumpeter & Opie, 1934).

Digital technologies are inherently generative, and their potential remains largely unrealized, which means that the market is constantly unstable and the ways of creating, consuming, and using goods and services are constantly evolving. In general, the technological transformation associated with the introduction and use of digital technologies is more of an evolutionary process that is gradually being implemented and has existed for some time simultaneously with the processes that preceded it. In this regard, objects and relations that emerge or change under the influence of digital technologies will certainly be evaluated and used following the value models and benchmarks developed earlier. Thus, there are prerequisites for the emergence and spread of concerns about new technologies and practises, regardless of their content and objective significance for human well-being and the nature of the relationships between people.

Cultural and symbolic aspects related to the use of digital technologies are produced in the

interaction between users, media, and social groups. User practices emerge from different user groups' daily use of digital endpoints. Industry structures are the result of the mutual positioning and strategies of hardware and software manufacturers, sellers, and suppliers. The technological knowledge embodied in devices, websites, digital platforms, and networks is created by various IT workers, engineers, and researchers; hardware and software manufacturers create these objects. The activities of these different groups are aligned and coordinated.

The competencies, skills and knowledge acquired and shared by the bulk of the system's participants are a form of intellectual capital. Acquiring and applying new knowledge and building competencies takes a long time. Established firms and organisations often find it difficult to develop or move to a new level of

competence, which is a barrier to the penetration of most innovative ideas into everyday practice. Learning is cumulative, building on and improving existing knowledge (Kotter, 2012). Thus, learning is the main factor of path dependence in the diffusion of innovations, and the time required for learning is a factor that slows down the introduction of new tools and the spread of new practices. Therefore, technological transformations can occur at a rate that is slower than the actual rate of innovation production. This is evidenced by the data in Tabl. 1.

It is noteworthy that informational interaction is many times more prevalent than commercial interaction: the share of consumers in the surveyed countries who use digital technologies for buying/selling is much lower than the share of those who use digital tools for non-commercial purposes.

**Table 1.**

*Prevalence of different purposes of using digital technologies for communication and shopping for a set of selected countries*

Country	The share of the population (%) that does:						
	Private correspondence	Communication in social media	Search for information about products and services	Search and reading news	Search for reference information	Uploading own content	Buying and selling goods and services
United Kingdom	89.23	73.13	n. a.	70.36	n. a.	37.78	31.00
Denmark	93.57	80.76	85.02	82.19	60.62	52.20	27.67
Estonia	82.38	65.14	77.93	80.57	55.14	36.12	18.20
Israel	69.3	76.8	n. a.	n. a.	n. a.	n. a.	n. a.
Ireland	76.68	63.58	76.54	66.77	26.36	37.25	18.92
China	22.45	n. a.	40.94	53.91	n. a.	n. a.	n. a.
Latvia	71.86	64.66	61.88	67.58	22.11	24.41	8.85
Netherlands	92.79	66.91	89.36	75.48	57.20	52.91	36.49
Germany	86.29	52.50	85.56	70.76	65.55	35.41	29.70
Norway	94.11	86.31	90.30	91.28	72.54	43.70	33.38
Poland	64.82	53.04	62.24	60.49	29.79	21.07	13.68
Russia	36.67	68.10	n. a.	20.10	n. a.	30.56	26.50
Slovakia	70.95	59.24	59.85	59.76	35.82	20.30	21.98
United States	74.88	62.12	n. a.	n. a.	n. a.	14.31	12.71
Hungary	72.01	68.86	69.26	67.14	43.58	28.10	13.23
Ukraine	58.00	61.00	n. a.	56.00	71.00	17.00	n. a.
Finland	90.44	66.68	86.56	81.33	70.71	26.89	31.71
France	79.40	42.32	61.54	53.78	26.75	22.99	22.32
Switzerland	90.52	53.26	80.93	76.36	n. a.	39.48	25.29
Sweden	90.67	72.22	83.13	79.58	60.55	37.50	25.17
Japan	80.60	60.70	66.70	63.80	25.80	n. a.	14.00

**Source:** compiled by the author on the basis of OECD and individual country data: data for Ukraine: [412]; data for Russia: [413]; data for China: Statista\*.

**Note:** n. a. – no data available; \* – Internet Usage in China: <https://www.statista.com/statistics/277352/online-activities-in-china-based-on-number-of-users/>

As is known, in the theory of cultural values by Hofstede et al., (2010), the following indicators are used to describe culture: 1) power distance (DIS), 2) degree of individualism (IDV), 3) gender type of culture (MAS), 4) attitude to uncertainty (AOU), 5) long-term orientation (LTO) and 6) indulgence (IND). The indicators are measured on a scale from 0 (minimum value) to 100 (maximum value). The LTO and IND indicators have not been determined for all national cultures, and research in this area is ongoing. Indicators of cultural values are neither

multiplicative nor additive: it makes no sense to define a generalized indicator, a typical or average value for them. Therefore, the impact has to be determined separately for each cultural axis by calculating the corresponding pairwise and multiple correlation coefficients with the selected outcome indicators.

Indicators of the development of digital marketing systems and indicators of the respective national cultures according to the latest stable data are presented in Tabl. 2.

**Table 2.**  
*National culture parameters in the Hofstede model and the degree of development of digital marketing systems for a selected group of countries*

Country	Share of the population that makes purchases online, %.	DIS	IDV	MAS	AOU	LTO	IND
Australia	63.00	38	90	61	51	21	71
Belarus	30.00	95	25	20	95	81	15
Bulgaria	20.00	70	30	40	85	69	16
United Kingdom	83.00	35	89	66	35	51	69
Georgia	4.00	65	41	55	85	38	32
Denmark	84.00	18	74	16	23	35	70
Estonia	61.00	40	60	30	60	82	16
Israel	44.00	13	54	47	81	38	n. a.
Ireland	57.00	28	70	68	35	24	65
China	39.00	80	20	66	30	87	24
Latvia	45.00	44	70	9	63	69	13
Moldova	18.00	90	27	39	95	71	19
Netherlands	80.00	38	80	14	53	67	68
Germany	75.00	35	67	66	65	83	40
Norway	79.00	31	69	8	50	35	55
Poland	47.00	68	60	64	93	38	29
Russia	26.00	93	39	36	95	81	20
Romania	18.00	90	30	42	90	52	20
Singapore	63.00	74	20	48	8	72	46
Slovakia	57.00	100	52	100	51	77	28
United States	70.00	40	91	62	46	26	68
Hungary	40.00	46	80	88	82	58	31
Ukraine	21.00	92	25	27	95	86	14
Finland	70.00	33	63	26	59	38	57
France	66.00	68	71	43	86	63	48
Switzerland	63.00	34	68	70	58	74	66
Sweden	77.00	31	71	5	29	53	78
Japan	42.00	54	46	95	92	88	42

**Source:** compiled by the authors based on data from the World Bank and <https://www.hofstede-insights.com/country-comparison/>

The correlation between national culture parameters and digital marketing systems'

degree of development (Table 3) is statistically significant,  $p < .010$ .

**Table 3.**

*Correlation of indicators of national cultural development and the degree of development of digital marketing systems*

Share of the population that makes purchases online	1						
DIS	-.6725	1					
IDV	.7237	-.7469	1				
MAS	-.1094	.1311	.0518	1			
AOU	-.7046	.4576	-.3376	.0585	1		
LTO	-.2820	.5387	-.5511	.0678	.2591	1	
IND	.7770	-.7415	.7074	-.0040	-.6382	-.5901	1

**Source:** calculations by the authors.

There is a statistically significant ( $p < .01$ ) positive correlation between the share of the population that makes online purchases against indulgence ( $R = .77$ ) and the individualism indexes ( $R = .73$ ). At the same time, there is a statistically significant negative correlation of the share of the population that makes online purchases against uncertainty avoidance ( $R = -.76$ ), power distance ( $R = -.67$ ), gender culture type ( $R = -.27$ ) and long-term orientation ( $R = -.27$ ).

The high positive correlation between the level of indulgence and the share of the population that makes online purchases, in our opinion, is related to the nature of demand in modern, postmodern markets, which is characterised by an ever-increasing level of individualism and hedonism. According to Hofstede et al., (2010), indulgence broadly refers to the limits of acceptable behaviour in society, which can still be considered acceptable, while simultaneously deviating from the dominant model of behaviour and, in our case, standard consumption. In consumption and marketing, this cultural parameter is related to the breadth and heterogeneity of consumer demand (de Mooij & Hofstede, 2011). The higher it is, the greater is both the probability of consuming atypical, unusual goods for a given consumer group or individual consumer, and the volume of such consumption, of course, provided that there is a sufficient level of resource provision. Indulgence is directly related to hedonistic consumption. The close correlation with a high value of the individualism index is not surprising, as online consumption is the most individualised form of consumption, and thus it is becoming more widespread in consumer cultures where it is customary to make consumption decisions on one's own.

The strongest negative correlation is observed between the prevalence of online trading and uncertainty avoidance. Uncertainty avoidance characterises the degree of perceived risk associated with the implementation of an activity

under unknown conditions or in the future. In general, high values of this indicator are observed in societies where clear and detailed regulation of various aspects of activity is normal. In the case of e-commerce, the high value of uncertainty avoidance is related to concerns about the protection of personal information and privacy in digital channels. The more consumers use digital channels, the more personal information they leave with them. Thus, the development of consumers' use of digital channels reduces the level of personal data protection. Resolving this situation requires an institutional response in the form of regulating access to personal data and strengthening its protection against unauthorised interference and misuse.

High power distance means that members of a society or group take the inherited hierarchical structure for granted and make efforts to find their place in it, while low power distance means that the value of achievements is recognised over the value of inheritance, and, accordingly, that the place of a community member is determined by personal achievements, and the social distance between influential and noninfluential is low. Digital channels provide 24/7 accessibility and help reduce social barriers. Thus, it is not surprising that societies with lower power distance have a higher share of people who shop online.

A high value of long-term orientation means a focus on achieving future long-term results, which may sacrifice or delay short-term rewards or emotional satisfaction. High scores on this axis are observed in cultures that recognise perseverance, frugality, and adaptability as important social virtues. The correlation between long-term orientation and the prevalence of online shopping may indicate the association of online shopping with immediate, instant gratification (one of the symbolic meanings in the socio-economic and technological system).

In their study of the factors influencing the development of marketing systems in the digital economy, Ahluwalia and Merhi (2020) proposed a comprehensive model of e-commerce adoption at the country level, in which they examined three main factors of influence, namely: a) targeted government policy for the development of the IT sector and telecommunications; b) peculiarities of national cultures, especially uncertainty avoidance; c) the effectiveness of security institutions on the Internet. The correlation analysis conducted by the authors shows a statistically significant correlation between government support for IT development and the existence of effective security institutions that protect marketing systems from fraud, on the one hand, and the development of e-Commerce, and the absence of a significant relationship with the uncertainty avoidance indicator. In this regard, the authors note that a significant portion of the expected impact of uncertainty avoidance is absorbed by mechanisms that guarantee the protection of personal data from unauthorised use and security against fraud and crime committed in cyberspace. In our opinion, it seems wrong to reduce sociocultural factors to uncertainty avoidance only, while in Hofstede's methodology, only a comprehensive consideration of all cultural parameters makes it possible to get an idea of the dominant values and behavioural patterns.

### Conclusions

The development of the operational resources required for the development and proper functioning of marketing systems in society is ensured through consumer education: the volume, content, and nature of the service they provide to each other, including consumption, depends on the availability of specific knowledge and skills.

It is important to note that in this case, we are talking about knowledge and skills related to various subject areas, and not about those related to the technical aspects of the functioning of digital tools, software, and (or) hardware. In the context of Industry 4.0, the development of semantic networks, automated digital platforms, and artificial intelligence, consumers are increasingly relieved of the need to have and use specialised technical knowledge to organise their own consumption: the state of development of modern technologies allows users with very low levels of technical literacy to actively interact. The consumer's knowledge and special skills are becoming important for content creation, for

filling the interaction with meaning and significance.

Within the framework of the normative approach, the focus on stakeholders in modern social marketing, which is developing in the digital economy, implies a focus on a low level of power distance, a high level of leniency (tolerance), and a level of individualism. Contrary to the common stereotype, the indicator of individualism refers to the degree of conscious and accepted responsibility for one's own life and actions, rather than the level of selfishness in behaviour or consumption. The harmonious development of society, and respect for diversity in it, are more closely associated with the gender type of culture. In this regard, it is interesting to note that, for example, in Scandinavian countries, where the social responsibility of individuals and businesses for maintaining harmony and social well-being is highly recognised and widespread, there is a combination of a high degree of individualism and a high femininity index of national culture. As for uncertainty avoidance, it most often develops in conditions of high levels of institutional distrust (Fukuyama, 2008), which defines the development of institutional trust between all market participants as a fundamentally important goal of all components of social marketing.

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## Professional training of future teachers of preschool education institutions to implement the development of child's abilities

### Професійна підготовка майбутніх вихователів закладів дошкільної освіти до здійснення розвитку здібностей дитини

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#### Abstract

The article deals with the problem of professional training of future teachers of preschool education institutions to implement the development of child abilities in the modern information society. Attention is paid to the impact of childhood education on achieving significant success in various fields of Science and Art in the future. The analysis of the works of scientists allowed us to generalize the interpretation of the categories: "makings", "abilities", "giftedness". The foundation of a creative personality is its creativity, the determinant of which is the activity of the individual as a search and transformative activity that is not stimulated from the outside. The introduction of information and communication technologies affects the education system, causing significant changes in the content and methods of teaching. The tasks that should be based on the use of information and communication technologies in preschool education are presented. The functions should be performed by modern information and communication technologies in the educational and

#### Анотація

У статті розглядається проблема професійної підготовки майбутніх педагогів закладів дошкільної освіти до реалізації розвитку здібностей дитини в умовах сучасного інформаційного суспільства. Приділено увагу впливу навчання в дитинстві на досягнення значних успіхів у різних галузях науки і мистецтва в майбутньому. Аналіз праць науковців дозволив узагальнити тлумачення категорій: «задатки», «здібності», «обдарованість». Зазначається, що вроджені задатки дитини можуть реалізуватися лише в активній життєдіяльності особистості, у сприятливому середовищі, під впливом належного виховання та навчання. Основою творчої особистості є її творчість, детермінантою якої є активність особистості як пошуково-перетворювальна діяльність, що не стимулюється ззовні. Існує шість основних параметрів креативності. Підкреслено значення педагогічної практики у професійній підготовці майбутніх педагогів закладів дошкільної освіти для

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information environment of preschool educational institutions.

**Keywords:** professional training, information society, future educators, pedagogical practice, preschool age.

## Introduction

One of the strategic directions of the state-building process in Ukraine at the present stage is the reform of the higher education system. The educational process in higher education institutions is organized taking into account the scientific and pedagogical potential, material and educational-methodical base of the institution of higher education, modern information technologies and one of the most important components in teacher training is pedagogical practice. Education focuses on the formation of an educated, harmoniously developed personality capable of constant updating of scientific knowledge, professional mobility and rapid adaptation to dynamic processes in the educational and socio-cultural spheres, branches of techniques and technology, management systems and labor organization in a market economy.

We must train an innovative educator who will be able to introduce new approaches, new technologies, new thinking, and attitudes to working with children in the modern information society into the educational process.

Modernization of the education system in Ukraine is caused by changes in the socio-economic and socio-cultural spheres of our society, whose needs for a competent person put forward increased requirements for the construction of a personal value system, as a result of which pedagogical science faces the need to rethink traditional attitudes among children and young people.

## Literature Review

N. Liubchenko, O. Prokopenko,  
A. Vynogradova, E. Chernyshova (2012)

реалізації розвитку здібностей дитини в умовах сучасного інформаційного суспільства. Впровадження інформаційно-комунікаційних технологій впливає на систему освіти, спричиняючи значні зміни у змісті та методах навчання. Представлено завдання, які мають базуватися на використанні інформаційно-комунікаційних технологій у дошкільній освіті. Функції мають виконувати сучасні інформаційно-комунікаційні технології в освітньо-інформаційному середовищі дошкільних навчальних закладів.

**Ключові слова:** професійна підготовка, інформаційне суспільство, майбутні вихователі, педагогічна практика, дошкільний вік.

revealed the content of the All-Ukrainian School of innovation of leading, scientific-pedagogical and pedagogical workers, proposed a number of theoretical questions on the formation of an innovative educational space of preschool education and highlighted the innovative experience of preschool educational institutions of Ukraine, which are participants in the school of innovation. The main task of preschool education and upbringing is to provide conditions for the real, versatile development of the child with the aim of raising an active, creative personality. The basis of the new education system is its preschool component. Access to higher education takes its roots from preschool education, because it is the basis for the unified development of future citizens of Ukraine, the basis for the creation of a modern educational process.

V. Koshel & N. Yurchenko (2019) analyzed general innovation trends in the context of European integration and globalization processes in the field of higher education, in particular pedagogical education. Scientific and pedagogical literature on the use of innovative technologies for self-improvement of future teachers of preschool education institutions in their professional activities is analyzed. Attention is focused on modern technologies for the formation of professional competence of the future teacher. The article examines a number of contradictions in modern pedagogical theory and practice regarding the use of innovative pedagogical technologies for self-improvement of preschool teachers in their professional activities. That is why the problem of the quality of professional training of future teachers in the conditions of the educational process of institutions of higher education is no less

important than changes in preschool education. The teacher of preschool children is called to establish before the child the world in all its manifestations, to help him enter this world without fear, with real interest and love.

A. Bida (2012) argues that many extremely gifted people did not realize their capabilities due to unfavorable educating in childhood. The article shows that there is no consensus on the types of giftedness and their signs, but the article presents the results of research by scientists that make it possible to summarize the materials of gifted children: academic giftedness; intellectual giftedness; special giftedness; creative talent; general giftedness.

I. Voloshchuk & M. Evtukh (2009) reveal the mechanism of creativity. Scientists believe that creativity is provoked by the need to understand and improve. These needs, being conscious and unsatisfied, contribute to the accumulation of negative emotions.

V. Moliako & O. Muzyka (2006) believe that a feature of giftedness of preschool children is the reflection of their own abilities and the possibility of their development, a conscious distinction between their own and imitative actions, awareness of the transfer of imitative and inventional actions. The perfection of imitative activity combined with the ability to consciously purposeful use of inventions as means of creativity is evidence of the formation of creative orientation and one of the key indicators of the development of creative abilities of the individual.

L. Onofriyчук (2020) defines media education as a process of development and self-development of an individual using mass media, which aims to develop a culture of communication, the ability to consciously perceive, realize and interpret media texts in order to expand general and professionally significant knowledge, creative and communicative abilities of a future preschool education specialist. In the article, the authors consider the media literacy of the future preschool education specialist in the context of the ideas of the New Ukrainian School. Emphasis is placed on the problems of preschool education in the conditions of modern society.

L. Shisholik (2015) considers it necessary to use information and communication technologies in preschool educational institutions, which is an enriching and transformative factor, which is one of the ways to update the content of education

according to modern requirements. The article emphasizes that during the formation of a new system of education, focused on entering the world information and educational space, this process is accompanied by substantial changes in the pedagogical theory and practice of the educational process, connected with the introduction of changes in the content of learning technologies, which must be true to the latest technical reserves and help the harmonious entry of the child into the information society.

**The purpose.** The purpose of the article is to improve the training of future teachers of preschool education institutions to implement the development of child abilities in the modern information society.

### Methodology

To achieve the purpose, theoretical research methods were used: study and analysis of philosophical, psychological, pedagogical, methodological literature, normative sources, scientific heritage of domestic and foreign scientists on the problem of research to outline the conceptual boundaries of the phenomenon under study and its semantic load; logical and system analysis, classification, analogy, induction, deduction, generalization of scientific, theoretical and practical data.

Active use of pedagogical innovations by educators has become an integral part of the development process of almost every modern preschool educational institution. The main functions of a preschool education teacher are to educate, teach and develop preschool children using various forms, methods, technologies, and work tools. The training of the teacher, his knowledge, experience, the formation of his professional skills, culture, and the realization of creative potential should be aimed at the implementation of these methods.

The training of educators outlines the creation of a set of psychological and pedagogical conditions for increasing competence in the scientific-methodical and organizational-content fields of professional education, based on the system of professional training taking into account the ripe problems of preschool education.

Strengthening the requirements for the professional competence of specialists determines the improvement of the quality of their training, revision of the content and teaching methods, the introduction of effective

pedagogical technologies and teaching methods, the introduction of the latest educational parts into professional training, we consider all these provisions in our article.

## Results and Discussion

Despite the expansion of the indicated areas of research, the problem of the professional training of future educators of preschool education institutions to achieve the development of the child's abilities has not found proper scientific and methodological development. Contradictions are obvious, in particular: the idea of a new philosophy of education, which recognizes the child's right to be himself and the traditional pedagogical position of treating children primarily as objects of educational influence (Rogalska, 2009).

N. Lifareva (2003) notes in the textbook "Personality Psychology", establishing the role of childhood in the formation of personality, that in early childhood, personality traits are formed as a result of the interaction of genotype and environment, and then develop on the basis of socio-psychological laws. "At preschool age, the makings are formed, but the sensitive period of development of abilities based on them continues until the end of school" (Stratan-Artyshkova, Kozak, Syrotina, Lisnevska, Sichkar, Pertsov, & Kuchai, 2022).

V. Maliako & O. Muzyka (2006) exploring abilities, creativity and giftedness, note that makings are an innate education, and abilities are acquired. Initially, abilities are not the reason for a person's success in activity, but a consequence of the development of inclinations in activity. By being involved in the activity, the subject mobilizes its makings, which are restructured, fused and create a qualitatively new education – abilities.

It is the professional training of future educators of pre-school education institutions to achieve the development of the child's capabilities, the child's interaction with what surrounds him – mastering the language, assimilation and application of the knowledge and skills accumulated by generations of people – the source of his formation based on the general capabilities of the human brain and individual aptitudes of various abilities. The concepts of "abilities" and "giftedness" should not be associated with the idea of a ready – made gift of nature: – only a prerequisite, one of the conditions for the development of mental properties. The formation and development of

abilities is necessarily an introduction to classes, the riches of culture, it is the work of the child, his perseverance, passion for business. And, of course, a lot depends on the caregiver: whether he will be able to support, direct, inspire the child in time. No makings in themselves determine its future" (Bida & Chychuk, 2017).

In the practice of preschool teachers, it is customary to give approval for the exact reproduction of a given type of activity by a child, and not for its differences (creative actions). However, one of the conditions for the development of creative abilities of preschoolers in productive activities is the recognition and approval of adults not only imitative, but also creative actions. Scientists suggest that the development of creativity and creative abilities of preschool children is carried out on the basis of value regulation of imitation.

I. Voloshchuk believes that that a person is born with certain intellectual endowments, which are manifested in the form of general and special abilities, that intellectual endowments grow in the form of analytical and synthetic abilities of an individual, and that is why it is worth taking into account in the professional training of future educators of pre-school education institutions to achieve the development of the child's abilities. Analytical abilities of an individual are the basis of cognitive activity, the key to his successful learning. Synthetic abilities are responsible for the creation of new ideas and are the basis of the creative activity of an individual (Voloshchuk, 1998).

We note that as a result of the development of abilities, such traits as kindness, responsiveness, hard work, and the like are previously laid down in the child's character. They are formed and fixed in children's games, in accessible types of work – this is in early and preschool childhood. Those traits in the character of a child of this age that are constantly reinforced are supported by. It should also be noted that gifted children aged about four years are characterized by early development, good memory, quickly accumulate vocabulary, and show interest in certain activities.

We consider the concept of "giftedness" through the prism of motivational, emotional, individual and other personal qualities. In the process of analyzing the works of scientists - teachers, psychologists - various approaches to the problem of giftedness features were revealed, because of which it can be concluded that a child's giftedness is an ability to a certain type of

activity that develops based on natural inclinations. In addition, it is a complex phenomenon of the human psyche, including the unity of intelligence, creativity and motivation, develops in creative activity, and is determined by the motivation of educational activities.

As for the generalized position of scientists in determining the essence of the category "creativity", it can be noted: creativity is determined by the activity of a person aimed at creating qualitatively new material and spiritual values, has social significance, is marked by uniqueness, originality, provides for certain personal characteristics (skill, imagination, intuition, etc.) (Voloshchuk & Yevtukh, 2009).

The analysis of the works of scientists makes it possible to generalize the interpretation of the category "abilities" - individual psychological properties of the individual, thanks to which a certain activity is realized and its success is ensured. The development of abilities is determined by the makings - innate anatomical and physiological features of a person. The ease and speed of mastering knowledge and skills depends on their development (Bida & Chychuk, 2017).

A creatively gifted child needs an adult who is ready to see a creative personality in her, to give her a violin or a paintbrush, to support her initiative, to approve her originality, which must be taken into account during the professional training of future teachers of preschool education institutions to achieve the development of the child's abilities. The kid is ready to use the experience of his teacher and imitate his idol. It is important to remember that the innate inclinations of a child can be realized only in the active life of an individual, in a favorable environment, under the influence of proper educating and training. Therefore, an artistically gifted child from the tribe of Central Africa will never become an artist just because he does not get his hands of paints with which he could express his inner world (Bila, 2008).

Professional training of future educators of preschool education institutions for achieving the development of the child's abilities must take into account that it is of great importance for the formation of a creative personality as a conscious social being that at each stage of its development it occupies a certain place in the system of social relations available to it (in families kindergarten, school, at work), performs increasingly complex duties. The foundation of a creative personality is its creativity, the determinant of which is the

individual's creative activity as an unstimulated search and transforming activity.

Creativity is the ability to abandon stereotypical ways of thinking. Creativity as a natural creative potential of a person is determined genetically. There are six main parameters of creativity identified:

- 1) ability to identify and pose problems;
- 2) ability to generate a large number of ideas;
- 3) flexibility – producing a variety of ideas;
- 4) originality – the ability to produce distant associations, unusual responses, and respond to stimuli in a non-standard way;
- 5) ability to improve the object by adding details;
- 6) the ability to solve problems, that is, the ability to analyze and synthesize (Klymenko & Flys, 2018).

Scientists assign a significant role in the development of a child's abilities to others: parents, educators, and teachers. The combination of childlike spontaneity and adult experience can give a special creative impulse if an adult manages to act like a real master jeweler who cuts a diamond, removes excess and makes it shine. Most famous people who have achieved significant success in various fields of Science and Art have already received a thorough education in early childhood. Thus, G. Leibniz received such knowledge from his father by the age of six that after his early death he could independently continue his education: at the age of eight he learned Latin, at eleven he knew Greek, and at fifteen, he entered the Leipzig University; Mozart was a prodigy (Bida & Chychuk, 2017).

We emphasize the importance of pedagogical practice in the professional training of future teachers of preschool education institutions for the implementation of the development of child abilities in the modern information society. The purpose of teaching practice provides: to create conditions for the student, future specialist in preschool, sufficient knowledge and skills necessary for a modern teacher; to help the student understand the factors that affect the process of teaching (learning) (children, types of educational institutions, cultural context, curriculum, educational material, technical means of teaching, traditions). Educational practice is an integral part of professional training and ensures a smooth transition from study to work, in order to avoid confusion and inability to manage the situation during the first meeting with the group. Novice educators need

strong support and guidance (Kuchai, Skyba et al., 2022; Kuchai et al., 2022).

A new approach to the organization of pedagogical practice is formed on the following principles: the key tasks of pedagogical practice are to develop individual pedagogical abilities of students; pedagogical practice is an integrated part of all theoretical training programs in a higher educational institution and, above all, disciplines of the psychological and pedagogical cycle. This combination of theory and practice ensures a comprehensive correlation of theoretical knowledge with teaching activities. Pedagogical practice is carried out in partner kindergartens of higher pedagogical institutions. Pedagogical practice contributes to the elimination of the barrier between the theory and practice of training educators, the development of students' self-activity and ensuring their creative activity in the implementation of the development of child abilities in the modern information society.

Interesting is the characteristic of V. Bazurina types of pedagogical practices in the UK which is necessary for the professional training of future educators of pre-school education institutions to achieve the development of the child's abilities. There are two approaches to its implementation: block practice and serial practice. Serial practice lasts one day a week for several weeks. Educational institutions try to combine serial and block practice to develop students' professional competence. Practice in preschool institutions contributes to ensuring permanent ties between higher education institutions and preschool institutions, allows future educators to delve into the process of education and training of children, helps to establish pedagogically appropriate relationships with children and colleagues, leads to the possibility of developing the child's abilities in the modern information society (Bazurina, 2006; Kuchai, Yakovenko et al., 2021).

During teaching practice, students should introduce interactive learning methods used by teachers of higher education institutions. Various approaches to combining students in pairs and small groups allow us to significantly activate their educational activities both in practical classes on the methodology and in the process of conducting seminars during intern practice.

Paying great attention to the development of analytical abilities of intern students, P. Sheal offers to teach them how to set: what, how, why, and why happens in class. According to the

British researcher, observation training should take place in three stages:

1. Diagnostic observation. At this stage, a preliminary discussion of the next lesson is held, monitoring the activities of the trainee and children in the lesson and discussing the lesson.
2. Formative observation. This stage involves observation at a new level, namely the concentration of observation on the implementation of developmental purposes.
3. Summary observation. At this stage, general (diagnostic and developmental) monitoring of the course of the lesson is carried out, and the results of the work are summed up.

Three stages of training the trainee's observation are carried out in subgroups of 3-4 people; the time for which they must express their thoughts, comments, suggestions is strictly regulated, that is, they are required to make concise, precise statements, which contributes to the formation of skills to highlight the main thing, to focus on it. (Kuzminskyi, Bida & Kuchai, 2018).

A creatively gifted child needs an adult who is ready to see him as a creative person, give him a violin or paintbrush, support his initiative, and approve of originality. The kid is ready to use the experience of his teacher and imitate his idol. It is important to remember that the innate inclinations of a child can be realized only in the active life of an individual, in a favorable environment, under the influence of proper educating and training (Bila, 2008).

The results of research by V. Moliako and O. Muzyka (2006) indicate that preschool children's awareness of random productive inventions and their further purposeful use to obtain creative results is one of the mechanisms for developing creative abilities in imitation. It is revealed that random inventions occur at any stage of mastering activities due to the inability of preschool children to accurately reproduce the actions of an adult. However, if at the initial stages of mastering the activity, children are guided by imitating the actions of an adult and reject random inventions, then when the task is completed perfectly, inventions arouse the interest of both the child and his peers. Because of repeated successful inclusion of random inventions in the content of activities, children were aware of their value as a means of obtaining recognition for creative results.

Also, in the professional training of future preschool educational institutions to achieve the

development of the child's abilities, it should be taken into account that a sign of the giftedness of preschoolers is the reflection of their own abilities and the possibilities of their development, the conscious differentiation of their own and imitative actions, the awareness of the transfer of imitative and inventive actions. Reflection as one of the mechanisms of activity regulation requires a sufficiently high level of development of abstract thinking, as it involves "detachment" from one's own processes (Moliako & Muzyka, 2006). Therefore, professional training of future teachers of preschool education institutions should also take place in line with the development of the abilities of educational applicants in the modern information society.

Informatization of education is a large space for the manifestation of creativity of teachers, which encourages them to look for new, non-traditional forms and methods of interaction with children; it helps to increase children's interest in learning, activates cognitive activity, and develops the child comprehensively. Knowledge of new information technologies will help the teacher feel comfortable in the new socio-economic conditions. The use of a computer, multimedia and other technical means in the classroom for the purpose of educating and developing the child's creative abilities, forming his personality, enriching the intellectual sphere of a preschooler allows us to expand the capabilities of the teacher.

Summing up, we can conclude that it is necessary to implement information and communication technologies during the professional training of future educators of pre-school education institutions to achieve the development of the child's abilities, because their implementation:

- helps to improve the professional level of teachers, encourages them to look for new non-traditional forms and methods of teaching, and show creative abilities;
  - helps to increase children's interest in learning, activates cognitive activity, improves the quality of assimilation of program material by children;
  - contributes to improving the level of pedagogical competence of parents, their awareness of the activities of preschool institutions and the results of a particular child, cooperation between parents and preschool education institutions;
  - the introduction of information and communication technologies in the educational process of preschool institutions
- allows you to make classes attractive and modern thanks to the design of the information provided;
- computer technologies help to consolidate children's knowledge, skills, and abilities, solve cognitive and creative tasks;
  - the use of information and communication technologies makes it possible to model and solve various problem situations;
  - helps you check the correctness of children's answers, complete tasks using the screen;
  - the use of multimedia in teaching not only increases the speed of information to children and increases the level of its assimilation, but also contributes to the development of such processes as attention, memory, thinking, imagination, speech, develops a sense of color, composition, participates in the intellectual, emotional and moral development of children.

The use of information and communication technologies in the professional training of future educators of preschool education institutions to achieve the development of the child's abilities and in a preschool educational institution is an enriching and transforming factor, which is one of the ways of updating the content of education in accordance with modern requirements. (Shisholik, 2015).

The application of information and communication technologies in the professional training of future preschool educators to achieve the development of children's abilities and in preschool education should be based on solving the following tasks: development of multimedia electronic educational resources, electronic educational and methodological complexes, electronic control and measurement materials; introduction of electronic educational systems and development of methodical aspects of e-learning technology based on them; taking into account the components of the quality management system during the organization of educational environments.

Among the basic components of the network of the information environment of the institution of higher education for the professional training of future teachers of pre-school education institutions for achieving the development of the child's abilities and the institution of preschool education that will apply computer technical innovations, the following can be distinguished:

- a full-fledged multifunctional media library that covers multimedia, interactive educational programs from various branches

of Education, Science and Culture, educational and methodological materials on the main areas of preschool education, designed for different age categories of pupils;

- a virtual online library that provides ample opportunities for all participants in the educational process of a preschool institution to use the necessary information, organized into sections;
- information or editorial and publishing center that will provide creation, support and updating of websites, educational, creative, search, research, experimental projects, publication of informational publications, newspapers, methodological and educational manuals, etc.;
- catalog of information databases that contain comprehensive organizational, meta-consulting information on the implementation of educational and creative projects;
- an electronic library of methodological materials, search, research, and experimental works on various sections of the preschool education program is structured (Lyubchenko, Prokopenko, 2012).

It is the older preschool age that is characterized by manifestations of criticality, which is expressed in the desire to find and clarify mistakes and inaccuracies. And the rapid development of the media acutely raises questions about the training of future specialists in preschool education to achieve the development of the child's capabilities, because it is on them that the development of preschoolers' critical thinking, communicative skills and adequate self-evaluation of their statements and actions, their own capabilities and achievements in various activities depends.

Let's single out the reasons for the priority and relevance of media education that have a positive effect on the professional training of future teachers of pre-school education institutions for achieving the development of the child's abilities: the high level of media and the saturation of modern societies with mass media; the ideological importance of the media and their influence on the consciousness of the audience; rapid rate of growth in the amount of media information, strengthening of its management mechanisms and its distribution; the intensity of media penetration into the main democratic processes; increasing the importance of visual communication and information in all spheres; the need to educate students and orient them to

meet future requirements; strengthening of national and international processes of information privatization (Onofriychuk, 2020; Polishchuk, Khlystun, Zarudniak, Mukoviz, Motsyk, Havrylenko & Kuchai, 2022).

## Conclusions

The emergence of creativity in preschool age are determined both by the peculiarities of mastering the content of the activity itself by future teachers of preschool education institutions, and by the peculiarities of relationships with the environment and depends on their preparation. When professional training of future educators of pre-school education institutions for the achievement of the development of the child's abilities, it should be taken into account that the driving force behind the refusal to imitate the actions of an adult and the transition to the conscious inclusion of inventions in the activity is the possibility of satisfying the need for recognition by means of inventive and creative imitation.

The driving force behind the refusal to imitate the actions of an adult and the transition to the conscious inclusion of inventions in activities is the ability to meet the need for recognition by means of investment and creative imitation. Parents and educators should help develop the creative abilities of preschoolers. Therefore, improving the training of future preschool teachers in the process of teaching practice is an important task of our time.

The article deals with the problem of professional training of future teachers of preschool education institutions to implement the development of child abilities in the modern society.

The importance of pedagogical practice in the professional training of future teachers of preschool education institutions for the implementation of the development of child abilities in the modern information society is emphasized.

The tasks that should be based on the use of information and communication technologies in preschool education are presented.

The functions should be performed by modern information and communication technologies in the educational and information environment of preschool educational institutions. Let us highlight the reasons for the priority and relevance of media education in preschool educational institutions and in the professional

training of future educators of pre-school education institutions to achieve the development of the child's abilities.

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## Semiosis of textual categories of time and space in short fiction by Breece D’J Pancake

### Семіозис текстових категорій часу і простору в коротких оповіданнях Бріса Декстера Пенкейка

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#### Abstract

The article explores the semiosis of textual categories of time and space in short fiction by Breece D’J Pancake. The methodology of the research is based on the works by M. Bakhtin, Yu. Lotman, G. Genett, P. Ricoeur and U. Eco. It has been proved that the stories by Pancake replicate several Biblical plots: the creation of the world and the original sin (“Trilobites”), a prodigal son (“Time and Again”), the whore of Babylon / Mary Magdalene (“A Room Forever”) and the apocalyptic mark of the beast (“The Mark”). The time is static and is marked by seasonality. The space is segregated into macro-outer world and the inner space of the towns, engulfing people’s destinies and predetermining their down-to-earth existence. The semantic system is represented by the cross-cultural concepts: the light as a sign of hope; a room as an embodiment of a shelter; the hollowness of the night, growing into the hollowness of life; a rabbit embryo, symbolizing the mark of the beast; a snake, serving as a symbol of seduction; a train or a bus as the means of escapism. Three rounds of coffee in “Trilobite”

#### Анотація

У статті досліджується семіозис текстових категорій часу та простору у короткій прозі Бріса Декстера Пенкейка. Методологія дослідження базується на роботах М. Бахтіна, Ю. Лотмана, Ж. Женетта, П. Рікера та У. Еко. Доведено, що оповідання Пенкейка відтворюють декілька біблійних сюжетів: створення світу та перворідний гріх («Трилобіти»), блудний син («Знову і знов»), Вавилонська блудниця / Марія Магдалена («Кімната назавжди») і апокаліптичний знак звіра («Знак»). Час статичний і відзначений сезонністю. Простір сегрегований і репрезентується зовнішнім макро-світом та внутрішнім простором містечка, що пожирає долі людей, формуючи характер їхнього приземленого існування. Семантична система представлена крос-культурними концептами: світлом як знаком надії; кімнатою як уособленням притулку; порожнечою ночі, що трансформується у порожнечу життя; кролячим ембріоном, що уособлює знак звіра; змією як символом спокуси; поїздом чи

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replicate three circles of Hell in “The Divine Comedy” by Dante.

**Keywords:** Biblical symbolism, closed reality, explicit seasonality, means of escapism, textual categories.

## Introduction

It is the Biblical text that starts measuring the world and the human existence through the language with the word as its initial code and constituent element: “*In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through Him all things were made; and without Him nothing was made that has been made. <...> The Word became flesh and made his dwelling among us*” (Catholic Online Logo (n/d), 14). The world gets processed both through the language and the personal-temporal-spatial coordinates. Outside temporal and spatial code there is no existence, no human being, no objective reality or its perception. Time and space are the essential forms of every cognition, which define every cultural phenomenon, every human work, or a literary text in particular. The narration gets modelled through the temporal and spatial system, which forms the skeleton of the literary text, organizes its structure and shapes its artistic sense. According to Bakhtin, “every intrusion into the sphere of senses is committed exclusively through the gates of chronotope” (Bakhtin, 1975, p. 406). Thus, the chronotopic category represents a peculiar meaningful system of signs.

The exploration of the semiotics of time and space, is linked to the analysis of language devices, serving as a key to the unique author’s code (Kubryakova, 2004). The way the human mind processes the objective reality gets reflected in the language and is defined by it. Traditionally the exploration of the chronotopic categories leads to the construction of models, embracing lexico-semantic fields, suggested by Vsevolodova, 2007 and Guk, 1996. There is a strain of works, spotlighting the mechanisms of representation of the chronotopic categories through the language, among which the following aspects dominate: morphological (Vinogradov, 1971, Kubryakova, 2004, Nikolina, 2007); lexico-semantic (Guk, 1996, Denisenko, 2002); syntactic (Myaksheva, 2008); conceptual (Naberezhnova, 2008). In the present research the analysis of the categories of time and space will be joined to the detection of the

автобусом як засобом ескапізму. Три раунди кави у «Трилобітах» відтворюють три кола Аду у «Божественній комедії» Данте.

**Ключові слова:** Біблійний символізм, закрита реальність, виражена сезонність, засоби ескапізму, текстові категорії.

connection between the sign system and the process of semiosis of the chronotopic categories.

The categories of time and space represent “some hierarchical structure of subordinate senses” in every literary text (Toporov, 1983, p. 242), transforming from the geometric and physical categories into semiotic ones, becoming “a language, capable to express various meaningful notions” (Lotman, 1997), which enables us to speak of semiotic and lingvopoetic character of the categories of time and space in fiction.

The contemporary linguistic paradigm tends to be anthropocentric, exploring the language and culture, the human beings and the sign systems, generated by them, including the genuine constants like time and space, participating in conceptualization of the fictional world. The topicality of the exploration is conditioned by the fact that the new contexts, created in Modern, Postmodern and Metamodern literature, make different emphasis in the temporal and local categories.

The works by Breece D’J Pancake, which are in focus of the current research, get often compared to those by Ernest Hemingway, William Faulkner, James Joyce, Samuel Beckett, Flannery O’Connoir and other twentieth-century giants and represent a picture of West Virginian world of the second half of the XXth century, processed through the unique perception of a remarkably promising young author with suicidal inclinations. “Chekhovian in impetus, but closer to poetry than prose, these stories often feature a lonely young man in a dreary small community, hiding his dreams and thoughts from the world. This character is surrounded by rough, often violent, working men – miners, labourers, boxers – ageing, failing parents and women: despised or desired, but never granted a soul. This vision of reality, one senses, is Pancake’s own in both life and work”, says Karen Altenberg (Altenberg, 2017). Despite their literary value and high critical acclaim, the text by Pancake, and their chronotopic fame in particular, have never been

the object to a literary research. Meanwhile, the analysis of the chronotopic structure and its determiners allows to detect numerous semantic layers coded by the author.

**The objective of the article** is to provide a comprehensive analysis of textual categories of time and space and the mechanisms of their representation as specific components of semiotic act in the in short fiction by Breece D’J Pancake.

### Theoretical Framework

The research is based on the works by M. Bakhtin, Yu. Lotman, G. Genett and P. Ricoeur, devoted to the exploration of the categories of time and space in the literary text. According to Bakhtin, “the temporal features tend to disclose in space, and the space gets comprehended and measured by time” (Bakhtin, 1975, p. 235). Lotman proves that the artistic space represents “a world model of some particular author, expressed in language of his/her spatial concepts” (Lotman, 1988, pp. 252-253). Lotman suggests a range of dominant spatial forms: open – close space; linear (directed) – undirected (static) space; real (living) – magical (imaginary) space; own – alien space; and pointed – restricted space.

French philologist Gerard Genett focuses on the discrepancy on the sequence of the events in the storyline and the type of narration, calling it anachronism. Anachronism is inherent to every text and can be represented in two forms: *prolepsis* (a narrative approach when the story anticipates the events to be); *analepsis* (telling a story, which took place before the time of the reader). He also singles out three types of *ellipsis* (the gaps in time): a) explicit, when the lost event is pointed out; b) implicit, when the lost event is not manifested directly but gets reconstructed by the reader out of chronological gaps and narrative disruptions; c) hypothetical, which can’t be localized and gets detected post factum in some analepsis (Genett, 1998, p. 138). Genett proves that the contemporary literary mind expresses itself exclusively within the textual categories, which form the figures of “par excellence”, where the language becomes space, and the space turning into a language speaks for itself (Genett, 1998, p. 132).

Paul Ricoeur suggests to explore temporality on the basis of *mimesis*. Ricoeur uses the notion of *mimesis* in Aristotle’s sense (excluding Plato’s ideas), notably as an artistic imitation of reality, and not its passive copying. Ricoeur extends it up

to three components: *mimesis I* (anticipation), *mimesis II* (morphogenesis), *mimesis III* (transformation). Thus, *mimesis I* is based on actual reality, life as an aggregation of facts and events, deprived of cause-and-effect relations. *Mimesis II* is the composition of fiction and *mimesis III* is the act of its perception, the ideas and senses the literary work generates. Thus, every stage of *mimesis* is linked to a particular temporal experience, which ranges the time of the story according to the following scheme: *mimesis I* (the real time of the world) > *mimesis II* (the configured time of the artistic world depicted by the author) > *mimesis III* (assumed experience of the time) (Ricoeur, 1998, p. 82).

The exploration of the semiotic system of the text is grounded on the poststructural concept of a sign, suggested by Ch. Pierce and U. Eco. According to Eco, the signified enters into the semasiological relationships with the signifier due to the code, which means that the code is a particular function, the initial zeroth-order meaning, fixed in the language in a particular moment of history (Eco, 2007, p. 66). It constitutes the first stage of semiosis. The second stage deals with the interpretation of a sign. The key notion here is the notion of the interpretant or the “action of the sign”, the sign, which is created in the mind of the reader, who senses it and enriches its meaning, either creating a more developed sign, or, on the contrary, reducing its meaning (Nyot, 2001, p. 14). Thus, the content of the sign, created by the author, and the content of the sign, comprehended by the reader, may differ. Eco says, that the interpreter defines the meaning of the sign in this very context, namely distinguishing its connotation. The third stage of semiosis by U. Eco dwells on the idea that potentially limitless semiosis is anyway determined somehow, and it is the dynamic objects that plays the restrictive role: “this object, the sign of which is the sign”, “some particular state of the outer world” (Eco, 2007, p. 323), “reality that sends this sign to its representation” (Usmanova, 2000, p. 128). The dynamic object is something that reduces senses or, vice versa, creates a bigger frame for the interpretation of the sign. According to Eco, in the text of fiction the semiosis is already restricted by the text itself, notable by the lexico-grammatical language devices.

### Methodology

Methods and techniques of the research are determined by the tasks: to describe the structure and the functions of the categories of time and space in short fiction by Pancake and determine

their philosophic, artistic and linguistic dimensions, to retrace their semiotic potential; to disclose the nature of semiosis of the categories of time and space in the author's prose; to detect the set of the linguistic devices participating in the semiosis of the categories of time and space and structuring the artistic text in the selected prose. Among the research methods are the following: the method of semantic analysis, the method of oppositions, the method of contextual analysis, the method of chronotopic analysis.

## Results and Discussion

The term "semiosis" was first applied by a Greek doctor Galen from Pergamum (Pergamon) (139-199) in relation to the symptoms of illness. However, it is only in the XXth century when the term "semiosis" gets exploited within the theory of signs and the sign systems. The new approach to the definition of the term dates back to F. de Saussure and is based on the interpretation of the sign as the dual entity, representing the signifier and the signified. Hereby within the semiotic tradition by Saussure, semiosis is defined as an operation, which determines the relation between the form of expression and the form of content. On the other hand, Ch. Peirce suggests the triadic scheme "the object – the sign – the interpretant", where the "interpretant" is the way the sign is exploited by the man. According to Peirce "every cognition of an object is possible only through the exploration of the signs generated by it" (Pierce, 2009, p. 89).

The fictional space, represented in the stories by Breece D'J Pancake, is densely coded. The peculiar locus of West Virginia, embodied in the author's writings, shapes peoples' destinies, creating the formula of "place over people" (Gower, 2017). The space of existence by Pancake bears the down-to-earth philosophy and produces people of particular class, chronotopically restricted by their background: truckdrivers, unemployed miners, tramps, paroled convicts, runaways, farmers, fatherless sons, hardened men, and harder women. Pancake's protagonist is a chronotopic abnormality, an error in the code, a lonely person, "full of a hard-spirited *otherness*" (Gower, 2017).

Pancake's fiction represents several circles of reality: the old times, prior to the mimesis II, the fictional reality or mimesis II, and the inner world of the protagonist, formed by experience, mimesis III. The short fiction, which is supposed to be what Genett calls analepsis is only theoretically such. The time, which gets

presented in its common forms (the present, the past and the future), stays static as nothing changes, life doesn't change. West Virginia is, relatively speaking, a swamp, absorbing everybody, belonging to its rural static space. The "world outside" exists, however, is never reached physically. "*Trilobites*" is a story built in circles, where the large circle is the dimension of a big history, having started million years ago and going on, and the smaller one is the current temporality of the locus described. Trilobites serve as a symbol of eternity, of something greater than the actual reality, piercing the layers of time: "*I look at Company Hill again, all sort of worn down and round. A long time ago it was real craggy and stood like an island in the Teas River. It took over a million years to make that smooth little hill, and I've looked all over it for trilobites. I think how it has always been there and always will be, at least for as long as it matters*" (Pancake, 1983, p. 21). According to *the Encyclopedia Britannica*, trilobite is "any member of a group of extinct fossil arthropods easily recognized by their distinctive three-lobed, three-segmented form. Trilobites, exclusively marine animals, first appeared at the beginning of Cambrian Period, about 542 million years ago, when they dominated the seas" (Britannica, 2023). The protagonist is looking for trilobites as if trying to link to something bigger than the actual locality: "*I still can't find a trilobite, I say*" (Pancake, 1983, p. 22). The personal story of the protagonist, his feelings and thoughts gets partially told between the three rounds of coffee in the café, where Tinker Reilly's little sister works. It is between the pots of coffee his initially embryonic desire grows towards the new object. Ginny, who manages to cross the chronotopic parameters of Michigan, stays behind the local secularity. The primitive sexual desire, visible for the reader, is still unnoticeable for the character-narrator, who yet refuses to acknowledge his emotional transition, the dominance of the closed reality over the borderless bigger circle of entity: "*She goes to the counter end and scoffs down the rest of her sundae. I smile at her, but she's jailbait. Jailbait and black snakes are two things I won't touch with a window pole*" (Pancake, 1983, p. 22). Basically, the coffee rounds symbolize the spiritual degradation, the triumph of baser self over the higher feelings: "*Tinker Reilly's little sister pours my coffee. She has good hips. They are kind of like Ginny's and they slope in nice curves to her legs*"; "*The girl brings Jim's coffee in his cup, and we watch her pump back to the kitchen. Good hips*"; "*Tinker's sister comes up with her coffeepot to make us for a tip. I ask her for an aspirin and see she's got a*

pimple on her collarbone. I don't remember seeing pictures of China. I watch little sister's hips" (Pancake, 1983, pp. 22-23). At the same time, the "pictures of China" make a separate symbol as the postcards themselves. The postcards are sent by Ginny, the postcards are shown by the protagonist's friend, serving as the sign of existence of a bigger world outside Michigan, outside the States: "She sends me postcards with alligator wrestlers and flamingos on the front" (Pancake, 1983, p. 21). And his "I don't remember seeing pictures of China" point out the protagonist's concentration on locality, on the "giggle" of Tinker Reilly's sister in the café's kitchen. There comes a paradox: on the one hand, the outside locus gets neglected, ignored in favor of Michigan unpretentious topos, something carnal, something here and now, on the other hand, a big historical space, eternal dimension is the destination the character-narrator craves for and ultimately reaches: "I feel my fear moving away in rings through time for a million years" (Pancake, 1983, p. 37).

It is the locality that provokes changes inside the characters. According to Lotman, the characters' behavior is shaped by the space they are in, and the lapse of the space boosts the transformation according to the laws of the new space (Lotman, 2022, p. 264). Time and space transform them, reshaping the nature of the relationships inside the couple, separated by spaces. During the last date with Ginny love changes for sex: "I don't wait. She isn't making love, she's getting laid. All right, I think, all right. Get laid" (Pancake, 1983, p. 35). At the same time, the lower feelings are localized and tied to a particular element of the local toponymy, the girl from the café: "I pull her pants around her ankles, rut her. I think of Tinker's sister. Ginny isn't here. Tinker's sister is under me" (Pancake, 1983, p. 35). Here comes another spatial symbol, the symbol of a snake, as a Biblical sign of sin, the sign of a broken personal rule, a betrayal of personal principles: "I open my eyes to the floor, smell that tang of rain-wet wood. Black snakes. It was the only time he had to whip me" (Pancake, 1983, p. 35). The snake is "one of the most complicated and unsolved figures of both the world folklore and world religion", characterized by snake fighting (Propp, 1986, p. 216). The snake symbolism sobers up the protagonist, boosting his reverse transformation, which ends up in a spiritual escapism from the corrupt reality. The perception of Ginny changes, the circle of the actual reality intervenes with the eternal dimension: "I look a long time at the hollow shadows hiding her eyes. She is somebody I

met a long time ago. I can't remember her name for a minute, then it comes back to me" (Pancake, 1983, p. 35). The protagonist understands that it is the locality which is responsible for degradation of the whole generations: "I picture my father – a young hobo with the Michigan sunset making him squint, the lake behind him. His face is hard from all the days and places he fought to live in, and of a sudden, I know his mistake was coming back here to set that locust-tree post on the knob" (Pancake, 1983, 36). At the end of the story there appears an approaching train as a symbol of escapism, its device. The protagonist gets ready to cross the border; he won't stay: "I get up. I'll spend tonight at home. I've got eyes to shut in Michigan – maybe even Germany or China, I don't know yet. I walk, but I'm not scared" (Pancake, 1983, p. 37).

Thus, trilobites serve as a guide to the beginning of the world, the creation of lasting things, like the hills around, which had seen the millions of years of human civilization. The common pinpoint locality, represented by the house, a concrete patch in the street, the café, the car, the tractor, the cane, the old mountain, is opposed to eternal borderless, unlimited macro-objects, like the sky, the clouds, or the temporal dimension "long before" and the spatial dimension "outside" Michigan. As a result, the reader deals with so-called "splitting of the space", and the local objects of two types of locality fulfill the role of "indexes" that "point at the shift of the spatial zones and signals, marking the place" (Chertov, 1999, pp. 140-155). The "splitting" characterizes the emotional level, the state of mind, as the physical space of secular life is in-built into the macro-space of eternity.

The time in the short fiction by Pancake is marked by explicit seasonality: "the black joints of river are frosted by this foggy rain"; "the bowling alley is closed for New Year's" ("A Room Forever") (Pancake, 1983, p. 53), "the passing of an autumn night" ("Fox Hunters") (Pancake, 1983, p. 61), with love and the years counted by summers: "many summers ago he touched <...>"; "the March wind spraying dust into little clouds" ("Hollow") (Pancake, 1983, p. 39); "The air is smoky with summertime" ("Trilobites") (Pancake, 1983, p. 21).

The topos in "Hollow" is subdivided into two spatial layers – the mine and the world above opposed to each other: "Buddy was lost in the rhythm of the truck mine's relay; the glitter of coal and sandstone in his cap light, the setting and lifting and pouring"; "heard the pulley



*squeak in the circle of blue above*" (Pancake, 1983, p. 39). Mine is a closed space, "a world of twenty yards" (Pancake, 1983, p. 42), which the protagonist's life is linked to in the same way he is linked to the locality around it. He gets stuck in the "deep tunnels" feeding him and shaping the mode of living of people around (Pancake, 1983, p. 39) The dark colour of the mine dominates, being represented in the dust sprayed by wind (Pancake, 1983, 39), "the sweet tobacco juice" (Pancake, 1983, p. 40), "the raw dirty faces" (Pancake, 1983, p. 41), "coal splinters" in the air (Pancake, 1983, 41), "the coal face" (Pancake, 1983, p. 41), "the dust in up-down streams" (Pancake, 1983, 42), the cold air, "sealing the dirt to his skin" (Pancake, 1983, p. 42), the hollow of the night (Pancake, 1983, p. 43). Thus, the darkness transforms into the hollowness, physical and emotional. The semiotic circles of the dark restricted space extend to the hollowness of the place, left by the girl the protagonist loves, Sally. Thus, the filled-with-objects-space develops into an empty, hollow one, which can be defined as *atopy* (Palaguta, 2008, p. 2) or *non-site* (Ozhe, 2017, p. 136). The vehicle in the story is viewed not as an escapist device like it is in "Trilobites", but as a tool of restoration the past, called to return the lost elements and people back into their native topographic parameters: "Sal's gone, yes, she is. Yes, she is. Couple of months, an' we'll show her, yes we will." He saw himself in Charleston, in the Club, then taking Sally home in his new car" (Pancake, 1983, p. 50).

The protagonist of "Hollow" is a person of reversed perception. Lotman associates the closed space with darkness, whereas sunshine and light are linked to freedom. Pancake's character relates to darkness and coal dust. His mode of life, inherited from his father, links him to the dust of the mine, making it a constant part of his personal space. The sunlight and the "new shoes", on the contrary, get associated with funerals (Pancake, 1983, p. 45), the killing of a deer (Pancake, 1983, p. 51), a blood-thirsty cat and a dog at home (Pancake, 1983, p. 52). According to Lotman, "memories" is a reconstruction of the semiotic entity by its particles (Lotman, 1992, p. 18). The story rests on retrospection ("Musta been sixty years ago" (Pancake, 1983, p. 40)) and the present locality, which the main character wants to preserve.

The plot of "A Room Forever" is based on the balance between the stability of the universe around the protagonist-narrator and an eight-dollar room on New Year, embodying the temporal toponymy built by the man: "I see the

river in patches between buildings, and the black joints of river are frosted by this foggy rain. But on the river it's always the same. Tomorrow starts another month on the river, then a month on land-only the tales we tell will change, wrap around other times and other names" (Pancake, 1983, p. 53). Thus, the space is linked to time, which reflects the thesis by Toporov, who believes that "the center of the space is the center of time. <...> every full-fledged description of space presupposes the definition "here - now", and not just "here" (as well as the definition of time is not only focused on "now", but on "now - here")" (Toporov, 1983, p. 223). If the natural space equals the eternity, the man-constructed world is marked by finitude. The personal stories are numerous and alike, coming in succession against the background, bigger than them.

The parameters of the town in the story, represented by the streets, the *Delmar*, the bar on First Avenue, the smoke of the lobby, the row of crowded taverns with hardened people's destinies inside shrink to the protagonist's room "with a kid playing a whore" (Pancake, 1983, p. 58). The girl is viewed as an alien for the town element, which is traced in the details of her portrait: "I can tell right off she is not a chippy. Her front is more like a kid who had a home once - jeans, a real raincoat, a plastic scarf on her head. And she is way too young for this town - the law won't put up with fresh chicken in this place" (Pancake, 1983, p. 55). The girl doesn't belong to the place or the profession of a hooker: "You aren't cut out for this" (Pancake, 1983, p. 57). The room as a locus for New Year entertainment could transform into a topos able to save one destiny: "No, it's just I need a place. I got to stop moving around, you know?" (Pancake, 1983, p. 57). This room is a sort of a place inside a bigger space, a town, which is, in turn, inside of the huge eternal topography. The room forms a special shelter for two perfect strangers, creating a *heterotopia*, "a peculiar space inside of the common social spaces" familiar to the protagonist, but not to the girl (Palaguta, 2008).

The mirror serves as a symbol of meeting, as the holder of the story shared only by two. The absence of the girl in the mirror at the end of "A Room Forever" celebrates her escapism, unnoticeable for the others: "I look for her in the mirror but she is gone. I would have seen her going out the front, so I head for the back door to look for her. She is sitting against a building in the rain, passed out cold. When I shake her, I see that she has cut both wrists down to the leaders, but the cold rain has clotted the

blood so that only a little ooze out when I move her. I go back inside” (Pancake, 1983, p. 59). Here comes the symbol of shit washed away by the river together with the town secrets. In the same way the blood of the girl gets washed by the rain: “I walk along the avenue thinking how shit always sinks, and how all these towns dump their shit for the river to push it down to the delta. Then I think about that girl sitting in the alley, sitting in her own slough, and I shake my head. I have not gotten that low” (Pancake, 1983, pp. 59-60). Water washes away the dirt of the local civilization. The wasted lives turn into water, which is eternal and will stay when the people are gone. According to Pellegrino, a rural space “is a collective space of a village”, whereas “the urban space is centered” and is represented “by the individual space of the subject” (Pellegrino, 1989). The topography of “*A Room Forever*” is a town, which generates some ambiguity of the space. On the one hand, the plot of the story spotlights two individual fates intervened at some particular moment. On the other, these fates are similar to all the others in this very locality. The people portrayed characterize the town society in the whole. Even though the protagonist is aware of the dimension of eternity, something bigger than the lives around, he ultimately returns into his native imperfect space.

The attempt of the girl to commit suicide equals to the attempt of people to run away from the town on the busses. There is no escapism, as the place is a part of you and will always be: “I stop in front of the bus station, look in on the waiting people, and think about all the places they are going. But I know they can't run away from it or drink their way out of it or die to get rid of it” (Pancake, 1983, p. 60). The inner topography of the story is a hierarchical zoning of the closed levels of space, controlled by “the cops and the pimps” (Pancake, 1983, p. 56).

In “*Time and Again*” there is again a conflict between the limited topicality and the outer world, which takes the nearest and dearest. The burning light in the kitchen serves as a symbol of hope for the son to return: “I left the kitchen light burning. This is an empty old house since the old lady died. When Mr. Weeks doesn't call, I write everybody I know about my boy. Some of my letters always come back, and the folks who write back say nobody knows where he got off to. I can't help but think he might come home at night when I am gone, so I let the kitchen light bum and go on out the door” (Pancake, 1983, p. 83). On the other hand, the grunting of the hogs not only characterizes the static nature of the space depicted, the routine nature of life of the old man,

but also works as a symbol of the futility of hoping, in the down-to-earth reality miracles don't take place: “I pull up beside my house. My hogs run from their shelter in the backyard and grunt at me. I stand by my plow and look at the first rims of light around Sewel Mountain through the snowy limbs of the trees. Cars hiss by on the clean road. The kitchen light still bums, and I know the house is empty. My hogs stare at me, snort beside their trough. They are waiting for me to feed them, and I walk to their pen” (Pancake, 1983, p. 88). The cold of the morning stands for the frozen status of the reality, which took place after the death of wife and the running away of the son. “*Time and again, I try to count and can't*”, says the protagonist (Pancake, 1983, p. 88). This “*time and again*” embodies the whole nature of his life, which had stopped. There a movement of actions which don't lead to the actual development in life. “*I try to count and can't*” show the emotional condition of the protagonist, stand for his inability to concentrate, to reconcile with the actual state of things, arranged after the death of his wife.

The Biblical symbolism gets the most powerful in the story “*The Mark*”. The child conceived in sin with the protagonist's brother is viewed as a beast, a rabbit: “She felt the spot where the baby should be, closed her eyes, and tried to imagine her blood in the rabbit's veins” (Pancake, 1983, p. 90). The idea of the beast is repeated on the several levels – in connection to her brother and within a story inside the story: “She remembered her brother Clinton holding a litter of baby rabbits close to his naked chest while the mowing machine droned behind him in a dead hum. Was that the summer she began to want him?” (Pancake, 1983, 90); ““That baby was born lookin' just like a monkey,” Carlene said, bending herself to talk between Reva and the cage. “Momma swears it's the mark of the beast”” (Pancake, 1983, p. 97).

## Conclusions

Thus, the stories by Breece D'J Pancake replicate several Biblical plots: the creation of the world and the original sin (“*Trilobites*”), a prodigal son (“*Time and Again*”), the whore of Babylon / Mary Magdalene (“*A Room Forever*”) and the apocalyptic mark of the beast (“*The Mark*”). The macro-space of West Virginia is an enclosed structure, “a glass ball”, which doesn't let the protagonists out; they are tied to their space, which always a genetic part of them. The spatial code is inbuilt in the main characters, predetermining their behavior and predestining their life path.

The time in the texts is static, echoing the idea that nothing changes in the locus described. The calendar time is represented by four seasons – summer, autumn, winter and spring, mirroring the mood of the characters, their state of mind.

Spatially the fictional topography Pancake includes two macro-layers: the eternal “big” natural world around and the actual locus of a town, native to the characters. The town, embracing the space of buildings (hotels, cafes, houses) serves as a sort of a restricted structure with seemingly transparent borders, which the protagonists fail to cross. Despite the regular characters, the mass, the protagonists are able to notice the world’s eternity, comprehend its limitless nature. However, the protagonists are observers, thinkers, but not doers.

The semantic system of the author’s texts is marked by a range of significant symbols, expressed by the Bible-generated nouns or cross-cultural concepts: the light as a sign of hope; the trilobites as markers of the world creation, something bigger than the town described, greater than the actual protagonist’s space; a room as an embodiment of a shelter; the hollowness of the night, growing into the hollowness of life; a rabbit, symbolizing the mark of the beast and a deadly sin; a snake, serving as a symbol of seduction; a train and a bus “working” as the means of escapism, never used by the protagonists. The characters “see” the way out, but don’t believe that the change of topicality can lead to spiritual transformation. Three rounds of coffee in “*Trilobite*” replicate three circles of Hell in “*The Divine Comedy*” by Dante. At the same time, the sky as an opposition to down-to-earth everyday reality, is present in the majority of stories, linking the protagonist to the universe, making him its part.

In Pancake’s works space dominates over time. Space predetermines the lives, which are the same as the succession of lives before them, because within the depicted locus the trilobite hills are eternal and they matter, and people just change, substitute each other against the eternal landscape around their town, being unable to leave the maintained circle of things.

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## The effects of epistemic curiosity-based instruction in enhancing EFL students' reading and listening skills at a tertiary level

### Yükseköğretimde İngilizceyi Yabancı Dil Olarak Öğrenen Öğrencilerin Okuma ve Dinleme Becerilerinin Geliştirilmesinde Epistemik Meraka Dayalı Öğretimin Etkileri

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#### Abstract

Epistemic curiosity is seeking novel information in numerous fields incessantly. An increasing number of studies have been carried out to evaluate the role of epistemic curiosity-based instruction in enhancing students' linguistic abilities at different stages of education. However, it was monitored that measuring the effects of epistemic curiosity-based instruction on reading and listening enhancement in Iraq context at a tertiary level was a gap in the literature which encouraged the researcher to initiate and finalize the study to fill this gap. In this regard, the present study was carried out to investigate the effects of epistemic curiosity-based instruction on students' reading and listening competence within a span of 14 weeks. 60 freshman Foundation English course students who joined lessons actively at TISHK International University in Erbil, Iraq were chosen by simple random sampling method in 2022-2023 Academic Year. Control group students followed an orthodox training cycle, while the students in experimental group followed an epistemic curiosity driven instruction. Collected data by integrating quantitative and qualitative instruments revealed that epistemic curiosity-based instruction enhanced students' reading and listening marks significantly. This study's implications can provide a basis for education stakeholders who are considering introducing an epistemic curiosity-based curriculum in educational institutions.

**Keywords:** Epistemic curiosity, reading, listening enhancement.

#### Özet

Epistemik merak, sürekli olarak birçok alanda yeni bilgiler aramaktadır. Eğitim kurumlarında epistemik merak dayalı öğretimin uygulanmasına artan bir ilgi vardır. Benzer şekilde, epistemik merak dayalı öğretimin, eğitimin farklı aşamalarında öğrencilerin dilsel yeteneklerini geliştirmedeki rolünü değerlendirmek için giderek artan sayıda araştırma yapılmıştır. Bununla birlikte, epistemik merak dayalı öğretimin Irak bağlamında okuma ve dinleme geliştirme üzerindeki etkilerinin üçüncül düzeyde ölçülmesinin, araştırmacıyı bu boşluğu doldurmak için çalışmayı başlatmaya ve sonlandırmaya teşvik eden literatürdeki bir boşluk olduğu izlenmiştir. Bu bağlamda, bu çalışma, epistemik merak dayalı öğretimin öğrencilerin okuma ve dinleme yeterlikleri üzerindeki etkilerini 14 haftalık bir süre içinde araştırmak amacıyla gerçekleştirilmiştir. 2022-2023 Akademik Yılında Irak'ın Erbil kentindeki TISHK Uluslararası Üniversitesinde derslere aktif olarak katılan 60 birinci sınıf Foundation English kursu öğrencisi basit rastgele örnekleme yöntemiyle seçildi. Kontrol grubu öğrencileri ortodoks bir eğitim döngüsünü takip ederken, deney grubundaki öğrenciler epistemik merak eksenli eğitim aldılar. Nicel ve nitel araçların entegre edilmesiyle toplanan veriler, epistemik merak dayalı öğretimin öğrencilerin okuma ve dinleme notlarını önemli ölçüde artırdığını göstermektedir. Bu çalışmanın sonuçları, eğitim kurumlarında epistemik merak dayalı bir müfredat sunmayı düşünen eğitim paydaşları için bir başlangıç olabilir.

**Anahtar Kelimeler:** Epistemik merak, okuma, dinlemeyi geliştirme.

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## Introduction

Curiosity and fulfilling curiosity have been seen as essential for the continual betterment of people's lives. Thus, it has been asserted that the capacity to be inquisitive, investigate, and get more knowledge is innate in all humans, meaning that they are born with this trait (MacKinnon & Kuhn, 2022). In this regard, curiosity plays a crucial part in people's lives because it is expected to increase the degree of dignity once people expand their valued knowledge and share them in society, so people can take advantage of it and refine their knowledge. To name a few, pilots can earn more respect if they devise some life-saving tips out of curiosity to ensure passengers' safety in a troublesome situation and share their thoughts in a seminar with other pilots. Hence, farmers can be role models in their villages if they conduct ongoing research to produce fruits and vegetables in a pesticide-free way. Thus, they can support the potential customers and environment with their endeavors. Likewise, a civil engineer can do thorough research to employ new techniques while constructing which can pave way for building stronger structures. Hence, they can be more robust during the earthquakes. Similarly, an instructor can look for novel strategies incessantly to teach in a more engaging way, so learners' enthusiasm may increase accordingly. It can be stated that curiosity can have numerous good effects on the lives of individuals, regardless of their professions.

Certain classifications have been made about types of curiosity which are epistemic, diversive, specific and sensory with their distinguishing qualities. Epistemic curiosity (EC hereinafter) has been characterized as the desire to acquire new knowledge during one's lifespan, while diversive curiosity refers to channeling the energy to fulfill curiosity in many sources. On the other hand, specific curiosity is the pursuit of in-depth knowledge, whereas sensory curiosity has been identified as the pursuit of fresh experiences and stimuli. Tieben et al., (2011) emphasized five principles of evoking curiosity which were novelty, partial exposure, uncertainty, complexity and conflict. Novelty can be defined as being alert on novel experiences; partial exposure can be explained as having incomplete information; uncertainty means raising some doubts; complexity can be defined as being perplexed by ambiguity and conflict means having some contradictory experiences. It can be argued that the desire to reach valid and trustable information is the common goal while taking some initiatives out of curiosity.

Education based on the constructivist model has risen as the most popular method in the twenty-first century. Accordingly, constructivist learning theory has inspired educational institutions to implement EC-based instruction because constructivism puts

forward the idea that students actively develop their knowledge by creating links to earlier information and discovering novel information with numerous endeavors (Pande & Bharathi, 2020). In other words, early experiences are vital for enhancing learning so that students can gradually make connections with prior and present knowledge. Constructivism's fundamental concepts include actively constructing information, learning from others in a social context, creating connections to real-world experiences, stimulating the mind, and increasing motivation. Jerome Bruner, John Dewey, Jean Piaget, Maria Montessori, and Lev Vygotsky have made significant contributions to constructivism (Jia, 2010). Bruner's theory of development posits that learning occurs best when learners join hands on activities, see some images to recall hands on activities and verbalizing the overall process to share ideas (Yildiz, 2017; Ozdem-Yilmaz & Bilican, 2020). He asserts that they can internalize their learning and transfer the knowledge into long-term memory by applying the theory of development into educational contexts successfully. Dewey's pedagogy, for instance, believes that students improve their skills in an environment where they may interact with others and share ideas so that learners can increase their knowledge through inquiry-based education as opposed to passively listening to lectures (Williams, 2017; Kara, 2023). Similarly, Vygotsky's zone of proximal development (ZPD) suggests that systematic learning happens when learners are guided in a social setting with appropriate tasks (Silalahi, 2019). In other words, the level of difficulty should be proportional while teaching unfamiliar subjects. Furthermore, Piaget's theory suggests that hands-on activities, questioning, and investigation are essential factors to realize educational goals. Similarly, the theory of Maria Montessori emphasizes that learners are inherently inquisitive, allowing them to study and advance independently (Batubara et al., 2020). Her theory is predicated on the idea that self-paced and personalized training can facilitate learning once students' curiosity has been piqued by well-organized activities in a welcoming environment. These ideas reveal that constructivism and EC have many common points in terms of theoretical and practical perspectives.

Due to its significance and multiple advantages, the improvement of reading skills is gaining growing attention. Reading is a lifelong ability that is utilized in both the classroom and throughout life (Kuçukoglu, 2013; Abdulrahman & Kara, 2023). The individuals who have been reading regularly are expected to be more creative, open-minded, and respectable (Ulker et al., 2021; Yildiz, 2020). In the same vein, their chance to expand their word power, improve their comprehension and become more

successful at school or in their professional lives increases as they read in a systematic way. Likewise, predicting, making connections, visualizing, inferring, questioning, and summarizing are strategies to improve reading comprehension (Kuperman et al., 2022). Another essential point to be considered while integrating more reading activities into the curriculum is that there is chain reaction between reading regularly and improving other skills in English. For example, learners can increase their writing skills if they read some tips on writing academically. Likewise, they can be a good public speaker if they read some books on addressing some speech in communities. Similarly, they can sharpen their listening skills if they read some suggestions on note-taking skills. On the other hand, some barriers against reading are prevalent. It can be stated that reading is considered the building block for all essential skills in English.

Listening is vital to foreign language learning and fostering communication in different contexts. Hence, the development of L2 listening abilities strongly influences the development of other talents (Hagen et al., 2022; Wallace, 2022). For instance, good listeners can grasp key points in conversations and convert them into a writing and speaking format. In addition, good listeners are expected to be good readers because their lexical, semantic and syntactic knowledge are adequate enough to comprehend the texts (Wolf et al., 2019). It can be attested that improved listening skill can pave the way for the enhancement of other fundamental skills. Once learners can master listening skills, they have ample opportunity to prove their credentials in listening via internationally recognized standardized exams such as TOEFL, IELTS and PTE. Thus, they can be ahead of their rivals in a competitive job market upon graduation. It can be postulated that enhanced listening skills can offer several benefits in individuals' lives.

The research questions of the study were:

This study sought the effects of EC based instruction in improving learners' reading and listening skills. Moreover, their overall attitudes towards learning English out of curiosity were examined thoroughly. Based on this framework, the following research questions were formulated as follows:

- Does EC enhance learners' performance in terms of reading and listening?
- Does EC-based instruction affect learners' overall attitude towards learning English?

### Literature Review

Curiosity is the driving force to make an attempt for novel information, so knowledge gaps can be reduced, and individuals can gain novel experiences

gradually. EC was initially defined and illustrated by Berlyne (1954) who asserted that sensory and cognitive curiosity urge people to access to new information. He also hinted those individuals can multiply their skills when they try all possible means to reach novel information and use them effectively in their educational, social and professional lives. Several contributions have been made on the concept of EC since the introduction of it by in the 1950s. To name a few, Loewenstein (1994) proposed the theory called information gap which underlines that the motivation to close the information gap increases as individuals research more about the topic. He asserts that prior information triggers the individuals to become more curious and expand their learning on the same topic. Intensity of curiosity increases the likelihood of closing the knowledge gap earlier than expected time. Subsequently, Rauterberg (1995) put forward incongruity theory which posits that knowledge gaps should not be neither too challenging nor too easy. He argues that manageable information gaps increase the motivation to learn and close the gaps accordingly. In other words, limitless knowledge gaps demotivate individuals to make further attempts. In addition, Litman (2010) coined the terms which were I- type and D-type curiosity. The former one refers to being exposed to novel information, while the latter is related to feeling deprived of existing knowledge and making efforts to fill the knowledge gap. Tieben et al. (2011) established a cycle which includes encountering, exploring, discovering, and adjusting to expand the knowledge in EC endeavors.

EC has received much attention recently by the stakeholders who have taken up certain positions professionally at various stages of education and global initiatives which have been set up to raise standards in education. To name a few, Jirout and Klahr (2012) assert that EC based instruction fosters students' learning in primary schools dramatically. Similarly, Pellegrino (2017) postulates that primary education should not only teach how to acquire knowledge but also guide students on how to be eager to learn in an engaging way which can be possible with an EC based instruction. They also postulate that students can get the inspiration to learn further while they seek information from different sources as videos, presentations, articles, stories etc. Additionally, Fouad et al. (2015) state that curiosity encourages high school students to combine theoretical knowledge with practical one, so they can have a chance to apply their learning into their social lives in an interaction with various activities inserted into curriculum in a successful way. Passion for learning and teaching has an undeniable impact on student achievement; therefore, passionate teachers are continually striving to improve student performance (Celik & Yildiz, 2017). Likewise, Eren (2009) attests that EC based instruction can

develop students' critical thinking, problem solving skills which can enhance students' achievement marks substantially at a tertiary level, so expressing ideas independently, learning in an interactive environment and researching thoroughly can be defined as the distinguishing factors of EC based instruction. According to OECD (2018) acquiring knowledge, checking the accuracy of the information by researching from multiple sources, having effective learning experiences are key considerations to progress and succeed at all levels of educational institutions. Additionally, this OECD report also underlines that fostering children's social, emotional and cognitive skills out of curiosity support them to be curious as long as they are alive. Considering the aforementioned perspectives, it can be stated that EC can appeal to students at all levels regardless of their ages.

During the last two decades, a growing interest has been noticed on the effects of EC based instruction in improving English proficiency of learners (Yildiz, 2021; 2022). Some scholars (Metcalf et al. 2020; Tang & Aro, 2021; Wale & Bogale, 2021) argue that EC yields better results to raise the standards in education, whereas a limited number of scholars (Wilson, 2021; Johnson & Tawfik, 2022) assert that EC sets some barriers against learning efficiently. Although most of the studies conducted on EC offer promising gains, whereas few ones raised some doubts about the efficiency of it. To name a few, Lowry and Johnson (1981) examined the effects of EC on reading ability which revealed that primary school students' reading ability was enhanced and their overall attitude towards learning English changed positively in the US context. Similarly, Tobin and Guadagno (2022) carried out a study with 306 adults from a range of countries through a questionnaire which unearthed that podcast EC developed students' listening skills via podcasts considerably. In addition, Nakamura et al. (2022) conducted a study on 25 Thai students in an English oral communication course enriched by EC which revealed that curiosity-based instruction inspired the students to increase their self-confidence ensuring their creativity. Furthermore, Hong et al. (2022) stated that EC based instruction enhanced students' writing skills substantially in an Academic Writing course in China context. They asserted that encouraging students to do prior research before writing increased their willingness and motivation dramatically. Likewise, Wale and Bishaw (2020) found that EC based instruction stimulated students' critical thinking skills substantially. However, some studies culminated in some doubts about implementation of EC based instruction. For example, Tan & Tan, (2020) conducted a study in Malaysia which revealed that curiosity-based activities via games did not yield better results for all students in terms of acquiring new words and composing sentences related to new words. Similarly, Jiang (2021) proposed that

implementation of curiosity-based instruction cannot ensure progress academically unless prior orientation period has been completed.

## Methodology

### Research Design

A mixed methods design was adopted in this study which required using qualitative and quantitative instruments harmoniously based on the pre-defined research plan. O'Cathain et al. (2010) assert that a mixed methods design offers several advantages to researchers such as receiving numerical and verbal data and cross-checking them whether there are some conflicts between different instruments. Additionally, they postulate that weaknesses of several instruments can be reduced to a large extent once the researchers are free to choose any qualitative and quantitative instrument according to the necessities.

### Participants, Setting and Sampling Procedure

A renowned private university which is TISHK International University (TIU henceforth) in Erbil, Iraq was chosen as the setting. The underlying reasons to choose this university are that the medium of instruction has been completely English; nationals of various countries have received education peacefully and students have been eager to join such studies. The population of the study was all students who took Foundation English course during the year. Foundation English course students took this course to master English and be able to express their ideas in a written and spoken format required by their departments to earn a degree with a high GPA. This course was run by experienced and dynamic academics of TIU Language Preparatory School. The lessons were enriched with the latest technology and modern methodologies. To name a few, they read some e-books, addressed some presentations, wrote an essay and received precious feedback weekly, played educational online games, watch some movies and documentaries on Netflix or Youtube and took online revision tests, available on Lecture Notes website. Additionally, they took their exams in a Zip Grade enriched format, so each student's mistakes, frequently missed questions and means of each class were archived and analyzed in each common meeting for the betterment of the education. Their progress and mistakes were noted and students were informed about their common mistakes periodically.

The participants to represent the population were chosen by employing simple random sampling method. Simple random sampling offers some flexibility for researchers to choose the sample in an unbiased way fairly (Rahman et al., 2022). The researcher saved all Foundation English students

and chose the sample via a software application called online random picker. The researcher chose 30 students for each group as control and experimental out of 150 students who took Foundation English course in 2022-2023 Academic Year. They joined some workshops to be familiar with both instruction modes which were traditional

and EC based one. Additionally, students' consent forms were collected. Once they were familiar with each method of instruction, the study was initiated. Participants' demographic and departmental distribution can be seen below in Table 1 and 2 respectively.

**Table 1.**  
*Participants` frequency in terms of gender and age*

Variable(s)	Option	F	%
Gender	Female	34	56.7
	Male	26	43.3
Age	17-18	19	31.7
	19-20	21	35
	21-22	14	23.3
	23-24	6	10
Total		60	100

As shown in Table 1, 34 (56.7 %) female students participated in the study, whereas 26 (43.3 %) male students joined the study. Additionally, 19 (31.7 %) were between 17 and 18 years old; 21 (35 %) students were between 19 and 20 years

old; 14 (23.3 %) students were 21 and 22 years old and 6 (10 %) students were between 23 and 24 years old. It was observed that female students were higher than male ones, and students aged 19 and 20 were dominant in this study

**Table 2.**  
*Distribution of participants' departments*

Departments	Frequency	%
Accountant	3	5
Architectural Engineering	4	6.67
Aviation Engineering	2	3.33
Banking and Finance	2	3.33
Business and Management	3	5
Computer Engineering	6	10
Dentistry	7	11.67
IT	4	6.67
Interior Design	4	6.67
Mechatronics Engineering	2	3.33
Medical Analysis	6	10
Nursing	5	8.33
Petro-chemical Engineering	3	5
Pharmacy	8	13.33
Physiotherapy	1	1.67
Total	60	100

Table 2 illustrates that students were chosen from 15 different departments, with the highest number of participants from pharmacy and the lowest from physiotherapy.

### Instruments

Quantitative data were collected through pre-test and post-test exams including reading and listening questions equally. However, qualitative data were collected through the questionnaire, the interview and the survey. Exam results were inserted into SPSS 23. to analyze via independent

samples t test. Subsequently, numerical data in the survey and questionnaire were fetched and analyzed by SPSS 23. as well. However, the transcripts of the interview were categorized in common themes through MAXQDA software program. Gaili (2022) asserts that SPSS has been used extensively in Social Sciences to analyze data in line with scientific methods, so it allows the researchers to make more precise interpretations rather than relying on personal remarks. In addition, Guetterman and James (2023) state that MAXQDA application helps the researchers to classify data according to common points and focus on each interviewee within seconds, so its popularity has risen tremendously in the last 10 years.

### **Data Collection Procedure**

The study lasted 14 weeks to initialize and finalize the data. All participants received both types of instruction regardless of being in control or experimental group within two weeks. In other words, all students joined the lessons traditionally in the initial period. The underlying reason to introduce both types of instructions was that they could compare one instruction with another after joining the study in one group. Once common lessons were completed, the participants were placed in two groups to receive different treatments.

14 weeks were required to collect and analyze the data in the present study. In the first week, all participants, regardless of whether they were in the control or experimental group, received both forms of instruction. In other words, all pupils were introduced with the basics of traditional teaching method and EC based teaching method. The fundamental rationale for introducing two sorts of instructions was that participants could compare one instruction to the other once the study was completed. After being familiar with two types of teaching methods, participants were divided into two groups to receive different treatments according to pre-defined schedule.

### **The Cycle of Instruction in Control Group**

The participants in control group completed 6 units in Scope 1 published by Oxford. They read the passages about London as a cosmopolitan city, Different Lives to be knowledgeable about types of families, Go, Go, Go to be familiar with various expeditions as an adventurous person, A Fast Way to Bad Health to have further information on disadvantages of fast food and Masters of Memory to introduce people with photographic memories. Apart from reading

passages, they were exposed to some videos and audio tracks to develop their listening skills. The videos were related to The United Kingdom, Teens and Pocket Money, The Australian Climate, British Food and Roman Britain. The audio tracks were about children who received online education in the Australian outback, Adam's money collection habit from different countries, Kevin's phone calls with his father while he is travelling to various countries, the food program to introduce school lunches in Britain, the USA and Japan. Finally, they listened to a conversation on Anna's history homework which was about introducing a family member for a history homework.

The instructor covered these topics according to the syllabus. S/he covered a unit biweekly. S/he assigned some pages in workbook to increase their learning rate. On the other hand, students were not urged to expand their learning by doing extra research on related topics. They were satisfied with the activities of the book during lectures.

### **The Cycle of Instruction in Experimental Group**

The participants in experimental group completed 6 units in Scope 1 published by Oxford. They read the passages about London as a cosmopolitan city, Different Lives to be knowledgeable about types of families, Go, Go, Go to be familiar with various expeditions as an adventurous person, A Fast Way to Bad Health to have further information on disadvantages of fast food and Masters of Memory to introduce people with photographic memories. Apart from reading passages, they were exposed to some videos and audio tracks to develop their listening skills. The videos were related to The United Kingdom, Teens and Pocket Money, The Australian Climate, British Food and Roman Britain. The audio tracks were about children who received online education in the Australian outback, Adam's money collection habit from different countries, Kevin's phone calls with his father while he is travelling to various countries, the food program to introduce school lunches in Britain, the USA and Japan. Finally, they listened to a conversation on Anna's history homework which was about introducing a family member for a history homework.

The instructor covered these topics according to the syllabus as well as urging the students to research thoroughly about given topics. S/he covered a unit biweekly. S/he assigned some pages in workbook to increase their learning rate

as well as assigning some homework to research and write creatively. In other words, arousing students' curiosity was prioritized in experimental group. For example, they visited British Council or Woodward English Grammar website to be more knowledgeable about tenses and shared their tips in class to activate peer-learning. In addition, they watched further documentaries about the UK to share their thoughts while studying relevant unit. Subsequently, they read some articles in blogs to be familiar with different expeditions while

studying the unit on travel experiences. All in all, further reading and listening activities were at the core of the instruction in the experimental group. The instructor facilitated their learning as a guide rather than forcing them to learn in the lectures monotonously. Interaction, peer-learning, brainstorming were common considerations in experimental group.

A sample homework schedule in experimental group is depicted in Table 3.

**Table 3.**  
*Depiction of homework schedule in experimental group*

Sunday	Do thorough research on the internet about different nationals living in London
Tuesday	Visit TIU LPS Foundation English Lecture Notes website and take the quiz on unit 1
Wednesday	Read a story on a challenging expedition and summarize it in the class in a spoken format
Thursday	Watch a video on fast food and express your ideas on fast food in a written format
Friday	A Thorough Revision
Saturday	A Thorough Revision

The experimental group's homework policy was based on the concepts of EC-based instruction. The main goal was to provide opportunities for each student to improve their English in a written and spoken format. Students were encouraged to learn by inquiry; therefore, tasks were designed to require them to search different websites. To illustrate, after conducting research on assigned themes, students presented their findings in class. Hence, they had the opportunity to confidently share their thoughts and were encouraged for the following tasks. The instructor allotted a specific amount of time for each student's presentation so as to treat them fairly. In the subsequent phase,

the instructor organized some debates to engage in collaborative learning activities. After completing these tasks, participants were given a brief quiz consisting of five multiple-choice questions on the topic presented that day. The purpose of the test was to measure pupils' retention rates. In addition, this quiz provided students with opportunities to identify their errors and focus on eliminating them day by day. This cycle was repeated weekly with new responsibilities according to a predetermined schedule. A sample homework schedule in experimental group is depicted in Table 4.

**Table 4.**  
*Depiction of homework schedule in control group*

Sunday	Complete the exercises on pages 38 and 39 in workbook
Monday	Complete the exercises on pages 40 and 41 in workbook
Tuesday	Write 5 sentences about feeling adjectives
Wednesday	Write 5 sentences about last week
Thursday	Complete the exercises on pages 42 and 43 in workbook
Friday	A Thorough Revision
Saturday	A Thorough Revision

The policy for assigning homework in the control group was based on the principles of traditional teaching approaches. The purpose of the activities was to improve their accuracy rather than their fluency. In addition, the activities in

the book were followed strictly without resorting to other online resources. As indicated by the aforementioned homework structure, the students closely followed the instructor's

assignments and remained passive in several occasions.

## Results and discussion

Findings of this study were classified under 4 headings which were the questionnaire, the survey, the interview and precise analysis of

exam results, so each instrument was elaborated to get detailed analysis and make interpretations accordingly.

## The Analysis of the Questionnaire

Students' opinions towards EC based instruction was visualized in Table 5.

**Table 5.**  
*Participants' responses in experimental group*

ITEMS	Mean	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		%	f	%	f	%	f	%	f	%	f
1. I was so motivated while learning via traditional teaching methods.	2.06	10%	3	10%	3	10%	3	17%	5	53%	16
2. My critical thinking skills developed considerably in this study.	2.43	7%	2	10%	3	40%	12	7%	2	37%	11
3. I realized that my reading skills were enhanced in this study.	2.7	7%	2	10%	3	57%	17	0%	0	27%	8
4. I am more self-confident after joining this study.	2.2	7%	2	13%	4	20%	6	13%	4	47%	14
5. I expanded my knowledge when my teacher taught me in a traditional classroom atmosphere.	2.8	7%	2	27%	8	37%	11	0%	0	30%	9
6. My instructor ran this study to increase our learning collaboratively.	2.43	7%	2	10%	3	20%	6	47%	14	17%	5
7. I wish I had joined such a study earlier.	2.03	7%	2	13%	4	13%	4	10%	3	57%	17

The findings of item 1, which was about the degree of motivation after being exposed to traditional teaching methods, indicated that the mean score was insignificant. To illustrate the data, 3 (10 %) students chose strongly agree; 3 (10 %) students chose agree and 3 (10 %) students chose neutral and 5 (17 %) students chose disagree. On the other hand, 16 (53 %) students chose strongly disagree. These figures show that most students noticed a negative correlation between the level of motivation and employing a traditional teaching method.

The findings of item 2, which was about developing critical thinking skills via traditional teaching methods, indicated that the mean score was insignificant. To illustrate the data, 2 (7 %) students chose strongly agree; 3 (10 %) students chose agree and 12 (40 %) students chose neutral

and 2 (7 %) students chose disagree. On the other hand, 11 (37 %) students chose strongly disagree.

These figures show that most students noticed a negative correlation between developing critical thinking skills and receiving a traditional instruction.

The findings of item 3, which was about enhancing reading skills via traditional teaching methods, indicated that the mean score was insignificant. To illustrate the data, 2 (7 %) students chose strongly agree; 3 (10 %) students chose agree. On the other hand, 17 (57 %) students chose neutral and 0 (0 %) students chose disagree and 8 (27 %) students chose strongly disagree. These figures show that most students noticed a negative correlation between developing reading skills and receiving a traditional instruction.

The findings of item 4, which was about the degree of self-confidence via traditional teaching methods, indicated that the mean score was insignificant. To illustrate the data, 2 (7 %) students chose strongly agree; 4 (13 %) students chose agree. On the other hand, 6 (20 %) students chose neutral and 4 (13 %) students chose disagree and 14 (47 %) students chose strongly disagree. These figures show that most students noticed a negative correlation between raising self-confidence and receiving a traditional instruction.

The findings of item 5, which was about Expanding overall English knowledge via traditional teaching methods, indicated that the mean score was insignificant. To illustrate the data, 2 (7 %) students chose strongly agree; 8 (27 %) students chose agree. On the other hand, 11 (37 %) students chose neutral and 0 (0 %) students chose disagree and 9 (30 %) students chose strongly disagree. These figures show that most students noticed a negative correlation between expanding overall English knowledge and receiving a traditional instruction.

The findings of item 6, which was about Rating the performance of the instructor who employed a traditional instruction method, indicated that the mean score was insignificant. To illustrate the data, 2 (7 %) students chose strongly agree;

3 (10 %) students chose agree. On the other hand, 6 (20 %) students chose neutral and 14 (47 %) students chose disagree and 5 (17 %) students chose strongly disagree. These figures show that most students did not enjoy the conduct of lessons in a traditional atmosphere run by the instructor.

The findings of item 7, which was about feeling regretful for not having joined this study earlier, indicated that the mean score was insignificant. To illustrate the data, 2 (7 %) students chose strongly agree; 4 (13 %) students chose agree. On the other hand, 4 (13 %) students chose neutral and 3 (10 %) students chose disagree and 17 (57 %) students chose strongly disagree. These figures show that most students did not feel regretful for not having joined such a study earlier.

Considering all the aforementioned data collected from control group students whose teaching method was traditional run by the instructor, it can be argued that the overall satisfaction rate was far less than experimental group students whose instruction was enriched by EC.

Students' opinions towards traditional teaching methods was visualized in Table 6.

**Table 6.**  
*Participants' responses in experimental group*

ITEMS	Mean	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		%	f	%	f	%	f	%	f	%	f
1. While I was learning out of curiosity, my motivation was boosted.	4.63	70 %	21	23%	7	7%	2	0%	0	0%	0
2. I think my critical thinking skills were stimulated in this study.	4.6	60%	18	40%	1 2	0%	0	0%	0	0%	0
3. This study was so helpful to develop my reading skills.	4.86	87 %	26	13 %	4	0%	0	0 %	0	0%	0
4. I can express my ideas in a more self-confident way after this study.	4.20	27 %	8	63%	1 9	1%	3	0%	0	0%	0
5. Doing research at home and sharing my thoughts in class were so beneficial.	4.73	73 %	22	27%	8	0%	0	0%	0	0%	0
6. Being guided by my instructor helped me to fill knowledge gaps.	4.93	93 %	28	7%	2	0%	0	0%	0	0%	0
7. I wish I could have joined such a revolutionary study earlier.	4.76	87 %	26	3 %	1	10 %	3	0 %	0	0 %	0

The findings of item 1, which was about the correlation between motivation level and learning out of curiosity, indicated that the mean score was quite significant. To illustrate the data, 21 (70 %) students chose strongly agree; 7 (23 %) students chose agree and 2 (7 %) students chose neutral. On the other hand, no response was recorded neither in disagree nor strongly disagree. These figures show that most students appreciated the period on grounds that they boosted their motivation.

The findings of item 2, which was about the correlation between critical thinking skills and learning out of curiosity, indicated that the mean score was quite significant. To illustrate the data, 18 (60 %) students chose strongly agree; 12 (40 %) students chose agree. On the other hand, no student chose other options. These figures show that most students appreciated the period on grounds that they developed their critical thinking skills.

The findings of item 3, which was about the correlation between reading skills and learning out of curiosity, indicated that the mean score was quite significant. To illustrate the data, 26 (87 %) students chose strongly agree; 4 (13 %) students chose agree. On the other hand, no student chose other options. These figures show that most students appreciated the period on grounds that they developed their reading skills substantially.

The findings of item 4, which was about the correlation between self-confidence and learning out of curiosity, indicated that the mean score was quite significant. To illustrate the data, 8 (27 %) students chose strongly agree; 19 (63 %) students chose agree and 3 (10 %) students chose neutral. On the other hand, no student chose other options. These figures show that most students appreciated the period on grounds that they boosted their self-confidence tremendously.

The findings of item 5, which was about the correlation between doing research and expressing the information in the class gained by the research, indicated that the mean score was

quite significant. To illustrate the data, 22 (73 %) students chose strongly agree; 8 (27 %) students chose agree. On the other hand, no student chose other options. These figures show that most students appreciated the period on grounds that they expanded their knowledge at home and uncovered their ideas in class.

The findings of item 6, which was about the correlation between the instructor's efforts and filling the knowledge gaps, indicated that the mean score was quite significant. To illustrate the data, 28 (93 %) students chose strongly agree; 2 (7 %) students chose agree. On the other hand, no student chose other options. These figures show that most students appreciated the period on grounds that they appreciated the instructor's efforts to learn further information.

The findings of item 7, which was about feeling regretful for not having joined this study earlier, indicated that the mean score was quite significant. To illustrate the data, 26 (93 %) students chose strongly agree; 1 (7 %) students chose agree and 3 (10 %) students chose neutral. On the other hand, no student chose other options. These figures show that most students would rather have joined this study earlier.

Considering the gathered data in 7 items, it can be argued that students, who learned via EC based instruction, were quite satisfied with the overall process in experimental group.

### Descriptive Data Analysis

Descriptive data were gathered and analyzed via independent samples and paired samples t test. The former was run to make a comparison between control and experimental group considering pre-test and post-test results, whereas the latter was run to test whether the means of two paired measurements within control or experimental group are statistically different.

Independent samples t test analysis was given in Table 7.

**Table 7.**  
*Independent samples t test analysis*

Variables	Groups	N	Mean	SD	t	df	Sig
Pre-test	Control	30	53.17	11.483			
Pre-test	Experimental	30	53.33	12.753	-.053	58	.958
Post-test	Control	30	56.33	18.427			
Post-test	Experimental	30	69.50	15.049	-3.031	58	.004

Note.  $P < 0.05$

Independent samples t-test was run to measure whether there was a statistical difference between each group considering pre-treatment and post-treatment results. According to the gathered data, control group students started the study with a 53.17 mean score, while it was 53.33 in experimental group. Correspondingly, the p-value is .958 which was higher than 0.05, so there was no statistical difference between each group in the initial period. However, post-test results revealed that control group students increased their marks to 56.33, whereas the mean score was 69.50 in experimental group. In other words, control group students' progress was insignificant, while it was quite noticeable in

experimental group. Accordingly, post test results revealed that p-value was .004 which was less than 0.05. These figures revealed that experimental group students who followed an EC based instruction increased their reading and listening marks substantially, while the progress in control group students who followed a traditional instruction made a minor leap from their previous position. Considering the detailed analysis thorough independent samples t test, it can be argued that EC based instruction yielded more promising outcomes, while traditional teaching method did not produce satisfactory results.

**Table 8.**  
*Participants' common words to describe traditional learning*

Categories	Frequency	%
1 Teacher as the sole authority	28	96.67
2 Learning Individually	29	86.67
3 Undertaking Less Responsibility	26	100
4 Being passive	30	93.33
5 Getting Bored	28	76.67
6 Theoretical	23	96.67

As is evident in Table 9, participants highlighted reflections on traditional teaching approaches. They view the teachings as teacher-centered, focused on individual endeavors, undertaking a

limited responsibility, being passive, having boring classes, and being exposed different amounts of theoretical knowledge.

**Table 9.**  
*Participants' common words to describe EC based instruction*

Categories	Frequency	%
1 Teacher as a guide	29	96.67
2 Learning in cooperation	26	86.67
3 Feeling More Responsible	28	93.33
4 Being Active	27	90
5 Engaging	25	83.33
6 Practical	27	90

In contrast, Table 9 demonstrated that inquiry-based learning adopted in the experimental group, resulting in higher student satisfaction. They underlined that student-centered instruction, cooperative learning, increased responsibility, physical activity, engaging classes, and practical knowledge acquisition were essential considerations in EC based classes.

which were highlighted in each group were highlighted below:

**The Analysis of the Interview**

The participants' genuine opinions were transcribed and categorized with the help of MAXQDA software program. Common themes

**Selected Interviews in Experimental Group**

**Being an Active Speaker**

I got so much pleasure while doing activities in this study. My instructor guided us to broaden our horizon day by day. For example, we did a thorough research about challenging expeditions before reading a passage on them. Additionally, we watched some videos about different types of collections before listening to the audio track on money collection. Additionally, we expanded our knowledge about different cultures, ethnicities

and landmarks while researching on London. Whenever we were assigned doing thorough research, our instructor encouraged us to share our ideas in the lecture, so we learned from each other collaboratively. As a concluding remark, I can tell that I wish I could have received such a revolutionary instruction before. My mood changed positively, and my linguistic abilities developed substantially as long as I took part in activities in this study. (St 14)

### **Fulfilling Thirst for Knowledge**

I used to receive a traditional instruction in high school where I could not learn by inquiry. There were many question marks about the topics I learned. However, I did not do thorough research about them because there was no opportunity to share and discuss them in classes. Once I heard about this study, I felt so excited. I thought that I would research and exchange my ideas with my instructor and classmates. This study changed my perspectives positively. I filled the knowledge gaps in my mind, so I asserted my ideas in a more self-confident way. Additionally, I learned a lot from my friends. When we exchanged our ideas, we learned how to develop critical thinking skills in a peaceful atmosphere. In addition, the topics in the book were more engaging for us because we knew that we would fulfill our thirst for knowledge sooner or later. Breaking the monotony changed my attitudes towards learning English positively. I am glad to have participated in all activities in this study. (St 18)

### **Improving Listening Skill via Different Materials**

I used to have serious problems about listening before this study which helped me to regain my self-confidence. My instructor directed me to watch some relevant videos before the lesson, so I increased my background knowledge about the audio track which we would listen to in the following day. In addition, I listened to some conversations and read the transcripts of them to improve my listening skills. This training period helped me to develop my listening skill day by day. Now I can comprehend the listening tracks in the book without having any difficulty. It was a very fruitful period for me under the supervision of my instructor. (St 20)

### **Developing Reading Skills via Supplementary Materials**

Reading passages were quite difficult for me to understand previously. However, my instructor sent me some related e- reading passages which

were graded according to my level. I read them periodically and took online tests about the given passages, so I could see my progress easily. In addition, I could use the online dictionary to learn the key words in the passages. Thus, my learning rate increased substantially. Subsequently, reading supplementary materials on the internet helped me to complete the activities on time by employing skimming and scanning techniques. This habit saved me during the exams. I could not see a lot of questions in previous exams due to bad time management skills, but now I know how to scan and skim through to save time and complete all reading questions on time. (St 26)

### **Earning More Respect in Society**

During the study, we did research extensively on various topics related to daily lives, so we could use them in our daily conversations. For example, my cousin visited us, and I mentioned some adventurous expeditions which I learned during the study. Moreover, I depicted the disadvantages of eating fast food with clear examples because we read, watched many documents related to it. S/he listened to me very eagerly because the topics and details captured his/her attention. My motivation to research more and more increased tremendously after this occasion. Now I try to learn new things each day thorough the internet because I know that I will use them in my conversations. (St 29)

### **Positive Effects of EC to Develop Speaking Skills**

I had no idea about EC previously. However, I had some information about learning by discovery. This study helped me to express my ideas confidently because we did thorough research about the topics to be covered in the following day. When we researched in advance, we took notes and revised our sentences earlier. Thus, this preparation period was a fruitful period for us. In addition, we expanded our vocabulary knowledge substantially while examining various sources. In the past, our instructor asked us questions to tell our ideas immediately during which we suffered a lot. However, our instructor guided us professionally in this study. We took the initiative to speak more once our levels were satisfactory enough. Making prior research and increasing the duration of speaking gradually increased the quality of education and boosted our performance tremendously. (Student 16)

## **Selected Interviews in Control Group**

### **Unable to Eager to Learn Enthusiastically**

We received the instruction in a traditional format, so we followed the book's activities without switching to any extra materials. Although we progressed well at first, our motivation reduced day by day due to repeating the same procedure. When we knew what to do and how to progress in advance, it did not capture my attention. I learn better when I feel surprised with supplementary activities such as inspiring videos, informative articles or some news. These activities help me feel engaged. However, these details were missing in the study which reduced my enthusiasm dramatically. I wish my instructor integrated some web-enhanced activities into the curriculum and pushed us to do research before each lesson. (St 7)

### **Having Difficulty Learning New Words in Reading Passages**

Our instructor taught us the new words in the passages traditionally. S/he only explained the verbally without encouraging us to make some efforts about the meanings of them the day before the lesson. However, my best friend was in the other group. The instructor told them to do research about the meaning of key words and composing a sentence for each key word before the lesson. when the lesson started, they were ready to tell the meaning and compose a sentence accordingly. In addition, they had some video talks with their friends to summarize the reading passages before the exams. These endeavors kept them motivated, but these considerations were not available in my group. I wish my instructor had urged us to do research and contribute to lessons actively rather than keeping us passive. (St 13)

### **Unable to Catch Essential Points in Listening Exercises**

We listened to the audio tracks in the lesson and progressed to other activities. However, I forgot the details as we continued with other activities. Additionally, my instructor showed us some tips about note taking. However, I could not learn them well due to lack of concentration. On the other hand, my friends in the other group had ample opportunity to listen to it again and summarize it in the following day. Additionally, they were encouraged to watch different videos on improving their note taking skills. They told me that they learned an effective tip from each speaker in videos, so they had a chance to apply

these tips into their listening activities. Each student's learning style is different, so allowing the students to learn from various materials can inspire them to develop their listening skills with proven techniques. (St 20)

### **Having Less Freedom to Direct Learning Cycle**

Our lessons did not allow us to express our ideas freely from multiple sources because the activities of the book required us to answer shortly. However, I wanted to share my ideas about different topics as a debate after researching on the internet. I know that answering shortly was not beneficial in the long run. I needed to express my ideas in a few minutes, so I could uncover my ideas. Additionally, allowing students to tell their ideas based on their research could help them to learn from each other. As a result, I believe that guiding students to learn from different sources and valuing their ideas in the class can pay off. I wish we could have had such an instruction. (St 24)

### **Unable to Make Connections between Theoretical and Practical Knowledge**

My learning period was not satisfactory for me. I learned the topics in the lesson, but I could not see real-life examples of them in my social life. For example, I learned basics of superlative sentences, however, I could not get any information about the tallest buildings, the richest man, the most populated country, the largest continent or the smallest animal. On the other hand, my friends in the other group visited some websites about superlatives as a part of their assignment and shared their ideas about superlatives. As a result, their knowledge on superlative sentences expanded considerably. I would be more glad now if I had received such an inspiring instruction. My willingness reduced when I could not see real life reflections of the topics in the book. I like exploring and sharing my ideas in the class, so we can get more pleasure while learning in an interactive atmosphere. (St 27)

This study examined the impact of EC-based instruction on the reading and listening abilities of students by employing a mixed methods design instruments. On the basis of the findings in each instrument, the following significant points were emphasized.

The findings of pre- and post-tests demonstrated that EC-based education laid the foundation for a

substantial increase in reading and listening grades. This outcome was consistent with the findings of Jiang et al, (2018) who asserted that EC-based training enables students to improve their reading and listening abilities gradually. In addition, the findings of the survey and questionnaire indicated that student-centered learning, collaboration, interaction increased students' motivation to a large extent which was in line with Grigorescu's (2020) study which revealed that motivation of the participants increases once students have more authority in the learning process. Likewise, Abubakr and Kara (2022) postulate that students' engagement level increases when students do research and share their thoughts in a classroom atmosphere because they notice that their ideas are valued in the lesson. Similarly, Eren (2009) stated that the students are likely to be more motivated if the classes are created to accommodate their needs on curiosity. Apart from increased marks and motivation, the study unearthed some reflections on self-confidence. Most students stated that the more they spoke, the more self-confidence they had which was in line with Gurler's (2015) study which indicated that there is a positive correlation between fostering a communicative atmosphere in class and students' self-confidence in EFL classes. Moreover, most students asserted that they developed their critical thinking skills considerably which was consistent with Prayogi and Asy'ari's (2021) study which unearthed that students can improve their critical thinking skills substantially once they expand their knowledge by researching out of curiosity. Furthermore, the students reaffirmed that interaction during the sessions assisted them to learn from each other, so they activated peer-learning subconsciously which was consistent with the study of Barron and Darling Hammond (2008). In addition, students valued the transition from theoretical to practical knowledge that EC-based training made possible. This outcome was consistent with Adhami and Taghizadeh's (2022) study which suggested that embedding theoretical knowledge into practice can be accomplished through EC-based training because students can observe several practical solutions and reflections while going through the activities day by day. In light of the gathered data, it can be stated that EC based instruction yielded promising results in terms of enhanced listening, reading performance, developed critical thinking skills, improved self-confidence and positive attitudes towards learning English collaboratively.

## Conclusion

The present study unearthed that EC-based instruction played crucial roles in transforming the quality of education and enhancing learners' reading and listening skills significantly. In other words, training based on EC considerably improved students' scores in reading and listening. Moreover, students' motivation, engagement, and self-confidence were improved correspondingly. In the same vein, students' attitudes towards learning English changed positively. Subsequently, they were confident in their ability to overcome obstacles after taking the initiative to expand their learning from different sources. The revealed data suggested that EC-based instruction holds great promise for students, teachers, administrators and policymakers.

Several recommendations for future research can be verbalized. This study examined the impact of EC-based training on reading and listening abilities. Future studies can be conducted to extend the scope of the study with additional skills. In addition, only marks of students in the control and experimental groups were compared. It is possible to do additional research to determine whether or not gender influences the outcomes. In addition, this study collected data from only freshman students in one unit of a university, which can be extended with other stages to enrich the sample. Finally, this study lasted 14 weeks which can be extended to measure the effects of EC in longer periods.

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## Integrating mobile assisted language learning (MALL) into EFL classes at a tertiary level

### Yükseköğretimde Mobil Destekli Dil Öğreniminin (MDDÖ) EFL sınıflarına entegrasyonu

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#### Abstract

Mobile Assisted Language Learning (MALL) practices have gained increasing popularity thanks to the advancements in mobile technologies. Accordingly, a growing number of initiatives have been taken to integrate it into language learning process. However, a gap in the literature has been observed to measure the effects of MALL on students' writing competence at a tertiary level in Iraq. To this aim, it was sought to pinpoint the influence of MALL on 60 Language Preparatory School students' writing competence at TISHK International University by employing snowball sampling technique within 12 weeks in 2021-2022 Academic Year. The study was conducted in an Academic Writing course that required the students to write an essay weekly. The data were collected via exams, a questionnaire, an interview and a survey which were analyzed either by SPSS 23. or MAXQDA software applications in this mixed methods design study. Control group students received a traditional instruction, while experimental group students were trained based on the procedure of MALL. The findings unearthed that MALL practices increased students' marks dramatically, boosted students' motivation and increased students' overall attitudes towards learning English. The findings of this study can have some implications for the educators who consider the implementation of MALL practices at educational institutions.

**Keywords:** Mobile Assisted Language Learning, Academic Writing, Writing Competence.

#### Introduction

Mobile assisted language learning (MALL hereafter) has gained considerable momentum

#### Özet

Mobil Destekli Dil Öğrenimi (MDDÖ) uygulamaları, mobil teknolojilerdeki gelişmeler sayesinde giderek artan bir popülerlik kazanmıştır. Buna göre, dil öğrenme sürecine entegre etmek için giderek artan sayıda girişimde bulunulmuştur. Bununla birlikte, MDDÖ'nün Irak'ta öğrencilerin üçüncül düzeyde yazma yeterlilikleri üzerindeki etkilerini ölçmek için literatürde bir boşluk gözlenmiştir. Bu amaçla, 2021-2022 Eğitim-Öğretim Yılında 12 hafta içinde kartopu örnekleme tekniği kullanılarak TISHK International University'de 60 Dil Hazırlık Okulu öğrencisinin yazma yeterliliği üzerinde MDDÖ'nün etkisinin belirlenmesi amaçlanmıştır. Çalışma, öğrencilerin haftalık olarak bir makale yazmalarını gerektiren bir Akademik Yazma dersinde gerçekleştirilmiştir. SPSS 23 ve MAXQDA tarafından analiz edilmiş veriler, sınav, anket, mülakat ve karma metod yoluyla toplanmıştır. Kontrol grubu öğrencileri geleneksel bir eğitim alırken, deney grubu öğrencileri MDDÖ prosedürüne göre eğitildi. Bulgular, MDDÖ uygulamalarının öğrencilerin notlarını önemli ölçüde artırdığını, öğrencilerin motivasyonunu artırdığını ve öğrencilerin İngilizce öğrenmeye yönelik genel tutumlarını artırdığını ortaya koydu. Bu çalışmanın bulguları, eğitim kurumlarında MDDÖ uygulamalarının uygulanmasını düşünen eğitimciler için bazı etkilere sahip olabilir.

**Anahtar Kelimeler:** Mobil Destekli Dil Öğrenimi, Akademik Yazma, Yazma Yeterliliği.

since the 2000s when a wide spectrum of portable electronic devices such as laptops,

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mobile phones, tablets and PDAs were widely available to serve people at educational institutions. Additionally, modern teaching methods such as collaborative learning, gamification and project-based learning have required the educators to adopt the shift from teacher centred to student-centred approach which can be accelerated with MALL (Bernacki et al., 2020; Kara, 2023). Modern teaching methods emphasize that learners can construct their knowledge in a community where they can exchange their ideas freely. Moreover, they emphasize that learners can assume more responsibility in the learning process rather than staying passively. In addition, learners are encouraged to research by different sources, so they can grasp details out of curiosity. In this regard, mobile assisted language learning offers ample opportunity to meet the needs of the students and teachers. Mobile devices offer several advantages to users such as portability and connectivity which increases the value of them in education (Rocque, 2022). Once the learners have portable devices which are equipped with an internet connection, their motivation and engagement increase correspondingly (Celik et al., 2022). It can be assumed that the utilization of mobile devices can help unlock the full potential of learners with a well-balanced and monitored plan.

Mobile devices are versatile to satisfy users' needs in many fields. They have increased their popularity in social life recently. Users are able to text, send an email, do online shopping, watch videos, make a video call, follow the latest news, activate the navigation, book a room at a hotel or table in a restaurant etc. Similarly, mobile devices have been widely used in education (Grigoryan, 2022; Kara & Yildiz, 2022). For example, mobile devices have been employed to offer or receive online or hybrid education. Additionally, teachers can upload their video lessons to be watched by the students or general public. Thus, viewers can have ample opportunity to watch several times and fill the knowledge gaps if they miss some points during regular courses. In addition, teachers can send some links to take online quizzes. Once they take the quizzes, item analysis can be sent, so students can be granted the rights to see their mistakes and get valuable lessons in order not to repeat them in the following quizzes. Offering some quizzes online can help save the environment as well as saving time and energy. Furthermore, parents can benefit from mobile devices to get detailed feedback about their children via learning management systems (LMS). Mobile devices can be of greatest importance to monitor the children

and communicate with the teachers instantly (Alamer & Al Khateeb, 2023; Kara, 2020). Assignments are learning exercises assigned by teachers to promote student growth. Likewise, mobile devices can help individuals to expand their knowledge in many fields (Dayan & Yildiz, 2022). For instance, a cook can learn about unique recipes; an engineer can grasp some tips on how to construct stronger buildings; an artist can figure out how to draw more creatively; a retired person can be inspired on how to take up a new hobby; an enthusiastic learner can master a new language; parents can be guided on how to raise good children etc. It can be argued that mobile devices are at the heart of people's lives with varying functions in many aspects.

MALL opportunities have arisen to improve learner's four core skills of English Language Learning. MALL occurs when traditional classroom teaching is supported by mobile devices (Bernacki et al., 2020). There are many reflections of it to develop different skills. For instance, learners can listen and take relevant revision tests with their mobile devices. Additionally, they can read e-books to develop their pronunciation and enhance their comprehension. After that, they can improve their speaking in a video conference by expressing their ideas individually or as a team. Apart from other skills, MALL is activated to develop learners' writing skills. For instance, learners can read the sample paragraphs and essays electronically before writing, so they will be familiar with the overall organization or key words to insert into their own writing works. In addition, learners can submit their works electronically via Google Form, WhatsApp or Viber. Once they submit their works electronically, the teacher can manage and highlight them with ease. Additionally, learners' enthusiasm increases when they submit electronically because typing is expected to take less time than writing on the paper. Furthermore, teacher can send his/her feedback to evaluate their writing electronically. Moreover, peer-learning can be used once the teacher can display a student's work and wait for the feedback from his/her classmates via their mobile devices (Abubakr & Kara, 2022). Considering these positive implications in education, MALL initiatives are expected to increase at educational institutions on a global scale.

This study investigated the effects of MALL on enhancing students' writing performance. In this respect, mobile devices and online writing submission applications were employed as primary instruments to receive students' writing

works periodically based on the pre-defined plan by the researcher. Considering this framework, following research questions were formulated:

Does MALL enhance students' writing performance at a tertiary level?

Does MALL pave the way for changing students' attitudes towards Academic Writing course?

### Literature Review

Educators struggle to instill a love of reading in technology-obsessed students (Yildiz, 2020). However, MALL has arisen as the combination of mobile learning and computer-assisted language learning to assist educators. In other words, it has come out to enrich students' traditional learning atmosphere with some information and communication technology tools such as laptops, cell-phones, tablets and PDAs. Although there were tiny steps to implement MALL in classes earlier, the process accelerated dramatically after the 2000s. Pioneering attempts to increase the use of MALL in education include Dicky's teleconferencing to teach English conversation to Korean students, Stanford University's lab to teach Spanish with mobile technologies, Thornton and Houser's course management system Poodle, Wisconsin University's several language course enriched by mobile technology, Duke University's decision to provide free iPod for freshman students (Abdulameer, 2021). Upon noticing their positive influences on language learning and teaching environment, they have been used widely in increasing numbers (Ulker et al., 2021).

Currently, proliferation of mobile technologies is transforming traditional teaching practices all over the world accordingly. There are several theoretical foundations of MALL expressed by scholars. To name a few, Norbrook and Scott (2003) assert that portability and immediacy are key factors to employ MALL practices in educational institutions. Additionally, McNicol (2004) attests that MALL is convenient for learners as they are flexible to watch any content at any time with their hand-held devices. After that, Kara (2023) contends that mobile learning allows individuals to receive online education throughout the world, so it offers unmatched opportunities for learners to earn a degree, certificate or expand their knowledge for life-long learning. However, it does not necessarily mean that MALL does not pose any risks. To illustrate, Chinnery (2014) states that having a tiny screen, unaffordability, the necessity of recharging, unable to type efficiently, the

possibility of distracting the attention with other notifications or websites, unable to develop digital literacy skills are some barriers which are prevalent.

A growing volume of research has been conducted to measure the effectiveness of MALL in different contexts globally. To name a few, Gheytsi et al., (2015) found that MALL yielded better results to develop reading comprehension skills of Iranian high school students. Similarly, Plana et al., (2013) investigated university students who were taking English classes in a mobile enriched atmosphere which revealed that MALL enhanced students' reading scores. Likewise, Ishikawa et al., (2014) examined the influence of a mobile reading application employed in a Japanese university which unearthed that e-reading activities helped students expand vocabulary and improve reading comprehension.

Apart from reading, some studies have been conducted about the effects of MALL on listening skills. For instance, Alabsi (2020) conducted a study in Saudi Arabia at a tertiary level which concluded that assigning students to add subtitles to the video with their mobile devices increased their listening scores and overall English proficiency. Likewise, Terantino (2016) carried out a study in the USA on pre-school children who were exposed to an instruction with their tablets. The study revealed that students increased their word-power and listening comprehension tremendously.

Subsequently, Abdulrahman and Kara (2023) conducted a study to watch movies and read books simultaneously in Iraq context at a tertiary level which unearthed that students' speaking skills have developed substantially once they integrated mobile tools into traditional classrooms. Similarly, Almadhady and Bahrum (2020) conducted a study in Iraq to receive university students' perceptions on MALL which revealed that students have positive views about the effects of MALL on their speaking enhancement.

Regarding the influence of MALL on writing performance, several studies have been carried out as well. To name a few, Dwigustini, et al., (2021) offered a hybrid education at a university in Indonesia in a writing course which revealed that students' writing marks increased dramatically once they used their mobile devices to enhance their learning. Likewise, Morchid (2020) found that Moroccan university students progressed considerably in terms of writing after

being subjected to a MALL based instruction including texting, transcribing the podcasts and taking notes while playing educational games. Likewise, Wang and Smith (2013) integrated MALL into their classes in Japan which revealed that the students who received reading and grammar materials via mobile devices showed remarkable achievement at the end of the study. Considering the aforementioned studies, it can be argued that MALL offers many advantages in different contexts at different stages of education.

Regarding grammar, Azeez and Al Bajalani (2018) investigated the relationship between grammar marks and MALL in Iran context on university students which revealed that recording sentences and forwarding to the teacher to get a valuable feedback via mobile devices increased students' accuracy in multiple choice format grammar tests.

**Methodology**

A mixed methods design was adopted in the present study which required using Quantitative and qualitative research methodologies consecutively, so limitations of each method could be compensated and positive sides of each research method was emphasized. Two writing exams, a questionnaire and a survey and an interview were held to collect data. The exams were designed to collect, quantitative data, whereas the questionnaire and the survey were activated to collect qualitative data. Bentahar and Cameron (2015) attest that the implementation of a mixed methods design allows researchers to collect, cross-check and validate results reliably.

**Participants, Setting and Sampling Procedure**

This study was undertaken at Tishk International University (TIU henceforth) in Erbil, Iraq, where around five thousand students studying in twenty-nine departments were enrolled in 2021- 2022 Academic Year. This private institution provides instruction in English, allowing diverse groups from many ethnic backgrounds to obtain a top-notch quality education. This study included one hundred students who graduated from TIU Language Preparatory School's intensive English training program. Snowball sampling technique was employed in this study which required the initial participants to invite other students with shared qualities to join. Initial participants expanded the number of sample students based on students' tendencies to write enthusiastically. In other words, the students who could write passionately became the hosts to invite other enthusiastic students in terms of writing. Etikan et al. (2016) assert that snowball sampling alleviates the difficulties encountered while choosing the sample because this non-probable sampling method helps the researcher to reach the participants with the common characteristics, so participants can exchange their ideas and contribute to the study equally. In the present study, the researcher assigned ten students who earned the highest marks in Academic Writing course. Subsequently, each of them chose five more students who were eager to progress in terms of writing in their circle of friends at Language Preparatory School. The rationale to choose snowball sampling technique was to reach the best candidates who could join writing activities within 12 weeks actively. Otherwise, boredom, anxiety, feeling exhausted issues could force the researcher to finalize the study before the expected time. Thus, 60 students were chosen from the population and split into two groups equally to represent control or experimental group. The students were chosen from 14 different departments which could be observed below in Table 1:

**Table 1.**  
*Distribution of participants' departments*

Departments	Frequency	%
Accounting	3	5
Architectural Engineering	4	6.8
Banking and Finance	3	5
Business and Management	4	6.8
Civil Engineering	3	5
Computer Engineering	4	6.8
Dentistry	3	5
Information Technology	5	8.3
Interior Design	4	6.8
International Relation and Diplomacy	3	5
Mechatronics Engineering	4	6.8
Medical Analysis	8	13.3
Nursing	3	5
Pharmacy	9	15
Total	60	100

Table 1 illustrated that participants' departments ranged from accounting to pharmacy. Additionally, it was observed that pharmacy students were followed by medical analysis ones

in terms of the highest number of participants. Apart from students' departments, faculties of students were visualized in Table 2.

**Table 2.**  
*Distribution of participants' faculties*

Departments	Frequency	%
Administrative Sciences and Economics	13	21.7
Applied Sciences	13	21.7
Dentistry	3	5
Engineering	19	31.7
Nursing	3	5
Pharmacy	9	15
Total	60	100

Table 2 depicted participants' faculties which encompassed six out of eight faculties at university. According to the figures, it was noticed that faculty of engineering students were the highest ones with 19 members (31.7 %).

Additionally, dentistry and nursing students were the least ones with 3 members respectively (5 %). Participants' ages and genders were also given in Table 3.

**Table 3.**  
*Participants' frequency in terms of gender and age*

Variable(s)	Option	F	%
Gender	Female	24	40
	Male	36	60
Age	18-21	42	70
	22+	18	30
Total		30	100

Table 3 analysis revealed that male students (60%) outnumbered female students (40%) with 36 and 24 members respectively. Along with the participants' genders, the participants' ages were also shown in detail, unearthing that 70% of the students were between the ages of 18 and 21, while 30% were 22 or older.

### Data Collection Procedure

This study was commenced and finalized in an Academic Writing course through which students expanded their knowledge with a well-planned syllabus as 3 hours per week because TIU LPS administration acknowledged the importance of spoken and written English and designed the classes accordingly. In the first semester, the researcher had laid the background for Academic Writing, so the students were exposed to writing 4 paragraph essays in this study. The study lasted for 12 weeks when students were required to write 5 essays regardless of being in control or experimental group. Although both groups were urged to write

5 common essays, the conduct of lessons was considerably different in each group which was illustrated below:

1. What are your reasons to watch movies?
2. If you took up a new hobby, what would it be?
3. Will the life be easier in the 2050s?
4. What is the most harmful type of pollution? What are some ways to eliminate it globally?
5. Do you prefer having online or in-person classes to earn a degree at a university?

### The Cycle of Lessons in Control Group

The instructor showed the examples of traditional and MALL based writing instruction within 2 weeks, so that the participants could weigh the pros and cons of each at the end of the study. In the third week, the instructor switched to traditional writing instruction according to the pre-defined plan. The instructor covered the lesson by applying the rules of pre, while and post writing. To illustrate, the instructor drew a

mind map about the topic, so each student contributed to the brainstorming process. They learned how to organize their outlines by the mind-map they drew in cooperation. In the next phase, each student came to a decision about the outline which would serve as a map while writing for each student. The instructor examined each student's outline and offered feedback if there were some parts which needed minor or major modifications. In the subsequent stage, the instructor and students wrote a sample essay on the same topic in cooperation, so they learned how to introduce, expand and finalize the essay based on the regulations of Academic Writing course. Upon completion of the sample essay, the students commenced writing their own essays within 30 minutes. The instructor set the timer to train students on racing against time during the exams throughout their education. Once they completed writing, students submitted their works on a piece of paper as in line with traditional writing model. In the second lesson of the week, the instructor offered feedback for each student and highlighted common mistakes. Afterwards, the instructor urged the students to analyse some sample essays available on different websites. They read and discussed some details to write more creatively in the following weeks. Finally, the instructor informed the students about their marks based on the rubric and suggested some students to rewrite the same topic considering the instructor's feedback on the paper. The instructor justified his/ her decision to urge some students to write one more time by granting them a chance to learn from their mistakes and master writing academically. It can be stated that control group students were exposed to a traditional based writing instruction which was quite different in experimental group.

### **The cycle of Lessons in Experimental Group**

The instructor showed the examples of traditional and MALL based writing instruction within 2 weeks, so that the participants could weigh the pros and cons of each at the end of the study. In the third week, the instructor switched to MALL based writing instruction according to the pre-defined plan. The instructor covered the lesson by applying the rules of pre, while and post writing. To illustrate, the instructor drew a mind map about the topic, so each student contributed to the brainstorming process. They learned how to organize their outlines by the mind-map they drew in cooperation. In the next phase, each student came to a decision about the outline which would serve as a map while writing for each student. The instructor examined each

student's outline and offered feedback if there were some parts which needed minor or major modifications. In the subsequent stage, the instructor and students wrote a sample essay on the same topic in cooperation, so they learned how to introduce, expand and finalize the essay based on the regulations of Academic Writing course. Upon completion of the sample essay, the students commenced writing their own essays within 30 minutes. The instructor set the timer to train students on racing against time during the exams throughout their education. Once they completed writing, students submitted their works on a piece of paper. In the second lesson of the week, the instructor offered feedback for each student and highlighted common mistakes by displaying the screenshots of students' works without naming any student. The instructor activated peer-learning, so students could find their friends' mistakes and offered a valuable feedback to make corrections. Afterwards, the instructor urged the students to analyse some sample essays available on different websites as a pair work activity. They read and discussed some details to write more creatively in the following weeks. Finally, the instructor informed the students about their marks based on the rubric and suggested some students to rewrite the same topic considering the instructor's feedback on the paper via a Google Form link which was available on TIU LPS Academic Writing Course Lecture Notes. The instructor justified his/ her decision to urge some students to write one more time by granting them a chance to learn from their mistakes and master writing academically. The instructor welcomed second submissions electronically on purpose because writing for the second time on the paper can be tedious and time consuming for a lot of students. On the other hand, typing via virtual or on-screen keyboard was more convenient for students all of whom were digital natives. It can be stated that experimental group students took advantage of benefits of in person and online learning opportunities equally.

### **Findings**

Findings of this study were classified under 4 headings which were the questionnaire, the survey, the interview and descriptive analysis, so each instrument was elaborated to get detailed analysis and make interpretations accordingly.

### **The Analysis of the Questionnaire**

Table 4 shed light on students' opinions in the questionnaire.

**Table 4.**  
*Control group students' responses*

ITEMS	Mean	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		%	f	%	f	%	f	%	f	%	f
1. Receiving the instruction traditionally was a fruitful period for me to improve my writing skills.	2.13	7 %	2	7 %	2	23 %	7	19 %	6	44 %	13
2. I did not get bored while receiving Academic Writing course in a traditional format.	1.8	0 %	0	0 %	0	23 %	7	33 %	10	44 %	13
3. I did not lose my enthusiasm towards writing when I received the instruction in an orthodox format.	2.3	10 %	3	12 %	4	17 %	5	17 %	5	44 %	13
4. I think integrating mobile devices into writing class has a lot of drawbacks.	1.46	0 %	0	0 %	0	0 %	0	47 %	14	53 %	16
5. I wish I had joined this program earlier.	1.26	0 %	0	0 %	0	0 %	0	27 %	8	73 %	22
6. My instructor's teaching style was inspiring.	2.33	0 %	0	0 %	0	60 %	18	13 %	4	27 %	8

The participants in control group responded to six items to pinpoint their sincere perspectives on the implementation of traditional writing class which was explored in detail below:

Item 1 analysis indicated that most students did not consider this period as a fruitful one with a 2.13 mean score. To illustrate, two students (7 %) chose strongly agree and agree options respectively, however, seven students (23 %) chose neutral; six students (19 %) chose disagree and thirteen students (44 %) chose strongly disagree. These figures hinted that students were not satisfied with the instruction offered during the study.

As shown in item 2, regarding feeling bored, the mean score was only 1.8 which revealed that the majority of the students got bored. To name a few, no student chose strongly agree or agree options. On the other hand, seven students (23 %) chose neutral; ten students (33 %) chose disagree and thirteen students (44 %) chose strongly disagree. It can be hinted that motivational tools were missing to capture students' attention.

Item 3 was designed to pinpoint students' enthusiasm which indicated that a lot of students did not increase their enthusiasm considering the mean score which was 2.3. To illustrate the figures, three students (10 %) opted in strongly

agree, and four students (12 %) chose agree. On the other hand, five students (17 %) chose neutral; five students (17 %) chose disagree and thirteen students (44 %) chose strongly disagree.

Once item 4, which was related to integrating mobile devices into writing classes, was examined, it was observed that the mean score was only 1.46. To name a few, no student chose strongly agree, agree or neutral. On the other hand, fourteen students (47 %) chose disagree, and sixteen students (53 %) chose strongly disagree which unearthed that students had no hesitation to expand learning with mobile technologies.

Item 5 was designed to figure out whether students regret not having joined such a program earlier which revealed that they did not have regret about not having joined such a study. In the same vein, the mean score was 1.26 which was the lowest in the questionnaire. Additionally, no student chose strongly agree, agree or neutral options. However, eight (27 %) and twenty-two (73 %) students chose disagree and strongly disagree respectively.

The last item was directed to evaluate the instructor's performance while offering traditional writing instruction which revealed that the satisfaction rate was quite low with a 2.33

mean score. To illustrate, no student chose strongly agree, agree options. However, eighteen students (60 %) raised their concerns by choosing neutral. Likewise, four (13 %) and eight students (27 %) chose either disagree or strongly disagree

respectively. These figures hinted that the type of instruction mattered although the instructor did his/her best professionally in the classroom atmosphere.

**Table 5.**  
*Experimental group students' responses*

ITEMS	Mean	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		%	f	%	f	%	f	%	f	%	f
1. Receiving the instruction with MALL technologies was a fruitful period for me to improve my writing skills.	4.56	63 %	19	30 %	9	7%	2	0 %	0	0	0
2. I did not get bored while receiving Academic Writing course via MALL enriched format.	4.83	83%	25	17%	5	0%	0	0%	0	0%	0
3. I did not lose my enthusiasm towards writing when I received the instruction in an unorthodox format.	5	100%	30	0 %	0	0 %	0	0%	0	0%	0
4. I think integrating mobile devices into writing class has a lot of benefits.	4.96	97 %	29	3 %	1	0%	0	0%	0	0%	0
5. I wish I had joined this program earlier.	4.93	93 %	28	7	2	0%	0	0%	0	0%	0
6. My instructor's teaching style was inspiring.	5	100 %	30	0 %	0	0 %	0	0 %	0	0 %	0

Experimental group students responded to 6 items as well which unearthed noteworthy findings to consider meticulously.

Item 1 was designed to evaluate the effectiveness of MALL enriched program which revealed that the satisfaction rate was considerably high considering the mean score 4.56. To illustrate, nineteen (63 %) students chose strongly agree; nine students (30 %) chose agree options and two students (7 %) chose neutral. On the other hand, no student chose neither disagree nor strongly disagree. These figures hinted that MALL enriched writing instruction was a promising period.

Considering item 2 analysis which was related to measuring their boredom levels, it was observed that the majority of students did not get bored. Conversely, it can be inferred that they got pleasure while joining activities with mobile technologies. To illustrate, twenty-five students (83 %) chose strongly agree; five students (17 %) chose agree. On the other hand, no student opted in other options.

As shown in item 3, regarding being enthusiastic during the study, all students were enthusiastic enough to join the activities eagerly. The mean score which was 5 hinted that the students' enthusiasm did not fade as the days went by.

Item 4 findings revealed that all students took side with integrating MALL activities into writing classes with a 4.96 mean score. It can be inferred that mobile technologies can increase students' motivation dramatically.

Item 5 was designed to figure out whether students regret not having joined such a program earlier which revealed that they regretted about not having joined such a study. In the same vein, the mean score was 4.93 which was one of the highest ones in the questionnaire. All students opted in either strongly agree or agree options. In other words, no student chose neutral, disagree or strongly disagree.

The last item was directed to evaluate the instructor's performance while offering traditional writing instruction which revealed that all students appreciated the efforts of the

instructor without any hesitation. These figures hinted that the type of instruction and the instructor's efforts complemented each other to develop students' writing skills.

Considering all findings of the questionnaire, it can be concluded that students' overall

satisfaction rate was substantially higher than the findings for control group students. In other words, MALL yielded better results in terms of earning students' appreciation.

### The Analysis of the Survey

**Table 6.**

*Participants' opinions on traditional writing activities*

Categories	Frequency	%
Boring	27	90
Monotonous	28	93.3
Teacher-centred	30	100
Tiring	25	83.3
Time-consuming	19	63.3
Losing enthusiasm	29	96.7

Based on the survey results in Table 6, the participants emphasized some terms as the distinguishing qualities of traditional writing instruction. They emphasized them as teacher-

centred, losing enthusiasm, monotonous, boring, tiring and time-consuming in a descending order from 30 to 19.

**Table 7.**

*Participants' opinions on mall activities in an academic writing course*

Categories	Frequency	%
Convenient	29	96.7
Portable	25	83.3
Student-centred	27	90
Modern	30	100
Interactive	28	93.3
Entertaining	21	70

Based on the survey results in Table 4, the participants emphasized some terms as the distinguishing qualities of MALL activities. They highlighted MALL activities as modern, convenient, interactive, student-centered, portable and entertaining in a descending order from 30 to 21.

study when I had to write on the paper. I wish I had had the flexibility to write on the paper or by the keyboard. (Student 8)

### The Analysis of the Interview

#### Control Group Students' Interviews

I received a traditional instruction during the study which was quite boring for me. Once we wrote the essays for the first time, I did not complain about it. I thought that my writing would improve well while writing on the paper. However, writing on the paper for the second time after receiving the first feedback was quite troublesome for me. I am very good at typing on the virtual or on-screen keyboard. It is also less time consuming for me. Additionally, I can zoom in and out to see my mistakes easily before submission. However, I suffered a lot during the

It was not a typical period for me. I learned how to write academically. Although it was monotonous from time to time, I noticed the improvement in my essays. Additionally, writing one more time after the first feedback helped me a lot to see my mistakes and eliminate them in my second attempt. Personally, I prefer learning in a hybrid way which necessitated employing in-person and online learning opportunities. However, I did not mind it. I realized that I learned well when I followed the instructions in a disciplined way. (Student 13)

This study could have produced better results if we had been allowed to use our mobile devices for educational purposes in an Academic Writing course. We had to write and submit on the paper every time, but it was so boring for me. I have no problem about writing on the paper for the first time. On the other hand, I like researching on the

internet about the topic, getting some ideas and composing my own essay for the second submission. I believe that we should read more sample essays before the second submission, so we could expand our knowledge and write more creatively. (Student 17)

My instructor graded my paper and showed my mistakes individually. However, my friends in the other group learned from each other because the instructor displayed each submission on the smart board and asked the students to correct the mistakes. Additionally, they zoomed in and out according to the need. However, we could not learn from each other in the study. We wrote and the instructor graded. I need more interaction and collaboration to improve my writing skills. (Student 25)

I read a lot of articles about the role of technology in education. They assert that integrating technology into classes can pay off if planned and monitored successfully. However, the conduct of lesson was so monotonous in our study. We brainstormed, wrote, received feedback and rewrote. The cycle could be enriched with mobile devices to increase the satisfaction of the students. (Student 29)

### Experimental Group Students' Interviews

It was a beneficial study for me because I expanded my writing skills dramatically. I noticed that MALL activities enriched our learning and increased our motivation to write more creatively. In addition, it was a piece of cake to type and send the second submission electronically. I used to write for long hours in the past. Now, I compose my ideas within 20 minutes through the internet and merge my own ideas harmoniously thanks to mobile technologies which were allowed to use actively in this study. I am glad to be a part of this study which was memorable in many aspects. (Student 5)

I spend long hours surfing the internet, so I am capable of typing fast. When my instructor informed me about the study, I looked forward to

commencing it. When I typed on the keyboard, I did not think that writing was a tiring and boring process. Conversely, I realized that writing is at the heart of our lives which will have many reflections. In the same vein, I got so much pleasure while writing on the keyboard because I was familiar with typing academically. I can assure you that mobile technologies can change the quality of writing classes drastically. (Student 9)

My instructor offered the flexibility in this study to send our submissions with mobile technologies such as laptops, mobile phones and tablets. Additionally, we did not race against time for the second submission. We elaborated our ideas, checked instructor's feedback before composing the final form. Additionally, we learned from each other during peer-learning period. As far as I am concerned, it was a revolutionary technique to be implemented globally. I wish everyone employed such a handy method while teaching how to write academically. Granting freedom to use mobile devices broaden our horizons from different sources. (Student 16)

One of the most fundamental gains of this study was interaction for me. We interacted with our friends in many cases. For instance, we corrected the mistakes, brainstormed, composed the drafts, researched in cooperation. Thus, we strengthened our relationship to learn cooperatively and go one step further in writing each passing day. Speaking independently, finding the mistakes cooperatively, doing research as a team were key points to increase the success rate of the study. (Student 20)

### Descriptive Data Analysis

Independent samples t test was employed to measure whether there were a significant statistical difference once initial and final results were compared. The detailed analysis was given below:

Independent samples t test analysis was illustrated in Table 8.

**Table 8.**  
*Independent samples t test analysis*

Variables	Groups	N	Mean	SD	t	df	Sig
Pre-test	Control	30	53.50	11.230			
Pre-test	Experimental	30	53.33	12.753	.054	58	.957
Post-test	Control	30	54.50	18.305			
Post-test	Experimental	30	68.33	13.979	-3.290	58	.002

Note. P<0.05

Based on the values of pre-test in Table 5, there was no significant difference between each group because p-value was measured as .957 which was greater than 0.05. Additionally, there was not a significant difference between each group in terms of mean scores which were 53.50 in control group and 53.33 in experimental group. These figures indicated that their levels were quite similar initially. On the other hand, when the p values were analysed in terms of post-test results, it was measured as .002 which was significant. This difference was also observed in the mean score of experimental group which leaped from 53.33 to 68.3. However, the difference in control group was only 1 point once pre-test and post-test results were compared. Based on the post-test results, it can be attested that experimental group who followed a MALL enriched writing instruction outperformed. However, control group's progress was not as substantial as experimental group.

This study sought the effects of MALL enriched instruction in an Academic Writing class via exams, a questionnaire, a survey and an interview. Based on the findings, several key points were highlighted in each instrument. The exam results revealed that MALL enriched instruction increased students' writing marks and motivation substantially. This gain was in line with Kara and Yildiz's (2022) study which indicated that using mobile technologies can enhance students' all linguistic skills. Additionally, Bahari (2022) asserts that mobile technologies can increase the quality of education because students' enthusiasm and motivation can increase dramatically. Apart from exams, the questionnaire indicated essential points to consider. For instance, the majority of students reiterated that it was a productive period for students in many ways because they learned in an engaging way. This finding was consistent with Senel (2022) emphasized that digital literacy can offer learners to learn in an engaging way. The next instrument was the survey which unearthed significant advantages of MALL activities which were being interactive, modern, portable, student-centered and entertaining. This finding was common in Karakaya and Bozkurt's (2022) study which underlined distinguishing qualities of MALL activities in language learning and teaching process. The last instrument was the interview which revealed key points as well on the effects of MALL in writing. For instance, the students who received a traditional based writing instruction complained about boredom, monotonous cycle and tiring activities, whereas the students who were exposed to MALL activities to write academically expressed their

compliments with various stark examples. In addition, MALL gives teachers extra time to check on students. Instructors can spend more time with students because lecturing takes less time (Daskan & Yildiz, 2020). This finding was also supported by Kim (2022) and Yildiz (2022) who emphasized that mobile technologies could produce promising results to increase students' attitudes toward writing academically.

### Conclusion and Recommendations

This study investigated the effects of MALL initiatives on students' writing competence. Based on the findings gathered through various qualitative and quantitative instruments, it was observed that students' writing performance was enhanced dramatically. In the same vein, they were more eager to join the activities and submit their works electronically via mobile technologies. Furthermore, students' relationship with their instructors and friends strengthened substantially. In addition, interaction was the core part of the study which required the learners to cooperate, discuss and come to the sensible decision as a team. Subsequently, peer-learning activities increased students' retention rate as they corrected their friends' mistakes collaboratively. Moreover, students' overall attitudes towards learning English by mobile technologies changed positively. Based on the aforementioned advantages of MALL, it can be stated that mobile technologies can contribute to language learning and teaching process in increasing numbers for long years.

Some recommendations can be made for stakeholders of education who are keen on integrating MALL activities into writing classes. This study sought the effects of MALL on writing at a tertiary level in Iraq. Future studies can be conducted to measure the effects of MALL on different skills at different stages of education. In addition, male students were higher than female ones which can be equalized in future studies to represent genders fairly. Finally, this study lasted 12 weeks which can be prolonged in future studies because writing skills cannot be mastered within a short time. Longer periods can yield more satisfactory results.

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## The third-person effects and susceptibility to persuasion principles in advertisement

### Ефекти на третата персона и на податливостта към убеждаващите принципи в реклама

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#### Abstract

This investigation has several main objectives: 1) to determine whether the third-person effect (TRE) (Gunther & Thorson 1992; Youn, Faber, & Shah, 2000) can be achieved through advertising messages; 2) to identify which strategies for persuasive social influence from P. Cialdini (Cialdini, 2001-2021) help to enhance the third-person effect (TRE) among advertising consumers; 3) to find some causal relationships between susceptibility to persuasion on Kaptein's scale (Kaptein et al., 2012) or STPS and TRE among consumers of advertising. The results of the analysis of variance (ANOVA) showed that consumers aged 46 to 65 believed that positive the third-person effect (TRE) statements exert their influence on other age groups. When measuring the negative influence of the third-person effect (TRE), it was found that young adults aged 18 to 25 were most likely to assume that this influence was successful among other consumers, i.e. they overestimated the effects on others but not on themselves. Through regression analyses, it is found that persuasive strategies such as scarcity and social proof achieve their influence among youths, and scarcity and authority principles - among females and among other consumers (but not on themselves) when several negative strategies are combined. The research findings can serve social psychologists, behavioural psychologists, and those who protect the interests of business organizations.

**Keywords:** TRE, persuasive strategies in advertisement, STPS for Bulgarian costumers.

#### Резюме

Това изследване има няколко основни цели: 1) да установи дали може да бъде постигнат ефектът на третата персона (TRE) (Gunther и Thorson 1992; Youn, Faber и Shah, 2000) чрез рекламни съобщения; 2) да констатира кои стратегии за убеждаващо социално влияние по Р. Чиалдини (Cialdini, 2001-2021) спомагат за засилване на ефекта на третата персона (TRE) сред потребители на реклама; 3) да констатира някои причинно-следствени връзки между податливостта към убеждаване по скалата на Каптейн (Kaptein et al., 2012) или STPS и ефектът на третата персона (TRE) сред потребители на реклама. Резултатите от анализ на вариациите (ANOVA) показват, че потребители на възраст от 46 до 65 години смятат, че положителните твърдения на TRE оказват своето влияние върху останалите възрастови групи. При измерване на негативното влияние на TRE се установява, че младежи на възраст от 18 до 25 години в най-голяма степен допускат, че това влияние е успешно сред останалите потребители, тоест те надценяват ефектите върху другите, но не и върху себе си. Чрез регресионни анализи се установява, че убеждаващите стратегии като недостиг и социално доказателство постигат своето влияние сред младежите, а принципите на недостиг и на авторитет - сред жените и сред други потребители (но не и върху тях самите) при комбинирано прилагане на няколко негативни стратегии. Получените научни резултати могат да послужат на специалисти по социална психология, поведенческа психология и на такива, които защитават интересите на бизнес организации.

**Ключови думи:** TRE, убеждаващи стратегии в реклама, STPS за български потребители.

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## Introduction

Persuasion has been the subject of human research for millennia and finds its application in various areas of social life such as: social psychology, behavioural psychology, mediated communication, product offering design, direct marketing and advertising. Research has embedded the idea that persuasion explains the perceived and preferred basis of attitudes (Kaptein, 2012), as well as a range of behavioural changes in the achieved influence of interactive systems and technologies (Oinas-Kukkonen et al., 2008; Ploug et al., 2010). Despite views of the future of persuasive technologies that find they will be more effective than their human counterparts because they can be more persistent and 'always on' (Fogg & Eckles, 2007), other effects are being sought to achieve persuasive social influence. This is the additional effect of perception that can mediate the impact on purchase intentions, and is referred to as third person effects (TPE) (Gunther & Thorson, 1992; Youn, Faber, & Shah, 2000; Eisend, 2008). Conveying greater relevance of the product or service is achieved through the consumer's perceived value, which is explained by researchers as the main driver of purchase intentions and behavior (Zeithaml, 1988; Baker et al., 2002). In addition, it can be argued that the consumer's perceived value or the third person effect (TRE), is enhanced by the application of persuasive strategies developed by R. Cialdini (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021) to achieve lasting persuasive social influence in advertising. It is assumed that consumer perceived value has different effects on different groups of consumers and in the way they believe other consumers perceive advertising messages. The perceptual difference (based on attitudes toward a particular advertising message) arises because people tend to overestimate the perceived influence on themselves relative to others for a particular message because they believe they are more resistant to persuasion than others (Eisend, 2008, p. 35). A similar effect is observed when there is a discrepancy between the perceived influence on the self and the actual achieved influence on the self. Therefore, the ways in which consumers perceive social influence on them, as well as the perceived influence on other consumers, can provide a clear picture of the influence achieved by applying persuasive strategies in advertising.

## Literature Review

Although persuasion achievement is available in advertising, a number of aspects of persuasive

communication are in the process of being understanding. One of these is the presence of a varying number of persuasive strategies in marketing, e-commerce, persuasive technology and in advertising. Fogg (2002) was one of the first to highlight the importance of findings (Fogg, 2002) for the design of interactive systems created with the intention of changing human attitudes or behavior. The same author started a field called persuasive technologies (Fogg, 2002), with the author's greatest contribution being the compilation of a behavior model for persuasive design (Fogg, 2009). While Fogg's work focuses on achieving persuasion through technology, Kellermann and Cole (1994) collected 64 taxonomies that describe different persuasion strategies and their operationalization (Kellermann & Cole, 1994). The main goal of their study is the integration of cross-taxonomies motivating human evaluation (Kellermann & Cole, 1994, p. 13) as a useful level of analysis that helps to group and distinguish specific influence tactics or implementations of different strategies (Kellermann & Cole, 1994; O'Keefe, 1994). In another subject area such as marketing, e-commerce and others, Cialdini (2001-2021) formed seven persuasion principles, based on research on some individual differences of consumers (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021). The researcher attempts to explain the nature of persuasion strategies and their broad applicability. On the other hand, Hoy and Smith (2007) proposed 10 persuasive strategies by showing their effectiveness in creating leadership qualities (Hoy & Smith, 2007). Consequently, persuasion is achieved through different ways among different individuals as an effective part of mass communication, business communication, as well as advertising and interpersonal communication, and the intermediate level of these communication is third person effects (TPE) (Gunther & Thorson, 1992; Youn, Faber, & Shah, 2000; Eisend, 2008).

Since the persuasive principles developed over the years from Cialdini (2001-2021), as well as the impact of "third person effects" (TPE) (Eisend, 2008), are implemented through specific advertising messages and lead to a higher perceived sensitivity of others towards the self (Gunther & Thorson 1992; Youn, Faber, & Shah 2000), they will be a major part of this research study. The third-person effect states that when confronted with negative messages, people will overestimate the messages' effect on others relative to themselves (Youn, Faber & Shah

2000, p. 633). This is consistent with the persuasion knowledge model (PKM), which states that as people develop knowledge about the goals and tactics of persuasion agents, they will be less likely to perceive attempts at persuasion on themselves as effective (Friestad & Wright, 1994). Consequently, there is a disconnect between the effects of media advertising on others and on the self because this is due to underestimating others' awareness of external (situational) factors, and also thus overestimating others' susceptibility to advertising content (Youn, Faber & Shah, 2000).

Advertising consumers' resistance to different messages is also explained by the fact that individuals perceive the message as having a greater influence on others to enhance their perception of personal invulnerability and control (Gunther, 1991). Another perspective of researchers is that users who consider an issue important (Mutz, 1989) perceive themselves as experts or are highly involved in the message (Perloff, 1993), which is associated with the authority principle. Susceptibility to this principle is achieved when a claim is presented by an authoritative person and supported by an authoritative argument. This finding does not imply that the persuasive strategy of authority will only achieve a positive effect among all consumers of an advertisement, because Milgram's (1974) famous experiment showed that one-third of participants did not comply with an authoritative argument (Milgram, 1974; Kaptein & Eckles, 2010). In addition, reliably influencing advertising consumers' attitudes and behaviors through persuasion (but not coercion) is a research problem that still needs to be investigated. Kaptein, Markopoulos, Ruyter and Aarts (2009) found that the target of a persuasion attempt must be receptive to the consumers of an advertisement, similarly the message must be delivered at a specific time to allow the consumer to process the information (Kaptein, Markopoulos, Ruyter and Aarts, 2009). These aspects of persuasion are considered because there are many variations in the way the message query is formed. In order to evaluate the effects of the persuasive strategies proposed by Cialdini (2001-2021), as well as to elucidate other factors determining susceptibility to persuasion, the psychology of each principle must be explained. The creation of individual interventions in advertising messages to mimic person-to-person counselling (Brug, Oenema & Campbell, 2003) leads to the achievement of the third-person effect (Youn, Faber & Shah, 2000). Therefore, segmentation of target groups in advertising, as well as personalization based on psychological

characteristics such as individuals' stages of change (Noar, Benac & Harris, 2007), should be applied by making adaptations to Cialdini's persuasive strategies to achieve social influence (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021). The implementation of mutual adaptation, that is, according to the specificities of persuasive principles as well as the specificities of advertising consumers, requires a good awareness of specific individuals using specific advertising products and services, as well as of the different persuasive effects achieved.

This study conceptualizes the presumed social influence achieved among consumers of advertising, and the effects on higher perceived influence on other consumers relative to self. Consistent with third person effects (TPE) research, negative influence on others is perceived to be much stronger than positive influence (Gunther et al., 2006). Similarly, the third person effect has been found to occur when the goal recommended in the message is perceived as eliciting a negative effect (Youn, Faber & Shah, 2000). Therefore, in our study, some negative effects of persuasive principles should be derived through which the manifestation of third person effects (TPE) will be sought. On the other hand, researchers have pointed out that to whom a message is considered positive, individuals attribute a greater effect on themselves than on others because they have the skills to recognize its value (Cohen & Davis, 1991; Gunther & Thorson, 1992). Creating different perceptions can lead to analogous reactions from consumers when trying out products and services offered in advertising. In support of these views is the spiral of silence theory (Noelle-Neumann, 1974), which explains why individuals do not exhibit pre-expected behaviour because they see their perspective as different from the general public's view. Other authors in some initial studies failed to find third person effects (TPE), even when the negative effect was strengthened (Gunther, 1991). Therefore, several research questions are raised: 1) Does "third person effects" (TPE) exist as a negative or as a positive manifestation of human behavior? 2) Can this achieved effect be verified by persuasive advertising messages? 3) Through which principles of persuasive social influence can it be manifested?

According to these previous researches, the researcher puts forward the following hypotheses:

**Hypothesis 0:** There is no "third person effect" (TPE) among users, which can be verified through persuasive advertising messages.

**Hypothesis 1:** There is "third person effect" (TPE) among users, which can be verified through persuasive advertising messages.

**Hypothesis 2:** Third person effects (TPE) can be achieved by applying certain persuasive social influence strategies.

In order to provide greater clarity into the process of persuasive communication achieved, this paper revisits the issue of the "third person effect" (TPE), (Youn, Faber & Shah, 2000) by measuring individuals' susceptibility to persuasion using the STPS developed by Kaptein, M., Markopoulos, P., Ruyter, B., & Aarts, E. (2009), (Kaptein et al., 2009). There are several reasons for conducting the study: 1) there are conflicting opinions on the third person effect (TPE); 2) achieving persuasion through persuasive strategies is realized under certain conditions - eliciting positive and negative effects; 3) applying persuasive strategies in advertising may yield some mixed results on the presence or absence of the third person effect (TPE). The results of this study will benefit researchers and practitioners in the application of persuasive communication in advertising.

## Methodology

To understand whether our study provides a means of measuring sensitivity to persuasion using Cialdini's various principles (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021), we conducted an exploratory factor analysis using principal components analysis (PCA), with data analyzed after applying the Varimax rotation. The number of subscales in the Kaptein, Ruyter, Markopoulos and Aarts (2012) methodology is also 7, and in our study there are reasons to adopt the 7-factor solution because the extracted communities range from 0.340 to 0.772 for the whole samples, which is perfectly satisfactory as a measure (Kaptein et al., 2012). The extracted factor loadings range from 0.772 to 0.481, which is acceptable to form a coefficient of each factor (Ganeva, 2016). Based on this exploratory analysis, a 7-factor solution is adopted, according to which the adapted and modified version of Kaptein et al. (2012) questionnaire or STPS questionnaire - Susceptibility to Persuasion Strategies Scale will be used in the present study to establish the susceptibility of individuals to persuasion (Kaptein et al., 2012). Cronbach's alpha was used to test the reliability of an adapted and modified version of the STPS questionnaire (Kaptein et al., 2012). The reliability of Liking

Scale is  $\alpha=0.69$ , the reliability of Social Proof Scale is  $\alpha=0.78$ , the reliability of Commitment and consistency Scale is  $\alpha=0.69$ , the reliability of Scarcity Scale is  $\alpha=0.84$ , the reliability of Reciprocity Scale is  $\alpha=0.77$ , the reliability of Unity Scale is  $\alpha=0.73$ , the reliability of Authority Scale is  $\alpha=0.81$ . For the whole sample, the Cronbach's alpha coefficient is  $\alpha=0.799$ . As the values exceed the minimum recommended value of  $\alpha=0.70$  (DeVellis, 2012) the internal consistency for the respective subscales is sufficiently high, i.e. the items that make them up form a common scale.

Our further work applies the STPS questionnaire with 25 (seven subscales) statements (first module), an adapted and modified version of Kaptein et al. (2012), and in the next module (second module) of the survey, statements from advertisements are offered for respondents to evaluate, in order to ascertain individuals' susceptibility to Cialdini's persuasive principles (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021) with some negative statements with TRE. Different advertising images are used to conduct the experiment, supported by statements that measure each persuasive strategy containing manipulations of advertising messages, as statements provoke negative reactions because the purpose is to measure third-person effects: 1) Despite 10,000 likes on the Nike sports shoes advertisement, I would not buy the product because it limits my choice (social proof); An internet advertisement offering a 10% discount cannot make me order takeaway food because it is a product I am not interested in: (scarcity); A laundry detergent advertisement makes me participate in an online game, but I would not participate because the commitment is too great (commitment and consistency); The presence of a popular influencer in a bag advertisement does not make me try a product because that person is not important to me (unity); An online advertising expert recommends a product, but I would not try the product because I doubt the expert's opinion (authority); A laundry detergent advertisement makes me participate in an online game and brings a discount in the price of the product, but I would not participate because the discount is insignificant (reciprocity); A cosmetics advertisement with a beautiful woman does not stimulate me to try products (liking). To measure respondents' perceived sensitivity to influencing other consumers of advertising, questions manipulating TPE situations were asked (Gunther & Thorson, 1992). These are statements that elicit "third person effects" (TPE) (Youn, Faber & Shah, 2000): 1) Advertising affects my initial attitude by making it more

positive; 2) Advertising affects my initial attitude by making it more negative; 3) Advertising has a powerful effect on me; 4) Advertising affects the initial attitude of people around me by making it more positive; 5) Advertising affects the initial attitude of people around me by making it more negative; 6) Advertising has a powerful effect on men; 7) Advertising has a powerful effect on women; 8) Advertising has a powerful effect more on youth; 9) Advertising has a powerful effect more on adults. The value perception of advertising was measured with three 5-point Likert scales ranging from 1-Agree to 5-Disagree.

**Results and Discussion**

The study was conducted in the period from June 2021 to December 2022. Self-reported data were collected from a total sample of 300 respondents distributed across six age groups, ensuring a 95% representative size (being  $e = \pm 5\%$ ;  $p = q = 0.50$ ). Each case from the general population was equally likely to be included in the study. All respondents filled in the questionnaire on paper because this ensures the correctness of the answers. The total number of respondents is 300 people. According to these criteria, the total sample was 52% male (156 people) and 48% female (144 people) and by age group 41.7% (125 people) were aged 18 to 24 year, 36% (108

people) were aged 25 to 45 year, 22.3% (67 people) were aged 46 to 65 year. Data were processed using the statistical analysis package SPSS 19.0. The following used were basic statistical analyses: Descriptive analysis; Internal consistency of each of the subscales measuring the different persuasive strategies (Cronbch alpha  $\alpha$  coefficient), and for the whole sample; One-way analysis of variance ANOVA to examine the influence of age on third person effects (TPE); Student-Fisher t-test for the statistical significance of differences between means between groups; Pearson's correlations to reveal the strength of the relationship between different persuasive strategies in advertising that make up the factors (formed scales and subscales); Regression analysis towards establishing the causal relationship between susceptibility to persuasion of influence principles and third person effects (TPE) (Youn, Faber & Shah, 2000; Ganeva, 2016).

One-way analysis of variance (ANOVA) was applied to determine the impact of TRE on different age groups of respondents. It was also hypothesized that the arithmetic means of the positive third person effects with respect to age were different, and the result of the one-factor analysis of variance (ANOVA) is presented in Table 1.

**Table 1.**  
*Influence of age on the positive third person effects of adverting for other people (ANOVA)*

Independent variable	Dependent variable	Mean	F, p	T-test
Age	the positive third person effects	x1 (18-24 years old) = 3.20	F=3.91 p=0.00	t <sub>1,2</sub> = 2.98; p < 0.00
		x2 (25-45 years old) = 3.31		t <sub>1,3</sub> = 3.22; p < 0.00
		x3 (46-65 years old) = 3.63		t <sub>2,3</sub> = 3.97; p < 0.01

There was a statistically significant difference between the age groups studied, with the oldest age group, 46 to 65 years, having the highest mean score of the positive third person effects for other people, where  $F = 3.91$ ;  $p = 0.00$ ;  $x_3$  (46-65 years old) = 3.63, compared to the other younger age groups:  $t_{1,2} = 2.98$ ;  $p < 0.00$  and  $t_{1,3} = 3.22$ ;  $p < 0.00$ , (Table 1). Many researchers share the view that third person effects (TRE) is a powerful persuasive tool for persuasion, with evidence of its manifestations being negated in situations of uncertainty (Cialdini, 2001). The results obtained show that consumers of advertising from 46 to 65 years old assume that advertisements have a positive effect on consumers around them, while for other age groups this effect decreases:  $F = 3.91$ ;  $p = 0.00$ ;  $X_1$  (18-24 years old) = 3.20;  $X_2$  (25-45 years old) = 3.31.

Therefore, users in the oldest age group overestimate the achieved communication effects on other users, the explanation being that people have such biased perceptions for motivational reasons to maintain their own control and self-esteem (Gunther & Mundy, 1993). It can be assumed that they see themselves as less susceptible to third person effects (TRE), (Youn, Faber & Shah, 2000) because they underestimate others' awareness of externalities (Eisend, 2008). In addition, third person effects (TRE) based on commercial advertising messages typically result in higher perceived sensitivity of others to the self as they seek to dismiss the influence on the self (Gunther & Thorson, 1992; Youn, Faber & Shah, 2000).

It is hypothesized that the arithmetic means of the negative third person effects with respect to age are different, and the result of the one-factor

analysis of variance (ANOVA) is presented in Table 2.

**Table 2.**

*Influence of age on the negative third person effects of advertizing for other people (ANOVA)*

Independent variable	Dependent variable	Mean	F, p	T-test
Age	the negative third person effects	x1 (18-24 years old) = 3.63	F=2.74 p=0.00	t1,2 = 3.36; p < 0.01
		x2 (25-45 years old) = 3.38		t1,3 = 3.18; p < 0.03
		x3 (46-65 years old) = 3.49		t2,3 = 2.99; p < 0.00

When analyzing and comparing the results obtained from the one-factor analysis of variance (ANOVA) on the negative third person effects for other people, it was found that young people aged 18 to 25 years were most likely to assume that the negative effects for other people were achieved through the advertisements, because the mean values of this group were highest  $x_1$  (18-24 years old) = 3.63, where  $F = 2.74$ ;  $p = 0.00$  relative to other age groups:  $t_{1,2} = 3.36$ ,  $p < 0.01$   $t_{1,3} = 3.18$ ;  $p < 0.03$  (Table 2). This indicates that young consumers of advertising are most likely to lower the perceived negative impact on themselves relative to other consumers. In this case, the result may be explained by the biased perception of young consumers, which again overestimates the achieved negative effect of advertising on other consumers but underestimates this effect on themselves (Davison, 1996). Consumers of advertising least likely to perceive that it has negative third-party effects for other people, are aged 25 to 45 - the middle age, where  $F = 2.74$ ;  $p = 0.00$   $x_2$  (25-45 years old) = 3.38 compared to the other age groups:  $t_{1,2} = 3.36$ ,  $p < 0.01$   $t_{2,3} = 2.99$ ;  $p < 0.00$  (Table 2). Therefore, perceived sensitivity to the negative third person effects for other people has weak significance for this age group based on appeals from advertising. Consistent with TPE research, the negative influence on others is perceived to be much stronger than the positive influence (Gunther et al., 2006), implying that young consumers perceive the negative effects most strongly for other consumers. In addition, the researchers point out that these perceptions can lead to behavioral

responses despite the possible existence of a minor direct effect on others. The perceived effect on others alone is sufficient and may influence one's own behavior (Tsfati & Cohen, 2003).

In order to establish third person effects, various advertising claims that contain persuasive strategies and manipulate third person effects (Youn, Faber & Shah, 2000) were proposed as control variables for consumer evaluation. Because consumers have a choice to agree with or reject negative claims, their response depends on the perceived importance of an issue as well as the perceived threat to their freedom of choice (Brehm, 1966). Cronbach's alpha for statements measuring negative advertising was 0.780. Pearson's correlation coefficient was used to measure the linear relationship between ads containing statements from the subscales in the STPS questionnaire. Pearson correlations showed positive statistically significant relationships between persuasive statements adjusted by TRE, with correlations ranging from 0.403 to 0.775. Therefore, the assumptions of normality, linearity, and homogeneity are not violated because the correlations are moderately positive  $r = 0.403$ ,  $p < 0.000$  to strong  $r = 0.775$ ,  $p < 0.000$ , with the number of subjects being  $N = 300$ .

To establish the linear relationship between third person effects (TRE) and persuasive principles in advertising, a linear regression analysis was conducted (Table 3).

**Table 3.**  
*Influence of third person effects on the perception of advertising with persuasion principles, regression analysis ( $\beta$ , p)*

Regression model	Dependent variables					
	TRE (negative items) Advertising effect on young people		TRE (negative items) Advertising effect on other people		TRE (negative items) Advertising effect on woman	
	R <sup>2</sup> Adj	Stand. Coeff. Beta	R <sup>2</sup> Adj	Stand. Coeff. Beta	R <sup>2</sup> Adj	Stand. Coeff. Beta
Social proof		0.314		0.261		0.293
Scarcity	<b>0.318*</b>	0.256	0.110	0.181	0.145	0.242
Authority		0.226		0.118		0.281
Scarcity	0.223	0.198	<b>0.360*</b>	0.104	<b>0.326*</b>	0.156
Scarcity		0.188		0.061		0.340
Commitment		-0.012		0.016		0.301
Authority	0.109	0.163	0.112	0.002	0.191	0.162

\*Other principles are excluded from the models as statistically insignificant.

The assumptions for linear regression analysis were met as statements measuring persuasive strategies could statistically significantly predict the influence of the third person effects (TRE) scale (Youn, Faber & Shah, 2000), where  $F(2,298) = 7.49$ ,  $p < 0.001$  indicates results for third person effects (TRE). Susceptibility to persuasion in advertisements with social proof and scarcity principles determines third person effects (TRE) (negative items) when the advertisement influences young people ( $\beta = 0.318$ ;  $p < 0.00$ ), (Table 3). The combined social influence of these persuasion principles in advertising with negative third person effects was found. The scarcity principle as well as the social proof principle, which provoke consumers of advertising to use products and services for a short period of time, create a feeling of uncertainty and this causes people's reactance resistance (Brehm, 1966; Clee & Wicklund, 1980) and also cognitive dissonance (Festinger, 1957). The value of the adjusted coefficient of determination is  $R^2 = 0.31$ , i.e. that 31% of the variance for the impact of TRE on young people can be explained by the regression model presented, which according to Cohen (1988) is a moderate effect size, (Cohen, 1988).

The achieved social influence of the scarcity principle as well as the authority principle can predict the influence of TRE (negative items) Youn, Faber & Shah, 2000) when consumers perceive the value of the advertisement as significant to other consumers ( $\beta = 0.360$ ;  $p < 0.00$ ), (Table 3). The implications of the negative influence of these two principles, which yield mixed effects on consumers of advertising, both positive and negative, are documented by other

authors. Fuegen and Brehm (2004) use reactance theory to explain how authority endorsements can lead to negative effects when people's perception of freedom of choice is threatened (Fuegen & Brehm, 2004; Kaptein & Eckles, 2010). Therefore, these principles with negative advertising appeal may have some negative effects on individuals' attitudes and behaviors, and our study supports the view of underestimating the impact of advertising on the self while overestimating it on other people (Davison, 1996).

It has been found and achieved influence on women, through the scarcity principles, and the principle of authority can predict the influence of TRE (negative items) Youn, Faber & Shah, 2000), the value of the adjusted coefficient of determination is  $R^2 = 0.326$ , i.e. that 32% of the variance for the impact of TRE on woman can be explained by the regression model presented, which according to Cohen (1988) is a moderate effect size (Cohen, 1988). This result can be explained by the higher sensitivity of females, who have more emotional behavior and as it is clear, are influenced by negative appeals in advertising, the values of the scarcity principle are  $\beta = 0.156$ ;  $p < 0.00$ , and for authority are  $\beta = 0.281$ ;  $p < 0.00$ . Hence, in advertising, authority arguments whose influence is enhanced by TRE (negative items) (Youn, Faber & Shah, 2000) indicate rejection or questioning of the authoritative opinion that would lead to lack. In addition, it can be commented that both social proof and authority can be powerful tools of persuasion because individuals in situations of uncertainty follow other people's behavior and

may make rash decisions (Cialdini, 2001; Latané & Nida, 1981).

## Conclusions

A number of research studies have indicated that reliably influencing advertising consumers' attitudes and behaviors through persuasion is achieved in a variety of ways, with the success of each influence dependent on many factors. In the present research study, an attempt was made to measure the influence of TRE (Youn, Faber & Shah, 2000) by manipulating advertising messages with negative statements. It should not be underestimated that the target of the persuasion attempt must be receptive to the consumers of the advertisement, as well as the message must be delivered at a specific time to allow the consumer to process the information (Kaptein, 2012). This is the reason to look for the perceived value of the consumer or the third person effect whose impact is enhanced in a negative aspect by applying the persuasive strategies developed by R. Cialdini (Cialdini, 2001; Cialdini, 2016; Cialdini, 2021) as seen in our results. In a situation of applying third person effects (TRE) among users of different ages, it is found that users aged 46 to 65 believe that positive statements have a strong influence on other younger age groups. Consequently, this group overestimated the achieved communication effects on other users, the explanation being that people have such biased perceptions for motivational reasons to maintain their own control and self-esteem (Gunther & Mundy, 1993). When measuring the negative influence of the negative effects for other people (TRE), it is seen that young people aged 18 to 25 years are the most likely to assume that TRE is achieved through advertisements. This result is explained by overestimating the effect achieved on other people but not on themselves (Davison, 1996).

Manipulated negative statements, containing persuasive strategies in advertising, yield some results in young people, the influence exerted on other consumers and the influence on women. These are the three groups of advertising consumers among whom advertising effectiveness is achieved by (TRE) (negative items). The persuasive strategies that enhance third person effects (TRE) (Youn, Faber & Shah, 2000) are the principles of scarcity and social proof for young people, the principles of authority and scarcity for other people and for women. Explanations are found in reactance theory, which holds that consumers' freedom of choice is threatened (Fuegen & Brehm, 2004;

Kaptein & Eckles, 2010). These results may reverse the effect for consumers themselves, who believe they are less influenced by advertising. Previous research suggests that with respect to socially desirable issues, this type of perception may disappear so that people do not significantly overestimate the influence on others compared to the perceived influence on themselves (Eisend, 2008). Future research should find other causal relationships between Cialdini's (2001-2021) persuasive principles and third person effects (TPE) (Youn, Faber & Shah, 2000), and identify new factors for achieving persuasive influence.

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## Ukrainian-turkish literature relations between the 16th - 20th Centuries

### Українсько-турецькі літературні зв'язки XVI-XX століття

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#### Abstract

The article highlights Ukrainian-Turkish relationships in literature, originating from oral folklore, ballads, and historical songs since the 16th century to the present day. It emphasizes that literary communications between Ukraine and Turkey are primarily due to their close geographical proximity, intertwined geopolitics, and historical, economic, and cultural interrelations between both nations. Based on literary works, the article distinguishes key stages in Ukrainian-Turkish relationships in Ukrainian literature from the 16th to the 20th centuries and examines how individual and group-based Ukrainian identities in Ukrainian folklore of the 16th-17th centuries were formed in interaction with Turkish identities. Starting from the 19th century, changes in the context of social and political processes cause communicative vectors in literary works to change as well. Important aspects of Ukrainian-Turkish literary communication are discussed.

**Keywords:** communication, literature, Turkish literary, Ukrainian literary, Ukrainian-Turkish relationships.

#### Анотація

Стаття висвітлює взаємини між Україною та Туреччиною у літературі, що виникли у народному фольклорі, баладах та історичних піснях з XVI століття і до сьогодні. Автор підкреслює, що літературні зв'язки між Україною та Туреччиною пов'язані переважно з їхньою тісною географічною близькістю, геополітичним співплітом та історичними, економічними та культурними взаємозв'язками між цими народами. На основі літературних творів стаття відрізняє ключові етапи у взаєминах українсько-турецьких у літературі української літератури з XVI по XX століття та досліджує, як формувалися індивідуальні та групові українські ідентичності в українському фольклорі XVI та XVII століть у взаємодії з турецькими ідентичностями. З XIX століття зміни в контексті соціальних та політичних процесів також призводять до зміни векторів комунікативних зв'язків у літературних творах. Обговорюються важливі аспекти українсько-турецької літературної комунікації.

**Ключові слова:** комунікація, література, турецька література, українська література, українсько-турецькі контакти.

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## Introduction

The Relevance of the selected topic for this research is confirmed by the present-day transformations in all dimensions of the Ukrainian society which add more acuteness to the contradictions between the existing system of communications and the needs of modern science, as conventional channels of communications are losing their effectiveness while the new channels have to be developed, with consideration of historic background in various areas of knowledge. Discovering peculiarities of literary communications and recognizing their international relations will allow to optimize the ways of modern literary communicative interaction.

The significance of literary communications between Ukraine and Turkey should be specially emphasized, and that is primarily caused by the close geographical location of the two countries, interlinked geopolitics as well as historical, economic and cultural interrelations between the two nations, which resulted in long-term consequences for the development of their literatures. Impact of Ukrainian-Turkish communicative patterns can be found both in oral folklore, ballads and historical songs beginning from the 16<sup>th</sup> century, and in works by Ukrainian writers of later periods.

An important role in attaining success of any communication, interpersonal or cross-cultural, belongs to mutual ideas that the participants of such communication have about each other: these include both cognizing oneself through one's own "I" and through being perceived by others, and through perception of the "Other" (Foreign). In our perception, the Other may exist in the image of a foreigner and enemy, or a neighbor and partner. Given the absence of personal contacts with the Other, we perceive his image through the national literature dated to a certain period in history, and the image of the Other in such sources can often be stereotypical. Dmytro Nalyvaiko notes that the ideas and images of Native and Foreign belong to the oldest and archetypical concepts, and the opposition between the two is one of the basic elements in the structure of human consciousness (Nalyvaiko, 2006). Studying the presence of influences on literature or specific literary works caused by one nation regarding the other, it is important to distinguish the forms of interaction (communication) which are manifested in literature. First of all, these include such interdependent categories as influence, borrowing, reception etc. Although the said

notions may overlap to a large extent, their substantial accents are still of great importance. The term "influence" denotes both the process and the result of a sender's action towards the recipient. Both the sender and the recipient (receiver) can exist as various literary phenomena, for example, a literary work, image etc. According to the definition of Jan B. Corstius, influence is the "substantial and formal consequence of external and internal relations for a literary work ... or an entire period in literature" (1997). However, the theorist of literature V. Zhirmunskyi (1979) commented that influence is possible and productive only when the recipient literature has an inner demand for such cultural borrowing. Hence, every literary influence is related to partial transformation of the borrowed elements in accordance with national traditions and individual esthetic preferences of a specific writer.

## Theoretical Framework or Literature Review

With account of national (interethnic understanding) and global (East-West relationship) tendencies for dialogue growing stronger, aspects of communication and reception are becoming more and more interesting for humanitaristics. Beginning with the second half of the 20<sup>th</sup> century, literary research works on communication with other ethnic cultures started to come out more often (Wang, 1988; Pageaux, 2000; Heekyoung, 2018). A thorough study of how Ukraine's image, history and culture are perceived abroad was presented by Dmytro Nalyvaiko (In the Eyes of West: Reception of Ukraine in the Western Europe of the 11<sup>th</sup>-18<sup>th</sup> Century) (Nalyvaiko, 1998). The image of Orient in Western reception was investigated by Said Edward in his work "Orientalism" (1978). Oleksandr Biletskyi studies the place of Ukrainian literature among other literatures of the world (Biletskyi, 2009). Yulia Tiopnenko attends to reception of Ukrainian Literature in the English-speaking environment in the light of postcolonial studies (Tiopnenko, 2015), and so on. Mustafayeva (2017) and Abdulhasanly (2020) studied Azerbaijani-Turkish on literary connections of the past and present.

Problems of Ukrainian-Turkish communications and their representation in Ukrainian literature are still largely unexplored, though the images of Turkish ethnicity started to become quite widespread in Ukrainian consciousness and

literature as early as in the 16<sup>th</sup> century. The ethnic image of Turks in Ukrainian literature is a detail used to depict the Turkish people to Ukrainians. The term of “literary ethnic image” denotes a literary figure that involves not only individual features but also ethnic (national) identity of the characters, landscapes or past events described in a literary work, and presents some of their features as typical for a certain country, and inherent to the entire nation. By its structure, a literary ethnic image is a detail used to represent (describe) the nation in general. Building a correlation between individual features of the depicted people or events and a certain type of national identity allows literary critics to distinguish the image of one’s own ethnic-cultural “I” (native) from the image of the “Other” (foreign).

Absence of comprehensive knowledge of peculiarities and regularities found in Ukrainian-Turkish literary communications makes the selected topic of this research even more relevant.

Based on the problematics of the issues raised, we can say that, in general, Ukrainian-Turkish literary and cultural ties are divided into the following stages:

- a) The period of the XVI-XVII centuries
- b) The period from the 19<sup>th</sup> to the beginning of the 20<sup>th</sup> century
- c) The period covering the between 20 – 30<sup>’s</sup> of the 20<sup>th</sup> century
- d) The period of Soviet influence 40-80<sup>’s</sup> of the twentieth century
- e) The period from the 90<sup>’s</sup> of the 20<sup>th</sup> century to the present day.

The subject of this research is Ukrainian-Turkish literary communications represented throughout various genres of literature. The objective of this research is the study of Ukrainian-Turkish literary communications in the 16<sup>th</sup>-20<sup>th</sup> centuries.

### Methodology

The following methods have been used to solve certain tasks in the research: descriptive, comparative-historical, structural method (with elements of component analyses), the method of associations. The research methodology is based on the general theory of cognition. The methodological basis is the dialectical method of scientific knowledge, the fundamental provisions of the theory of intercultural communications, the work of Ukrainian and foreign scientists

regarding the process of cross-cultural communication. The theoretical basis of the research was scientific developments related to issues of interaction between Turkish and Ukrainian society.

The application of imagological methodology takes this comparative research into the field of studying cross-cultural relationship between the Turkish and Ukrainian nations. Similarly, we need a discourse-based approach as well; exploration of not only the communications available in Ukrainian literature, but also of those found within historical context, which will allow us to gain a deeper understanding of the subject being examined and discover peculiarities in development of literary international communicative relationships.

Organizational methods were used to obtain facts, process them and explain the peculiarities of intercultural communication; interpretative methods. For our research, an important aspect is the logic of ethnopsychology research - a set of stable ideas about interdependent stages, forms, levels, methods, procedures and strategies of studying the national-psychological features of Ukrainian-Turkish interaction.

### Results and Discussion

#### The role of historical background in Ukrainian-Turkish literary communications

Turkish images appeared in the national consciousness of Ukrainians back in the 16<sup>th</sup>-17<sup>th</sup> centuries and were recorded in folklore. In Ukrainian literature (oral folklore), the interest for Turkish culture was growing considerably and became quite steady from the middle of the 16<sup>th</sup> century, i.e. in the period of active confrontation between Cossacks and Turks. In the late 15<sup>th</sup> century, Ottoman Turks conquered the Balkans and were inclined to raid Ukrainian territories more and more often, but the history remembers not only international conflicts. There are sources to give evidence of attempts by Ukrainian hetmans to seek understanding with Turkey and establish peaceful diplomatic relations. For instance, I. Chernikov summed up the essence of diplomatic contacts between the two countries in the Cossack era by stating that Dmytro Bayda-Vyshnevetskyi, one of the founders of Zaporizhian Sich, was looking for agreement with Turkey in the middle of the 16<sup>th</sup> century; famous Ukrainian hetman Bohdan Khmelnytskyi (whose policy in the East was Turcophilic beyond any doubts) considered entering into a mutually beneficial military and

political alliance with Turkey, at a certain time; with the Turkish sultan's support, Yuriy Khmelnytskyi was proclaimed the hetman and the prince of Sarmatia in the late 1670s, in exchange for bringing the Ukrainian nation under Turkey's control; in his confrontation with Poland, the hetman of Right-Bank Ukraine Petro Doroshenko saw the Ottoman Empire as a strategic ally and signed the protectorate agreement of 1669, while the exiled hetman of Ukraine, Pylyp Orlyk, often appealed to Istanbul for protection of the Zaporizhian Cossacks who emigrated from Ukraine after the Battle of Poltava in 1709, and for providing them with money and food supplies (Chernikov, 2003). However, any long-term international contacts, especially those that involved a strong negative background, do not only remain in the memory of their contemporaries but become projected to the following generations with a concentrated system of images through oral folklore and literature. Based on cross-cultural social relationships and artistic generalization of existence, prose or poetic works about real cultural and historic characters appeared by way of covering important events or idealizing best members of the contemporary society. The period of struggle against the Islamic East in the 15<sup>th</sup>-17<sup>th</sup> centuries left a very deep mark in the memory of the Ukrainian nation and influenced the development of Ukrainian history and culture while reviving the nation's interest in the East.

### **Ukrainian-Turkish communications in folk texts of Ukrainian ballads**

Ballads (known as *dumas* in Ukrainian) were a phenomenon of Ukrainian culture and existed in Cossack and urban environments due to activities of talented performers, kobza players. Ukrainian folk ballads are epic and monumental, verbal and musical works of heroic and social nature that represent artistic patterns of the Cossack era and the culmination point in forming the national identity of the ethos and ideas of nationhood (Dmytrenko, 2009). The ballads we know today are mostly recorded from kobza players of the 19<sup>th</sup>-20<sup>th</sup> centuries. "Texts of ballads are a kind of an artistic code of reality that represent a historic event, figure or environment, the spirit of the nation, establish its optimistic vision of the world, ideals of freedom, truth, good, love, beauty and order. With the dramatic situations, often tragic finals in resolving the conflict of the "native - foreign" opposition (sometimes even "native versus native as foreign"), "truth - injustice," "freedom - captivity," through the search for glory, through real and ritual death, the nation idealized its heroes, transformed them into

knights of spirit and moral authorities worth of being remembered and regarded as a proper example" (Ukrainian Folk Ballads, 2009).

Slave ballads describe Ukrainian captives made to work on Turkish galleys or held as prisoners of war by Turks and Tatars. The texts of ballads reveal the perception of Turks by Ukrainian captives which is often implemented indirectly through the description of the captives' suffering and their longing for homeland. Through the folk genre of ballad, the narrative about invaders is realized, which indicates Ukrainian-Turkish communication. For example, in the ballad "The lament of slaves" some captives wishing to break free "...*From the hard Turkish slavery*" appeal to the God asking to bring a storm to the Black Sea that will tear away all anchors, demonstrating their attitude towards the situation they found themselves in.

The ballad "Ivan Bohuslavets" depicts a captive Cossack whom his Turkish wife characterizes with the words "*He turned to Turkish faith to enjoy the wealth*" (Ukrainian Folk Ballads, 2009). The ballad gives a communicative message that Ukrainians associated the Turkish land primarily with material wealth and well-being that stood in contrast to national spiritual values. The Turkish cities mentioned in Ukrainian ballads most often are Tsargrad (Istanbul), Trabzon and Azov. The Turkish cultural environment is depicted in ballads as the opposition of the native Ukrainian cultural space to the foreign Turkish surroundings. In the foreground, the first thing that they demonstrate is the opposition of religious categories. For example, a frequent example is when someone tells enslaved Cossacks, who spent many years in captivity, about the Easter Day. For example, it happens in "The Ballad of Marusia Boguslavka."

As formation of ballads has been completed in the Cossack epos, and in the heroic struggle of the Ukrainian nation against the Tatar and Turkish threat in the years of nation-building, the texts of ballads are connected to the spatial factor of their emergence and development in geopolitical conditions of the Ukrainian nation. That is why Ukrainian folk epos contains clearly manifested communicative oppositions, with Ukrainians set against Turks.

### **Peculiarities of Ukrainian-Turkish literary communications in Ukrainian historical songs, ballads and legends**

The theme of Turkish captivity is popular in Ukrainian historical songs of the Cossack era.

These songs tell the story of the prolonged confrontation between Ukrainians, Turks and Tatars. In Ukrainian historical songs, the image of Turks is that of terrible invaders who brought great suffering on the Ukrainian people. Songs represent realistic pictures of invaders: a sudden Tatar raid during the harvest time; a village looted and burned (“Fires aflame over the river, Tatars sort out captives”); frightened people fleeing; girls taken captive and their fate (“Three daughters of a priest in Turkish slavery”), a Cossack taken prisoner by Turks and dying after tortures (“Song of Bayda”). Ukrainian historical songs describe the Turkish army, the predatory policies of Turks and Tatars in Ukrainian lands, their use of force against local population, capturing young women etc.

According to I. Franko and F. Kolessa, there is a group of ballads that was added to traditional Ukrainian folklore by traveling bards of the 15<sup>th</sup>-16<sup>th</sup> centuries coming from Serbia, Bulgaria and Croatia. (Kolessa, 1983; Franko, 1984). Ballad is a genre of lyric and epic poetry, of fantastic, heroic, historical or social nature, with a dramatic plot. Different variants of Ukrainian ballads are dominated by the following themes: a brother buys a captive who turns out to be his sister; a brother sells his sister (or a father sells his daughter) to a Turk, and she kills herself; a boy buys his girlfriend out of the Turkish captivity (or vice versa); a wife cheats on her husband with a Turk (“Ivan and Maryana”).

In legends about the Cossacks’ struggle against Turks that have been retained to present, we can also observe hints at the Ukrainian-Turkish communications of the previous centuries. In legends, Turks are depicted in a generalized way: they are mostly presented as a non-specific image of invaders who have to flee after losing a battle against Cossacks in Ukrainian lands (“The battle of Cossacks against Turks”); an image of a Turkish merchant in Azov (“How Cossacks took Azov”) who wants to buy goods from Cossacks, such as furs of marten, fox and black sable; the effects of Turkish invasions on names of population centers in Ukraine: the village named Godia Turka where Turks and Cossacks allegedly made a treaty that forbade Turkish raids against Ukraine. Characters of Turks in legends emphasize and communicate the opposition “Native – Foreign / Friend - Foe.”

### **Development of Ukrainian-Turkish communications in the literature of the 19<sup>th</sup>-20<sup>th</sup> centuries**

Since the 19<sup>th</sup> century, Ukrainian-Turkish inter-literary contacts (ties) become more widespread as a form of interaction between literatures (communication). Ukrainian-Turkish communication in literature denotes either a unilateral action of the sender towards the recipient, or various forms of perceiving phenomena from other nations in literature, or bilateral literary interaction.

An important element for cross-cultural communication that finds its manifestation in literature is travel. It is travel that allows a person to receive direct personal impressions from a country and gain a deeper understanding of life in general, and of literary heritage and processes in particular. Literary works of the 19<sup>th</sup>- early 20<sup>th</sup> centuries provide sufficient grounds to see travel as an important form of international contacts between Ukrainian and Turkish literatures. This is the period that gave Ukrainian literature numerous mentions, researches, explorations, and fiction works that concern both specific figures in Turkish literary process and their creative heritage.

The need to study Eastern culture and literature was recognized by founders of the Ukrainian Academy of Sciences back in the early 20<sup>th</sup> century. When laying foundations for Eastern studies, scientists were convinced of the relevant need to explore history of the East because the ancient lands of Ukraine were the point of residence for various Eastern nations, as noted by L. Matveieva and I. Chernikov (Matveieva & Chernikov, 2007). From “The explanatory note by D.I. Bagaliy, A. Yu. Krymsky, G.G. Pavlutskyi, Ye. K. Tymchenko to the Committee for development of the draft law on organization of the Historical and Philological Department of the Ukrainian Academy of Sciences,” it can be seen that scientists deemed the study of history, languages and literatures of the East to be very important and provided a thorough substantiation for their concept: “Apart from the inevitable and universally recognized scientific need to study Eastern history as a part of the world history, Ukraine has its own reasons to see that East-related subjects are explored properly and intensively at its higher scientific institution. In the ancient times, the territory of the present-day Ukraine was the place for residence or continued stay of various Eastern nations, and Ukrainian science is facing a series of issues and tasks that need to be developed and

resolved in a planned way. Iranian studies, Turkish studies, and Arabic studies are the three subjects that comprehensive and objective Ukrainian history is impossible without"; scientists believed that without adding them, Ukrainian studies will have serious gaps (Matveieva & Chernikov, 2007).

In particular, a tremendous contribution into getting Ukraine acquainted with Turkish literature was made by Ukrainian orientalist Ahatanhel Krymsky (1871-1942) who spoke Turkish as well as other languages. A. Krymsky undertook a long travel (1896-1898) to the Middle East in order to study the culture of Eastern nations; while traveling he completed a monograph "Islam and Its Future" (1899, first published in 1904). During his stay in the East, the scholar collected scientific and folklore materials, and established direct cultural communications. It is known that an important role in the working process of A. Krymsky at that time belonged to letters. Solomiya Pavlychko draws our attention to the fact that A. Krymsky wrote very often to his family, friends and colleagues who lived in Ukraine and Russia. In his letters, he described in great detail everything he saw, therefore these letters are classified as exotic travel narratives (Pavlychko, 2001). Hence, direct communication with the Eastern culture was shaped and implemented through epistolary communication.

The scientific heritage of A. Krymsky gives evidence of direct literary relationships established through works by Turkish writers, which became possible due to his knowledge of Arabic and Turkish. In the future, this travel served as an impulse for further efforts in the field of Eastern studies. The largest of his Turcologic works are "The History of Turkey" (1924), "The History of Turkey and Its Literature" (1927), "Turks, Their Languages and Literatures" (1930). In addition to research works, the travel to the East enriched the creative heritage of A. Krymsky with a collection of poems characterized by Eastern motives and images. The new works demonstrate a more complicated form of literary contacts that manifests itself in reception of Eastern ideas, motives, images and their representation against the national literary background. In 1901, the first part of A. Krymsky's collection "Palm Branches. Exotic Poems" was published. The author extends the boundaries of Ukrainian landscape lyrics, reproduces the peculiarities of Eastern scenery in a delicate and accurate way. Eastern landscapes are represented thanks to the use of rich metaphors and comparisons as the

author tries to impress the reader through visualization, sound and taste perception, which was a novelty for Ukrainian poetry of his day.

Adoption, rethinking and creative transformation of Eastern motives, themes and images in Ukrainian national and cultural environment by A. Krymsky demonstrates the reception which is a category of "literary influence" and, by definition of V. Budny, it belongs to a higher form of literary communications – internal – which affects the structure of recipient text by performing the form-shaping and substance-forming role (Budnyi, 2008).

At the beginning of the 20<sup>th</sup> century, Ukraine's interest in Turkey continued to grow. Research trips and expeditions were important forms for Ukrainian orientologists to explore the East practically. As noted by Nadiya Senchylo, Ukrainian scholars and writers began to discover the Turkey previously unknown to them, which is suggested by a number of articles in "Vsesvit" magazine ("Museums of Istanbul" by V. Zummer published in Issue 12, 1929, "Several Hours in Istanbul" by M. Trublayini – 29, 1929 etc.) and "Chervonyi Shliakh" magazine ("From Dawn Till Dusk" by V. Stambulov, "The Sun Behind Minarets" by Kost Kotko) (Senchylo, 2017).

Following their impressions of traveling to Turkey, writers create fiction works in Ukrainian about this country, its nation and culture, and such writings represent the contemporary perception and understanding of Turkey as a neighboring country still little known to Ukrainians. A famous poet Pavlo Tychyna (1891-1967) visited Turkey and learned the Turkish language which influences his creative work. For example, some of his poems are dedicated to the Turkish theme - "Where there is a wonderful land of Turkey...", "Bosporus. A dream," as well as translations: "With Birds" - from Tevfik Fikret, "The Night Guard" - from Galit Fagri etc, and also his letters and diary notes.

It is known that from 2 November 1928 to 7 January 1929, P. Tychyna made a trip to Turkey as a member of the delegation consisting of Ukrainian scholars and writers, such as V. Zummer, O. Gladstern, O. Sukhov, L. Pervomayskyi to get acquainted with literary and cultural life of the country and establish relationships with their prominent scientific and cultural figures (Senchylo, 2017). Pavlo Tychyna was interested in materials on Turkish literature which he needed in order to complete

preparations for publishing an anthology of poems. Also “Tychyna wanted to see Nazim Hikmet whose poems he translated and published in “Chervonyi Shliakh” magazine, but at that time Nazim was already in prison...” (Tychyna, 1990). It is evident the poet was looking for direct communication with his colleague, but it was impossible. It was then that Tychyna wrote the poetic lines full of deep sorrow: “I got stuck on your mosques, In the crowd, in the crowd – Nazim Hikmet is in prison” (Tychyna, 1990). Tychyna turns to new and yet unknown Eastern images, which were outside the conventional framework for Eastern themes, plots, historical or legendary facts from the past of Ukrainian-Eastern communications. Personal acquaintances and contacts of P. Tychyna with Turkish writers facilitated his plans of compiling an anthology of Turkish poetry, although it was never completed because World War Two soon broke out.

Ukrainian-Turkish communications in the 20<sup>th</sup> century were not unilateral. A Turkish poet and playwright Nazim Hikmet visited Ukraine twice, in 1928 and 1951. The writer was interested in Ukrainian culture and literature, learned Ukrainian, and maintained friendly relationships with Ukrainian writers: Andriy Malyshko, Platon Voronko, Oleksandr Dovzhenko, Oleksandr Korniyshuk and others. Theorist of literature V. Kukhalashvili wrote that Nazim Hikmet read Vitaliy Korotich’s poems in Ukrainian which he enjoyed greatly. To his mind, among other Slavic languages it sounded just like Italian sounds among other European languages ... (Kukhalashvili, 1976). The Turkish man of letters published articles written in Ukrainian in a specialized literary newspaper. In his poem “Kyiv Siiri,” Nazim Hikmet uses a poetical form to express his love for Ukraine, city of Kyiv and works by Taras Shevchenko. Taras Shevchenko’s writings made a great impression on Nazim Hikmet, and he described them in the note he made in the guest book at Shevchenko Museum. Hikmet pointed out that he was always interested in and impressed by Shevchenko, not only as a brilliant poet and extremely talented painter, but also as a fighter whose life and creative work were always in parallel (Kukhalashvili, 1976).

Ukrainian authors Mykola Bazhan, Liubomyr Dmytrenko, Yury Kyrychenko, Andriy Malyshko, Maksym Rylsky, Volodymyr Sosiura, Pavlo Tychyna, Hrygory Halymonenko (Kukhalashvili, 1976; Halymonenko, 1981) and others translated works about Nazim Hikmet and wrote articles about

him. Hence, travels facilitate expansion of communicative boundaries.

### **Knowledge of language as an important factor in Ukrainian-Turkish and Turkish-Ukrainian external literary relationships**

Knowledge of a foreign language facilitates wider cross-cultural dialogue and close literary communications, not only by enhancing understanding and absorbing texts of the sender’s literature, but also by spreading them through translation, that is, by expanding the communicative boundaries of literature. Translation of a literary work into a foreign language becomes a form of communication capable of both information exchange and literary influence.

Activities of Vasyl Dubrovskiy in the 1930s were hallmark for establishment of Ukrainian-Turkish communications in the translation-related aspect. In 1931, Dubrovskiy translated “Yatyk Emine” a story by Refik Halit, from Turkish into Ukrainian; in 1932 he translated short stories by Omer Seyfettin and “Nur Baba” a novel by Yakup Kadri. Under the editorship of Prof. V. Dubrovskiy, a book by Heinz Griesbach-Tugan, “Modern Turkish Fine Literature” was translated from German and published. In the editor’s note, V. Dubrovskiy emphasized that “importance of knowing the culture and spiritual development of our closest neighbor, the Turkish nation, is beyond doubt. Even within specialized literary circles, the Ukrainian society hardly has any good idea of Turkish literature, especially modern writings,” and this statement proves the importance of translation for improving Turkish-Ukrainian literary contacts. (Griesbach-Tugan, 1948). In 1927, a translation of the novel “A Shirt of Fire” written by Halide Edib Adivar was published. This work was translated from German by V. Sofronov.

N. Senchylo-Tatlilioglu (2020) notes that an important role in development of Ukrainian-Turkish literary communications in the 20<sup>th</sup> century was played by magazines “Skhidnyi Svit” (The Eastern World) and “Vsesvit” (The Universe). “Vsesvit” publishes translations of shorter works – stories by Reshat Nuri Guntekin, Aziz Nesin, Halit Refik Karai, and longer writings: novels by the Nobel laureate Orhan Pamuk translated by Oles Kulchytskyi – “Snow” (2006, 2011), “My Name Is Red” (2007, 2012), “The White Castle” (2008, 2011) and more. Individually, translations of novels by Orhan Pamuk are published: “The Museum of

Innocence” (translated by O. Kulchytskyi and H. Rog (2009), “The Black Book” (translated by O. Kulchytskyi (2013), “Silent House” (translated by T. Filonenko (2015), and others.

As to promotion of Turkish-Ukrainian literary contacts by spreading works of Ukrainian writers in Turkish, we have information to prove that the first Ukrainian author to be translated into Turkish was Mykola Gogol (1809-1852). However, it is known that Gogol’s works are written in Russian. Birsen Karadja noted that archive findings allow to date translations of Gogol’s works into Turkish (in Latin letters) back to 1946, such translation being made by Servet Lunel. The first big novel translated from Ukrainian into Turkish was “Roksolana” by Pavlo Zagrebelnyi (translated by Omer Dermengi (2005)), which by itself is a reflection on life in the 16<sup>th</sup>-century Turkey told from the Ukrainian point of view. In 2009, Fedora Arnaut translated into Turkish 40 poems from “Kobzar” by Taras Shevcheko, including such large ones as “Kateryna” and “Kavkaz” (Caucasus). Also, O. Dermengi translated into Turkish a novel “Kliasa” (Class) by Pavlo Volvach (2011) (Senchylo, 2017). These translations are the evidence of literary communications based on the knowledge of Ukrainian and Turkish languages.

## Conclusions

Therefore, in the course of our research we have reached the conclusion that Ukrainian-Turkish communications have been present in the Ukrainian literature since the 16<sup>th</sup> century. They are distinguished by considerable length but tend to change over time. Folklore demonstrates a whole layer of lyric and epic works: historical songs, ballads, legends where Ukrainian-Turkish communicative interactions can be tracked. Ukrainian folklore tends to describe Turks from the point of hostility and open confrontation. It proves the assumption that international conflicts caused by historic events tend to become a nationwide trauma, which also finds its reflection in literary works. In Ukrainian folk texts of lyric and epic nature that represent Ukrainian-Turkish communications, perception of reality is based on the principle of polarization. With such basis, binary categories are matched against each other: good and evil, native and foreign etc. In Ukrainian folk literature, the idea of Ukrainian-Turkish communications is mostly reduced to ideological and cultural problems. However, there is no denying the fact that individual and group-based Ukrainian identities in Ukrainian folklore of the 16<sup>th</sup>-17<sup>th</sup> centuries

(historic ballads and songs) are formed in the course of interaction with Turkish identities.

Beginning with the 19<sup>th</sup> century, changes in the background of social and political processes cause the communicative vectors in literary works to change as well. Travels, correspondence, knowledge of language, and later literary research works, literary criticism, dictionaries, anthologies, and magazines that present foreign writings to national readers soon became important elements for implementation of literary Ukrainian-Turkish communications. Literary and cultural communications are one of the essential factors in the development of the modern world, influence on public life, on expanding the entire spectrum of human thinking, enriching a person's worldview, his artistic views. The influence of writers T. Fikret, N. Hikmet and others on the Ukrainian literary environment, the connection of literary critics and writers. A. Krymsky, V. Dubrovsky, P. Tychyna, and others with the Turkish literary environment ensured the mutual convergence of the literatures of the Ukrainian and Turkish peoples.

Nowadays, the focal points for research and development of the so-called “dialogue of Ukrainian and Turkish literatures” are university departments as well as cultural and academic centers. Universities and academic institutions organize symposia, conferences, round tables where Ukrainian and Turkish scholars who work on Ukrainian and Turkish studies find the opportunity to exchange ideas and publications, prepare joint projects and much more, which has a positive effect on development of communications between the two literatures.

Not only do reconstructed forms of literary interaction prove the existence of traditions in external Ukrainian-Turkish and Turkish-Ukrainian connections, but they also give sufficient evidence to discuss prospects in studying both literatures in terms of creative perception and internal contacts, with the examples of thematic, plot-based and image-related analysis of writings by certain authors.

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## Measuring corporate M&A performance from a two-dimensional perspective of economic and social benefits

### 以经济效益与社会效益二维视角衡量企业并购绩效

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#### Abstract

With the development of digital economy, Chinese companies have set off waves of M&A boom. The current mainstream methods of measuring corporate M&A are based on corporate finance level such as event study method and financial analysis method. Based on the literature research method, this paper points out the problems of the relatively single perspective and narrow scope of the measurement of M&A based on corporate finance. To this end, this paper uses the hierarchical analysis method (AHP) to comprehensively measure the economic and social benefits of M&A enterprises from the perspective of corporate finance and social contribution, constructs a corporate M&A performance evaluation model, and establishes a corresponding evaluation index system to promote a more comprehensive, scientific and reasonable measurement of M&A enterprise performance and promote sustainable development of enterprises.

**Keywords:** economic benefits, social benefits, mergers and acquisitions, performance, hierarchical analysis.

#### Introduction

As a kind of autonomous corporate behavior in the market economy, M&A is the choice of many companies to optimize resource allocation and achieve strategic goals, especially in the market environment with fierce competition and high uncertainty factors. With the development of China's economy and the improvement of its international status, the M&A boom has been

#### 摘要

随着数字经济的发展，中国企业掀起了一波又一波的并购热潮。目前主流衡量企业并购的方法基于企业财务层面的事件研究法和财务分析法等。本文基于文献研究法，指出了基于企业财务的衡量企业并购方法存在衡量视角相对单一、衡量范围相对狭窄的问题。为此，本文运用层次分析法（AHP），从企业财务角度和社会贡献角度，综合衡量并购企业的经济效益和社会效益，构建了企业并购绩效评价模型，确立了相应的评价指标体系，以促进更加全面、科学、合理的衡量并购企业绩效，推动企业可持续发展。

**关键词：**经济效益；社会效益；并购绩效；层次分析法

long lasting, with more and more cross-border and domestic M&A events. Information from China's Ministry of Commerce shows that the global M&A scale exceeded US\$5 trillion for the first time in 2021, with 9,464 M&As occurring in China and US\$622 billion in M&A value, including such influential M&A events as Byte Jump's US\$4 billion acquisition of Mu Hit

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Technology and High Tide Investment's €4.4 billion acquisition of Philips Home Appliances. The main internal motivation for enterprises to be keen on M&A is to gain competitive advantage and create more value. Studies have found that M&A enables enterprises to give full play to the advantages of management synergy, operational synergy and financial synergy, which can reduce operating costs through the effect of economies of scale, achieve resource complementarity and improve the competitive strength of enterprises. However, the actual operation of enterprises after M&A is not optimistic, as some enterprises achieve their strategic goals and many more do not. According to McKinsey & Company, the percentage of successful M&A is only 30-40%. There are many successful cases, typical of which is the acquisition of Volvo by Geely Automobile, which acquired 100% of Volvo for US\$1.8 billion on March 28, 2010. With the technical advantages of Volvo, Geely Automobile has significantly improved its technology and industrial chain, and embarked on a high-speed development path, growing from a little-known regional enterprise to the most influential domestic automobile enterprise. Volvo has also opened up sales in the Chinese market with Geely, giving the brand a new life and vitality. More cases of failure, high visibility and influence is the acquisition of Time Warner by America Online.

There are many factors affecting the success or failure of M&A, such as government policies, market environment, technological progress, management level, cultural integration, etc. So, is there any method to scientifically and rationally measure the quality of operation of enterprises after M&A, and to serve as a warning and guide for enterprise management operation?

Based on the research results of experts and scholars, this paper attempts to explore a new method or structure to provide a new path for measuring corporate M&A performance and promote the healthy and orderly development of enterprises with reference to the existing methods for measuring corporate M&A performance.

### Literature Review

As a management tool, performance evaluation has several functions such as planning assistance, forecasting judgment, monitoring support, incentive constraint and resource optimization (Qingjun, 2012, 25-27). In the case of M&A firms, the mainstream performance measurement methods are event study method, financial

analysis method, economic value added method and balanced scorecard (Yuxi, 2020, 26-28).

### Event study method

The event study method is based on stock price analysis, selecting a specific event according to the purpose of the study, studying the changes in the sample stock returns before and after the event, and then explaining the impact of the specific event on the price changes and returns of the sample stocks. Jiujiu Men (2016) empirically analyzed the consecutive M&A performance of Huadian International during the period of 2010-2014, and concluded that M&As were able to gain excess returns in the short term and the long-term performance of M&As kept improving. Yaoxin et al., (2021) showed that cross-border M&As can gain market recognition in the short term. Cross-border M&As are more recognized by the market when the buyer is a state-owned enterprise, and the market recognizes this type of M&As when the listed companies have less financing constraints.

### Financial analysis method

The financial analysis method measures M&A performance by comparing the changes in corporate financial indicators before and after M&A. However, because of the different situations of the firms, the differences in the research samples, and the various research methods, the final conclusions of the studies are also quite different, and the conclusions reached do not have a general reference value. For example, Tang Gongshuang, & Liu Mingzhi (2007) concluded that performance improved in the year of M&A and one year after M&A, but declined thereafter to a lesser extent. In contrast, Tong, Shenghui & Jun (2015) found that M&A has a negative impact on the performance of listed companies in central enterprises.

### Economic value added evaluation method

The economic value added evaluation method is based on the value added of the enterprise, and after making necessary adjustments to the accounting information, the net operating profit after tax minus the cost of capital invested is used to measure the M&A performance of the enterprise, reflecting the consumption of capital by the company while making profits, more accurately showing the efficiency of capital utilization and the rate of return, and reflecting the true value created by the company for shareholders. (Yongxiang, 2012, 45-50). As with the de facto leave research method, the results of

scholars' studies using the economic value added method vary widely. Zuo Xiaohui, & Lv Jieyao (2014) used the economic value added method to analyze the performance of corporate mergers and acquisitions, and the results showed that from the perspective of the acquirer, the EVA indicator achieved an increase in the year of the merger and the first year after the merger, and there was a small decrease in the second year after the merger; while the average value of economic value added per unit of net assets decreased year by year. Fanping Wang (2019, 36-40) concluded that economic value added did not change significantly before and after the M&A

### Balanced Scorecard

The Balanced Scorecard analyzes a company's strategic planning from financial and non-financial perspectives, specifically from four dimensions: financial, learning and growth, internal operations, and customer and market. The financial dimension uses financial data to clearly and intuitively reflect the financial performance of the firm; the learning and growth dimension takes into account the improvement of employees' skills and the firm's room for growth; the internal operations dimension focuses on the firm's management processes and management capabilities; and the customer and market dimension includes the satisfaction of target customer groups and the firm's market share. Abdelmoneim & Fekry (2021) used the balanced scorecard method to assess the impact of pre- and post-merger on the performance of non-financial firms in Egypt, and the results showed that the value of pre-acquisition operations is higher from two financial perspectives: liquidity and market value.

Existing methods for evaluating the performance of M&A firms better reflect the interests of M&A subjects, have general guidance on M&A performance, and have played an important role in the healthy development of M&A firms and in promoting the process of M&A. At the same time, these methods also have some drawbacks and disadvantages. One is the measurement perspective. The core of existing measurement methods are to study corporate M&A performance with financial data, which simply equates M&A performance with operational performance on financial indicators. Second, the scope of measurement. The existing measurement methods are based on the enterprises themselves and measure the M&A performance from a microscopic perspective, but lack a macroscopic perspective on the M&A

performance of enterprises. Third, the research methodology. The existing measurement methods basically use quantitative research to measure M&A effectiveness by analyzing financial statements, but rarely use qualitative methods to measure non-financial factors, such as corporate image, social responsibility, and consumer satisfaction, which are very important to corporate development strategies.

### Methodology

The purpose of this paper is to use literature research to identify the problems in existing M&A methods in an attempt to construct a new method to overcome these problems and to measure M&A performance in a comprehensive and scientific way. In this paper, we choose the hierarchical analysis method, which takes into account both qualitative and quantitative research methods, to derive the measurement framework, measurement model and measurement index system, and then complete the construction of a new measurement method structure.

### Measurement Framework

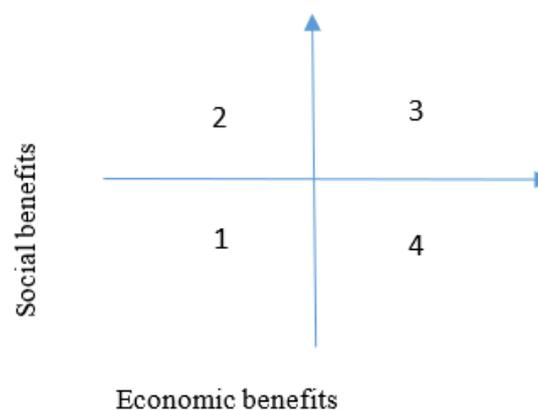
An enterprise is a legal person or other social and economic organization that uses various factors of production to provide goods or services to the market for the purpose of profit, and operates independently, is self-sustaining, and is independently accounted for. Business enterprises maximize market value as the ultimate goal (Zhiyang & Lufeng, 2019, 82-91), and create value for customers by integrating production factors. The market value of the enterprise is realized after exchanging its products or services, with the value of customers or consumers. The enterprise has economic benefits and earns profits in order to continue to survive and realize the interests of the enterprise, shareholders and stakeholders. The products or services provided by enterprises, on the one hand, need to meet the needs of consumers, prosper the social economy and promote social development, and on the other hand, within the scope allowed by laws and regulations and social morality, in this sense, "enterprises are organs of society, not only to meet a specific market demand, but also need to assume responsibility for society" (Drucker, 2006). Therefore, the benefits pursued by enterprises are divided into two parts, one is economic benefits and the other is social benefits. Economic benefits are the gainful results achieved by enterprises in social and economic activities; social benefits are the beneficial effects on social life in addition to

economic benefits. Business operators can not only meet the requirements of stakeholders, but also ignore social responsibility, which will be extremely detrimental to the sustainable development of enterprises.

Economic and social benefits of enterprises are never opposites. Economic responsibility is the lifeline in the survival and development of enterprises. Enterprises rely on economic responsibility to maintain the production and operation of enterprises, to maximize the ultimate profit in the development and operation of enterprises, and to create enterprise economic value and benefits for related business associates (Lei, 2018, 96-97). Social benefit is an important condition to promote economic benefit. 1953, Bowen in his book "Social Responsibility of Businessmen" made the first clear definition of the term corporate social responsibility: the obligation of businessmen to align themselves with relevant policies, make corresponding decisions and take desirable concrete actions in accordance with the goals and values of society. In Bowen's definition, CSR is a businessman's obligation to take the initiative to do things that are in line with the goals and values of society, thereby contributing to the development of a moral quality that prevents "companies from doing things that infringe on social interests, damage the natural environment, or violate human rights in their daily production and operations to the detriment of social justice in the pursuit of maximum profit." (lanfen & Li, 2006,

49-53). On the other hand, social responsibility is also "a management method to maintain a balance between enterprises and their stakeholders and society (Zuo, 2022) ", thus promoting sustainable development of enterprises. Therefore, enterprises need to grasp the dynamic balance between economic and social benefits, adhere to the concept of sustainable development, and strive to achieve the coordinated development and positive interaction between enterprises and society.

The economic and social responsibilities of enterprises are two inseparable components, and it is more scientific and reasonable to consider the performance of M&A from the economic and social benefits. On the one hand, it still measures M&A performance from the financial perspective in the traditional method, focusing on the actual operating conditions of enterprises, which is in line with the strategic purpose of M&A; on the other hand, it discards the problems of single perspective and single dimension in the traditional method, takes into account the stakeholders, guides the comprehensive development of enterprises, promotes enterprises on the road of sustainable development with a broader strategic vision, and better reflects the M&A and development quality. In this regard, we have constructed a two-dimensional measurement framework for M&A performance to measure the effectiveness of M&A from a more scientific and macro perspective.



**Figure 1.** Corporate M&A performance measurement framework.  
(The figure is the author's own design according to the content of the article)

The measurement framework classifies corporate M&A performance into four categories. The first type is low economic performance and also low social performance; the second type is high economic performance and low social performance; the third type is high economic

performance and high social performance; and the fourth type is low economic performance and high social performance. The first kind is the mergers and acquisitions with low performance; the second kind is more government-led mergers; the third kind is the mergers and acquisitions

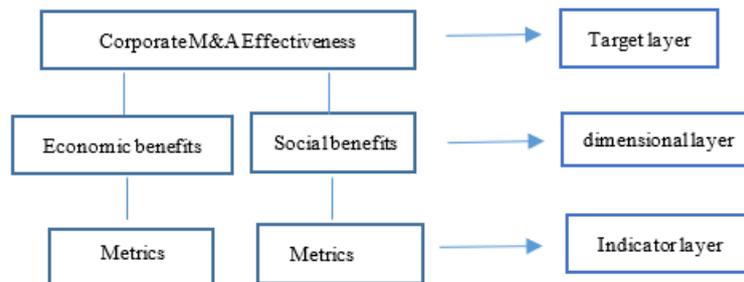
performance that effectively balances social and economic benefits; and the fourth kind is more market-led mergers and acquisitions performance. Obviously, the third kind is the goal to strive for in the process of corporate mergers.

### Measurement methods and models

In the framework of economic and social benefits, the economic benefit dimension is supported by specific data and can be measured based on actual business performance and indicator data; however, the social benefit dimension cannot be measured by specific quantitative data, which requires us to choose a method that can measure both quantitative and qualitative indicators. After screening, the analysis method used in this paper is the hierarchical analysis method. Analytic Hierarchy

Process (AHP) is a multi-objective decision analysis method that combines quantitative and qualitative analysis (Zhibo, 2013, 51-53), whose basic idea is to decompose complex problems into a recursive hierarchy according to the research content and objectives, quantify the indicators in the evaluation process, and obtain the weights of each indicator by solving the judgment matrix.

According to the requirements of hierarchical analysis, a progressive hierarchy is built, divided into target layer, dimension layer and indicator layer. The target layer is the effectiveness of M&A, the dimension layer is the two dimensions of economic benefits and social benefits, and the indicator layer is the specific component indicators under the two dimensions, thus forming the M&A performance evaluation model.



**Figure 2.** Corporate M&A performance  
(The figure is the author's own design according to the content of the article)

The evaluation index system is built according to the enterprise M&A performance evaluation model. The primary indicators are the economic and social benefits, the secondary indicators are the perspectives of economic and economic benefits and social benefits measurement; the tertiary indicators are the specific composition of the secondary indicators. Then determine the index weights. If the weight of economic benefits and social benefits is based on the percentage system, the score of economic benefits plus the score of social benefits should be equal to 100; the weight of the corresponding secondary indicators of economic benefits and social benefits each add up to 100; the weight of the tertiary indicators under each secondary indicator also add up to 100. In this way, we can deduce the specific score of the tertiary indicators and the weight of the tertiary indicators to the secondary indicators based on the specific score of the tertiary indicators. The score of the second-level indicators is then derived from the score of the first-level indicators, and finally the total

score of the M&A performance of the enterprise is obtained. After determining the median values of economic and social benefits, the effectiveness of M&A can be judged by comparing the specific scores with the median values. Because the determination of the median value and the construction of judgment matrix and determination of evaluation index weights in the hierarchical analysis method require analysis and discussion by a team of experts to produce specific data, we do not discuss them here, but rather provide a new perspective, ideas and methods.

### Measurement index system

The most important thing to establish the index system is to solve the problems of scientificity, objectivity, representativeness, operability, and the combination of average and total indexes. After defining the primary indicators, we need to establish the secondary indicators and the

corresponding tertiary indicators, so as to establish a complete indicator system.

### **Components of the economic efficiency dimension**

The main purpose of corporate M&A is to pursue economic efficiency, and the selection of economic efficiency performance indicators is mainly based on the financial accounting perspective to reflect the profitability and profitability level of enterprises. Regarding the economic efficiency dimension, different scholars have different views. Zhang Tienan et al., evaluated three dimensions of efficiency, scale, and effectiveness, involving 14 evaluation elements such as total asset contribution ratio, cost margin, total profit, and so on (Tienan et al., 2012, 121-130). Liu Quanzhou divided the economic efficiency of enterprises into three aspects of enterprise profitability, solvency and operating capacity (Quanzhou & Ying, 1999, 1-8), and Yu Ze believed that the economic efficiency of enterprises is reflected in five dimensions of enterprise profitability, cash flow capacity, operating capacity, development capacity, and debt servicing capacity (Ze, 2014). After comprehensive evaluation, we believe that the five dimensions of profitability, cash flow capacity, operational capacity, development capacity, and debt servicing capacity are more consistent with the reality of M&A enterprises. Profitability includes four indicators: sales margin, total assets return rate, capital return rate, and capital maintenance appreciation rate; cash flow capacity includes one indicator: cash flow ratio; operational capacity includes two indicators: accounts receivable turnover rate and inventory turnover rate; development capacity includes three indicators: brand awareness, market share, and investment in new areas and amounts; debt service capacity includes two indicators: asset-liability ratio and current ratio, Current ratio are two indicators.

### **Composition of the social benefit dimensión**

The development of enterprises should not only focus on economic interests, but also pay attention to social benefits, and achieve the

organic combination of economic and social benefits with the concept of sustainable development, so as to achieve high-quality corporate development. Carroll (Carroll) proposed the "pyramid model", defining the content of CSR as: economic responsibility, legal responsibility, ethical responsibility and conscious responsibility (changed to "philanthropic responsibility" in 1991), which is also the mainstream doctrine of CSR. This is also the mainstream doctrine of CSR, which has far-reaching influence. According to the "pyramid model" of social responsibility, we measure the social benefits of enterprises in four aspects: economic responsibility, legal responsibility, ethical responsibility and philanthropic responsibility. Economic responsibility includes three indicators, namely, payment of national taxes and profits, direct and indirect employment, and provision of quality products or services; legal responsibility includes two indicators, namely, compliance with the law and paying taxes according to the law; ethical responsibility includes four indicators, namely, energy conservation and environmental protection, compliance with social ethics, relations with employees, suppliers and competitors, and consumer satisfaction; and charitable responsibility includes two indicators, namely, participation in social welfare and participation in social charity. Charity responsibility includes two indicators: participation in social welfare and participation in social charity.

### **Results and discussion**

After the presentation in the third paragraph of this paper, we constructed a brand-new method based on hierarchical analysis to comprehensively measure the performance of M&A from two perspectives: economic and social benefits of enterprises. On this basis, we clarify the structure of primary, secondary and tertiary indicators for measuring the economic benefit dimension, and construct a measurement system of 2 primary indicators, 9 secondary indicators and 23 tertiary indicators. This is the most significant result of this paper, as shown in Table 1.

**Table 1.**  
*Corporate M&A performance measurement index system*

Tier 1 Indicators	Secondary indicators	Tertiary indicators
Economic benefits	Profitability	Sales Margin
		Total Return on Assets
		Rate of return on capital
		Capital preservation and appreciation rate
		Cash Flow Ratio
Economic benefits	Cash Flow Capacity	Inventory turnover rate
		Accounts Receivable Turnover Ratio
		Trademark visibility
		Market share
Economic benefits	Operating Capability	Investment in new areas and amounts
		Gearing ratio
		Current ratio or quick ratio
		Taxes and profits paid to the state
Economic benefits	Development capacity	Provide employment directly and indirectly
		Provide quality products or services
		Discipline and law-abiding
		Paying taxes in accordance with the law
Social benefits	Solvency	Energy saving and environmental protection
		Relationships with employees, suppliers, and competitors
		Compliance with social ethics
		Consumer Satisfaction
Social benefits	Financial responsibility	Participation in social welfare
		Participation in social charity
		Legal Liability
		Ethical Responsibility
Social benefits	Philanthropic Responsibility	

Most corporate M&A behaviors are future-oriented and focus on the strategic value of M&A behaviors. Accordingly, the method of measuring M&A performance should also reflect the strategic demands of enterprises and meet the actual situation of enterprise reform and development in the new economy and new situation. There are various methods for measuring M&A performance, each with its own advantages and disadvantages. A good method of measuring M&A performance should be conducive to promoting the healthy development of enterprises as well as promoting enterprises to actively contribute to society; it should be able to objectively and fairly evaluate the economic benefits of enterprises as well as scientifically and accurately measure the social benefits of enterprises, actively guide enterprises to effectively balance the relationship between economic and social benefits, and guide them to take the path of sustainable and high-quality development.

The paper proposes the isomorphic perspective of economic and social benefits to measure the effectiveness of corporate M&A is only a useful

attempt, and there are some areas that need to be enhanced and improved. Firstly, the scientific rationality of the method needs to be tested in practice, and secondly, the weights of the index system at all levels need to be discussed and determined by experts in academia and industry.

### Conclusions

Based on the summary and analysis of previous literature and methods, this paper finds potential problems in the current method, mainly in the perspective, scope and method of measurement. To this end, based on hierarchical analysis and performance evaluation theory, this paper constructs a framework for evaluating the performance of corporate M&A with the same structure of economic and social benefits, builds an evaluation system and clarifies the evaluation path. This evaluation method takes into account not only the financial factors but also the non-financial factors of enterprises; it takes into account not only the short-term performance evaluation but also the long-term performance evaluation of enterprises; it evaluates not only from the perspective of internal operation of

enterprises but also takes into account the influence of external environment on enterprise performance.

The contribution of this paper is mainly in two aspects: one is to measure M&A performance from a broader and multifaceted perspective; the other is to measure M&A performance by constructing an indicator system and corresponding indicator weights, which takes both qualitative and quantitative approaches.

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## Training students for intercultural communication in a dynamic world: a challenge in continuing education

### Подготовка студентов к межкультурной коммуникации в динамичном мире: задача непрерывного образования

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#### Abstract

The article discusses the problems related to preparing students for intercultural communication within the context of continuing education. The authors develop a set of definitions concerning the process of training students for intercultural communication. Additionally, the current need to review conventional approaches to the preparation of students for intercultural communication vis-à-vis the implementation of novel strategies is highlighted. The primary goal of the research is to establish a repeatable preparation process, which is practice-focused. The range of tasks suggested by the authors reflects the practical application of these strategies. Thus the following aspects have been identified as the most critical drivers: (1) a continuous and practice-focused process which facilitates the preparation for intercultural communication; (2) the use of case-based reasoning for researching and updating the tools and methods within the process of preparation of students for intercultural communication; (3) and a systematic approach to task development within the learning process (e.g., case studies, role plays, mixed interaction, networking, etc.). This method enables the adoption and concurrent adjustment of the teaching practices in order to fulfil the educational

#### Аннотация

В статье определена проблема, связанная с подготовкой студентов к межкультурной коммуникации в условиях непрерывного образования. Авторы обозначен ряд дефиниций, отражающих процесс подготовки студентов к межкультурной коммуникации. Кроме того, подчеркивается необходимость пересмотра сложившихся подходов к подготовке студентов к межкультурной коммуникации в связи с внедрением новых стратегий. Основная цель исследования – определить специфику организации практикоориентированного подхода к подготовке педагогов к межкультурной коммуникации. Следующие аспекты должны быть учтены для реализации обозначенной цели: (1) непрерывный и ориентированный на практику процесс, который облегчает подготовку к межкультурной коммуникации; (2) использование метода прецедентов, основанного на изучении конкретных примеров для обновления существующей практики с целью оптимизации процесса подготовки педагогов к межкультурной

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goals of diverse intercultural communication programs. Optimized practices and strategies can subsequently be collected, disseminated, and ultimately replicated within other post-secondary settings and contexts.

**Keywords:** teacher training, continuing education, intercultural communication, strategies for preparing students, case study, role play, networking.

## Introduction

Currently, «society has made students' ability and readiness for constant information searching and acquisition its top priority» (Akmambetova & Savelieva-Rat, 2021). Refining and updating professional knowledge and skills on a regular basis «has become one of the most critical factors which drive the importance of individualizing learning processes» (Akmambetova & Savelieva-Rat, 2021). Moreover, the willingness to develop a person-oriented educational path and the ability «to translate research interests into a specific and targeted course of study by being open and ready to embrace the innovations brought forward by the professional environment and intercultural communication is critical». (Kurylo, 2019).

The theoretical analysis dealing with the status of the scientific development of the problem under consideration shows that many research studies have been carried out by Russian and foreign researchers working in the field of pedagogical sciences. For the purpose of this research article, the studies can be divided into three groups. The focus of the first set of studies has been primarily on the aspects of training students for intercultural communication and the identification of its key principles and role in the current educational system on a global scale (Akmambetova & Savelieva-Rat, 2021; Stenischeva, 2020; Sirenko, 2021).

*The second set of studies* is targeted at analysing and understanding the genuine meaning of such a phenomenon as "intercultural communication"

коммуникации; (3) и системный подход к разработке задач в рамках процесса обучения (например, тематические исследования, ролевые игры, смешанное взаимодействие, создание сетей и т.д.). Этот метод позволяет внедрять и одновременно корректировать методы преподавания для достижения образовательных целей, реализуемых в рамках различных программ по межкультурной коммуникации. Усовершенствованные методы и определенные стратегии впоследствии могут быть интегрированы, распространены и, в конечном счете, использованы в других учреждениях и контекстах послевузовского образования.

**Ключевые слова:** подготовка учителей, непрерывное образование, межкультурная коммуникация, стратегии подготовки учащихся, метод прецедентов, ролевые игры, создание сетей.

including aspects of its implementation within the context of training students for intercultural communication (Zhukova & Shrenk, 2016; Novikova, 2007).

*The third set of studies* examines strategies for the preparation of students for intercultural communication in the context of dynamically changing learning needs. (Zhukova et al., 2022; Kurylo, 2019)

Thus, this paper presents the first authors' conclusion on the problem and seeks to understand the importance of continuing education and the strategies to its development.

The research has five sections following this introduction, wherein we have discussed the issues in the current situation to investigate how the continuing education could be applied to teaching process. In the next section, we present the analysis of the current methods deployed in this research. Following this, we present a brief history of the studied sector, focusing on the recent views on the current problem and the possible ways of solution (case study, personal education path, etc.). This is important to investigate how the continuing education is perceived.

## Literature Review

Within the present context of training students for intercultural communication, there is an emerging trend of rethinking the role of students

in the educational process, making them active partners rather than silent participants. The authors assume that the training of students for intercultural communication can be narrowly defined as a type of learning which includes pre-teaching. This means that the instructor provides background information on the subject ahead or before students start delving into the topic. Additionally, the fundamentals of the subject can be highlighted while discussing related topics. They can also be presented in a non-intrusive manner by way of referring, exemplifying, or creating associations. This type of dynamic educational process appears to be effective for studying a subject, which is difficult to understand. «The change of roles turns a student into a partner in the learning process who brings in his or her own experience» (Zhukova, 2022). In this educational process, a student becomes more agile and flexible. Being agile and flexible implies the ability to think faster, and to analyse and adapt to the current circumstances and search for the appropriate types of activities.

The key attribute of training students for intercultural communication is featured by its focus on the content and the process, which includes the readiness of learners for developing and setting their own learning goals along with forecasting the developmental trends of the phenomena under study. In other words, the whole learning system is designed to develop personal qualities, which are required for successful performance and driven by rapid social and intercultural changes (Kurylo, 2019).

This poses another challenge for pedagogical science, in particular, the optimisation of methods for training students for intercultural communication. Intercultural communication implies interaction among representatives of different cultures, which connects people, establishes good rapport and produces effective business correspondence and mass communication. Many researchers define intercultural communication as a combination of various forms of relationships and interactions among individuals and groups, which may belong to different ethnic and cultural backgrounds (Alismail, 2016; Duzhakova, 2008). However, there are those who see intercultural communication as interaction among people representing different cultures alone (Duzhakova, 2008) Researchers suggest that intercultural communication spawns a new social medium featuring a freedom of communication in a multicultural environment. This makes the problem of overcoming and

eliminating communication barriers more relevant and current.

Zhukova T.A. et., al put forward a perspective which reviews intercultural communication as a culturally driven process. The components of this communication process are closely interconnected with the cultural identity of its participants. At the same time, it is important to highlight three basic competences of intercultural communication: (1) the ability to notice and interpret information which is transmitted through non-verbal cues and which representatives of different cultures find the most difficult to interpret; (2) the ability to actively listen - a skill which participants of the intercultural communication process are expected to master; (3) the ability to predict and eliminate potentially embarrassing mistakes which may disrupt the intercultural communication process because of the wrong impressions they might produce.

Lately, researchers have taken a keen interest in the dynamic perception of culture, which stresses the importance of understanding the lifestyle, behavioural norms and values of a social group (e.g. urban culture). These developments emphasise the importance of research in the field of intercultural communication. In addition, the pace of the educational process is changing, making it more dynamic and forward-looking. It is obvious that there is an increasing need for new strategies and approaches to the education process (Dyuzhakova, 2022).

The organisational strategy implies a system, which contains findings of analysis of current social and educational conditions, learning goals, principles of selection and design of course content. It accounts for students' needs and expectations and a number of components associated with the process. The strategy includes a master schedule, which sets out priorities, and sequences the steps required for achieving the strategic goals. It is necessary to emphasise that Russian pedagogical universities currently «have come to realise the importance of strategic management and setting of short-term goals in the context of the new reality» (Alismail, 2016).

The points below show how dynamic the model of teaching student is and how it is important to consider the personal and organizational strategies. We believe that the strategies of continuing education we can use while teaching students and the ways how to improve continuing education.

## Methods

The objective of this research study is to provide insights for preparing students for intercultural communication within the context of continuing education.

One of the key aspects of the research methodology is targeted at improving the understanding of the methods, which contribute to the organization of the educational process. The selected method of case-based reasoning enables the working out of solutions to new tasks through the adjustment of existing outcomes obtained from similar tasks. The analysis, in its turn, provides a description of a particular case at a given educational institution, which allows for the application of accumulated experience to the problem in question. In this study, the research has been conducted by the Financial University under the Government of the Russian Federation (Moscow) and the Herzen State Pedagogical University (St. Petersburg). The implementation of scientific ideas and theoretical models proposed by the teachers in Herzen State Pedagogical University (the Institute of Pedagogy included 110 staff) is suggested as necessary.

In an attempt to understand the principles and structure of the case-based reasoning method, the authors rely on a systematic approach, which provides detailed insight into each case. This process allows for detailed analysis and comparison, and leads to the development of an integrated system of cases. Having this system in place makes it possible to single out structural components from individual cases and to identify functional relationships between them.

Moreover, the authors use the review literature and analyze the literature on the mentioned problem, the role of continuing education in teachers' training. As well, they find it is important to use interviews (among 20 colleagues of Financial State University under the Government of the Russian Federation and Herzen State Pedagogical University). Moreover, they refer to the literature regarding the activities, which should improve the process of training.

## Results

As discussed previously, the identification of new strategies should be instrumental in preparing instructors for intercultural communication within the context of continuing education. The authors of the article have

provided the most significant examples from their perspective.

To begin with, it can be asserted that the efforts to replace traditional linear approaches to the preparation of students have led to significant changes. The linear approach is manifested in a learning environment, which relies on the long-established patterns of development of intercultural communication skills without considering the relevant cross-cultural dynamics, which have been the subject of multiple research studies for many centuries (Alismail, 2016; Enders, 2002). The purpose of these research studies is to identify a range of linear, yet unique, design trends including opportunities for the improvement of existing practices. However, a number of researchers who have opposed the logic of linear theories have demonstrated that the linear type of development is one of many available and should be placed either in a fully closed information-driven environment without external exposure or the degree of impact should be properly gauged (Enders, 2002).

It appears that another strategy could be that of the personalisation practice-oriented approach (Kokarevich & Sizova, 2015). This strategy is mainly associated with life-long education. A solid life-long education strategy in the field of professional education sets clear objectives, tasks and content. These components are designed to encourage the rapid development of the personality of a student making them ready and willing to design and predict personal development paths and to work out ground-breaking solutions by way of intercultural communication. In this regard, a student takes on the role of the designer of his/ her personal educational path.

The term «personal educational path» was introduced in pedagogy at the end of the 1990s and can be reviewed as a definite educational programme and standard (Nieto et al., 2008). The following components make up the structure of the educational path: (1) a plan, which assumes target setting based on the appropriate standards; (2) content which includes systematization and grouping of subjects; (3) technology which drives the use of specific pedagogical technologies, methods and techniques; (4) a diagnosis which defines the set of required tools for analysis; (5) tools; (6) outcomes.

What is more, proper attention should be given to strategies, which facilitate social interactions. Such strategies are targeted at regulating the interactions among the various participants

involved in intercultural communication especially at the level of the educational institution, and regional government etc. The purposes and levels of self-regulation (self-organisation, self-management and self-control) define the selection of the correct strategy or strategies. They may include monologues (imperative or manipulative) and dialogues.]

If an imperative monologue strategy is selected (Hosseini Fatemi et al., 2016), then the instructor determines the goal and communicates it to the students. Thus, the educational process is built around it. This strategy is commonly applied when studying norms, which require performing specific operations, or when the sequence of steps cannot be disrupted. Work with official documents can be an excellent example of such a strategy. Additionally, the strategy for the management of the audience during lecturing is considered imperative if the instructor does not check up on the response and understanding of the students.

A manipulative monologue strategy (Zhukova et al., 2022) is different as it is the instructor who defines the path to the achievement of the goals. In this case, the instructor refers to the goals of a specific educational stage for consistency and compares them to the actual goals of the students. The instructor evaluates whether the students' level complies with the requirements set by the educational process for this specific stage. In addition, the instructor takes into account the nature of the relationship among the students in the group. The instructor creates the environment required for the achievement of the goal, which may be either not clear or partially obvious to the students at the start. The 'manipulative strategy' of interaction implies that the instructor presents the sequence of stages and level of difficulty of a specific task. For instance, in the case of a research project, if the goal of each step is not linked to the goals of the educational process, the instructor may change the sequence or content of the steps at any time if the situation calls for such changes.

The dialogue strategy (Vaira, 2007; Vargas, 2000) may be effective if both the instructor and the students have established an atmosphere of mutual trust. In the case of the pseudo-dialogue strategy, the instructor defines the goal of interaction, but in the course of studying the instructor facilitates work in groups (question and answer sessions or similar), discussions, case studies, etc. The instructor acts as the advisor, generally, at the request of the group. Given that the goal complies with the educational

programme, the instructor can present a list of potential goals to the group or specify the subject of the next stage of the educational programme, thus, passing on a new level of understanding the current pedagogical task.

The next strategy describes and defines the continuous nature of preparation for intercultural communication driven by the significance of bringing together various social cultures. This, in its turn, drives society towards tolerance, an integration of different educational systems, and a search for new ways of interaction and optimisation of preparation. The following highlighted levels articulate the findings of this research article:

- *The first (low) level* reflects the acquisition and adoption of conventional fundamentals of intercultural communication. This level reveals various inconsistencies and defines the necessary psychological and pedagogical set of tools required to optimise the preparation process through developing solutions to professional tasks.
- *The second (medium) level* includes innovative prospects of arrangement of intercultural communication defined by the regulatory process. It allows for the critical analysis of the prevailing norm in terms of the new prospects and identification of opportunities for further development and implementation through role-play.
- *The third (high) level* describes the ability to implement changes into the system of preparation for intercultural communication (educational programmes, chain of educational institutions, organisational structure of regulatory bodies within the educational system). The dialectical rejection of the second level paves the way for the transition to the third level. It is featured by the development of a clearer understanding of the substantial number of internal contradictions within the system necessary for the initiation of the transition process. In other words, differentiation has become a crucial component in the process. This includes the ability of the education to break the continuous flow of information and go beyond the established routine. It means that education should be capable of predicting and evaluating various problems and working out appropriate solutions based on its values and fundamental principles. Any problem should be viewed as an opportunity for further development through network-based mixed interaction.

## Discussion

Examples of tasks for the levels, which have been described above, are discussed below. The tasks have been developed accounting for the main principles of the strategies reflecting the various aspects of the preparation process.

- 1) The research study relies on the perceptions suggested by Zair-Bek, Ye. S. who state, «the learning task is the essential component of the competency or outcome-based approach. What is more, the combination of professional tasks forms the core of the content of professional preparation whereas the stages of competency development define the content». «The content includes the shaping of the problem which can be presented as an idea to the students. Afterwards, the students start to develop tasks, which require specific solutions independently. The tasks are based on the description of cases, facts or situations. The initial analysis, critical evaluation and interpretation of the findings lead to the transformation of the text through exchanging opinions and personal evaluations of the problem, which include the experience, values and perceptions of the participating individuals. The next stage involves a problem-solution session resulting in the development of new data sets which can be then studied following the same procedure». (Zair-Bek, 2017)

The task is an instruction or call for an action (a number or sequence of specific steps or activities) which includes requirements (known and needed for reaching the goal or solving the problem), context (generally known) and the outcome/solution (the unknown). These components are formulated in the form of a question or a task. The development of the solution includes the identification of the unknown components. Finding the solution means obtaining a specific and measurable result. A sample task might have the following structure and content presented in the form): (1) a generalised definition which describes an existing contradiction, challenge or question; (2) a key task which specifies an outcome or solution (which is to be developed); (3) a context which may include the following information: input data, specification of resources in place (informational, scientific, methodological, timing, psychological, managerial, and etc.); (4) a reference to the theoretical knowledge used for the solution to the problem; and (5) instructions which drive the development of

the final solution. The final solution may rely on data, action plans, instructions, perceptions, judgements, evaluations.

The final solution can be presented in the form of a text (programme, presentation, brochure, leaflet, book, notes, different types of advertisements, guidelines, project, instructions, etc.). It can be a descriptive piece of writing such as a behavioural strategy, a course of action, a mode of operation, or a technology etc.

The list of tasks can be combined to produce an outcome, which contains a solution, and at the same time, this outcome should be flexible. Additionally, the instructor should be able to adapt it based on the needs of students and the type of task. The process requires compliance with a comprehensive pedagogical process which includes axiological (methodological) self-identification; diagnosis-evaluation-prediction; target-setting; planning; design (concept development); practical steps needed to arrange pedagogical processes (technologies and interaction); outcome evaluations (students and teacher), and corrective actions.

Sample tasks are described below.

Sample Task 1: Intercultural communication.

*General overview of the task.* Modern society expects individuals to develop intercultural communication skills. Current observations show that the number of problems arising from interaction with representatives of different cultures is gradually increasing. The issue of eliminating such inevitable obstacles such as language barriers, social beliefs remains relevant and of great importance.

*The key task.* Provide a brief overview of intercultural communication.

*The context for solving the task.* You have a number of representatives from different cultures in your group. Both you and the representatives face language, social and cultural misunderstandings.

The tasks, which might lead you to the right solution, include the following:

- Identify the theoretical basis which can be employed to solve the problem in question;
- Collect data which describes solutions applied by professionals from different fields of study;

- Consider which steps or activities can contribute to the improvement of intercultural communication;
- Attempt to predict how representatives of different cultures might respond to the suggested activities. Work out and mutually agree a possible solution;
  - Prepare the final version of the solution as a project and prepare for presentation and defence.

#### Sample Task 2: Culture exchange game

The purpose of the «Culture exchange game» is to shape and improve the understanding of the role of a game in the learning process among students. Innovative games can be used to solve rather challenging social and economic tasks. They include swapping social roles for getting a better grasp on the real world. Three types of outcomes have been identified at the initial stages of innovative games: (1) informative – ideas and solutions to difficult or weakly structured problems, projects and programmes; (2) social – consolidating groups, senior management and specialist teams; (3) educational – mastering new techniques, brainstorming and effective decision-making.

The range of tasks under consideration and methodological sets of tools have been extended. Innovative games provide an opportunity to obtain a number of meaningful results, which include social and psychological aspects meant to improve the learners' understanding of their own personal needs and those of others.

Methodical results include the advent of new methods, techniques and mental strength practices, which assist participants of the game in self-adjustment. What is more, innovative games tend to encourage a higher degree of social engagement, and in turn create a unique environment for interaction. The aesthetic results often involve activities such as writing poetry, short plays performance or artwork. Methodological results can be characterised by an emergence of novel methodological approaches, ideas, and focus areas. A prime example is the "Network-based educational holding game" which involves the development of a company's organisational structure and corporate development strategy.

#### Sample Task 3: Intercultural Projects

«The age of self-management project» has been prioritised over other learning process initiatives within the roadmap, «The future of global

education 2015-2035» as proposed by the ASI strategic agency. The project suggests creating and developing mixed (network-based) structures, which deal with the communication of news content and cultural differences in Internet communication. Internet culture emerged with the advent of the World Wide Web and has evolved as an independent social phenomenon functioning on its own terms within global human civilisation. The projects are computer-based which contain common problems, goals, methods and techniques which are targeted at delivering specific results through collaboration. Examples might include:

- «The secret of the melting-pot» project which introduces students to family values passed on from generation to generation. As a part of the project implementation, students visit city museums, familiarise themselves with the items treasured by their families and conduct polls among other members of the group including teachers. Then they process and analyse the data which they have collected in order to find answers to the following questions: "How can we preserve the memory of our ancestors?" The outcome of the project will be a virtual exhibition of family values.
- The «Cloak and dagger in a multicultural world» project which teaches students different methods of information exchange. This project includes questionnaires and practical tasks. The project aims at providing a better understanding of the ways to encrypt information and explaining why it is essential in a multicultural context.
- The «Student holding groups» project which focuses on teamwork and the development of this skill. In this case, «holding» means a group of students, which are perceived as a parent company. The parent company sets the pace and line of work along with establishment of a number of smaller-sized subsidiaries which are expected to follow the instructions and report to the parent company.

#### Conclusion

To conclude, the following notable aspects feature continuous and practice-oriented processes of preparation for intercultural communication: a continuous and practice-focused nature; a use of case-based reasoning methods for finding and updating the components of the preparation process; and real - world learning tasks including role-plays and mixed network-based interactions.

The authors offer a number of suggestions for further research, which involves the elaboration, and refinement of the components underpinning the process of preparing students for intercultural communication. Further research and reading in this topic should consider the dynamics of the intercultural processes, which influence students' training for intercultural communication. The improvement of these processes should result in increasing the overall effectiveness of the training process of students for intercultural communication in a dynamic world.

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## Ways of implementing information technologies in professional training of future specialists

### Шляхи впровадження інформаційних технологій в професійну підготовку майбутніх фахівців

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#### Abstract

Creation of modern effective technologies, automation, intensification of production, implementation of planning and management with the help of modern information and communication technologies are the main factors of acceleration of scientific and technical progress. The purpose of the article is to show the importance of using information technologies in the training of future specialists. Without the integration of the educational environment of the higher school into the informational educational environment, without the exit of the educational process into the global information space, significant development of modern educational systems is impossible. In order to substantiate the principles of improving the professional training of education seekers, a quantitative analysis of open educational resources is proposed, the most popular platforms on which

#### Анотація

Створення сучасних ефективних технологій, автоматизація, інтенсифікація виробництва, здійснення планування і управління за допомогою сучасних інформаційно-комунікаційних технологій є головними чинниками прискорення науково-технічного прогресу. Метою статті є показати важливість застосування інформаційних технологій у підготовці майбутніх фахівців. Без інтеграції освітнього середовища вищої школи в інформаційне освітнє середовища, без виходу освітньо-виховного процесу в глобальний інформаційний простір, суттєвий розвиток сучасних освітніх систем неможливий. З метою обґрунтування засад удосконалення професійної підготовки здобувачів освіти запропоновано кількісний аналіз відкритих

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the path to open educational resources is designed are determined. The article examines the conditions by which the effectiveness of pedagogical support is achieved in the distance learning process. The substantiation of the most essential criteria and indicators involves the assessment of the quality of personality education in the digital educational space. They offer the perfect use of digital information, readiness for communication, critical thinking, digital and social competence.

**Keywords:** information and communication technologies, professional training of future specialists, open educational resources, distance learning, student.

## Introduction

All over the world, the development of the educational sector is observed and global changes are taking place in the information society, in general, and the intensive development and use of information and communication technologies is being carried out in all spheres of society, including the educational sphere, in particular. Such a situation that has developed in the world significantly affects social relations, the nature of scientific research, the content of production, the educational sector, everyday life, culture, etc. (Lukyanova & Komar, 2020). Therefore, the development of society depends on deep economic and social transformations, which depend on the constant achievements of scientific and technical progress in all spheres of human activity. Therefore, the use of information technologies in the field of education is necessary and opens up positive opportunities not only for the creativity of specialists, but also for the creativity of students (Kuchai, 2014).

A qualitatively new level is beginning the development of the world economy in our time. At the same time, in order to achieve high socio-economic results, the main importance belongs to the knowledge that specialists have acquired during training and information and communication technologies, which are tools for working with knowledge that reveal the competitiveness of a specialist. The level and quality of life of the entire society and the quality of innovative activity of subjects of the world economy depend on the quality and volume of

освітніх ресурсів, визначено найбільш популярні платформи на яких спроектовано шлях до відкритих освітніх ресурсів. Виписано різницю традиційного і дистанційного навчання (за основу взято форми взаємодії викладача і студента). У статті розглянуто умови, за допомогою яких у процесі дистанційного навчання досягається ефективність педагогічного супроводу. Обґрунтування найсуттєвіших критеріїв і показників передбачає оцінка якості виховання особистості в цифровому освітньо-виховному просторі. Вони пропонують досконале використання цифрової інформації, готовність до комунікації, критичне мислення, цифрової і соціальної компетентності.

**Ключові слова:** інформаційно-комунікаційні технології, професійна підготовка майбутніх фахівців, відкриті освітні ресурси, дистанційне навчання, студент.

information and communication technologies. With the help of modern information and communication technologies, an information space is created, which must necessarily be unified and contain databases of scientific information, groups of professionals in a certain specialty, active, not passive consumers, where knowledge is freely available. The higher school sets itself a modern task - to integrate students into the new information and communication space and to provide active access to scientific, modern knowledge and technologies that will be needed in their future profession. Active is the use of educational technologies that allow teaching and learning outside the classroom, and not only in the classroom. In connection with the rapid development of information and communication technologies, we consider the information space not only as a place for education and work, but also as one of the main parts of the living space of a modern individual (Podlesny et al., 2019).

**The purpose of the article:** to show the importance of using information and communication technologies in the professional training of future specialists. In the article we considered: the task of education using the leading trends of information and communication technologies; models and tools of best global experience; to increase the level of knowledge, the most common free courses; ten educational platforms are interpreted for summarizing the research results; the ways of

development of the young generation; the tasks facing a person in the information society.

### Literature Review

O. Kuchai (2014) proposed «...ways to solve the problem, that is, to improve the theoretical and methodical training of specialists by means of information technologies in institutions of higher education». The peculiarities of the use and application of information technologies in the training of specialists, in particular, in the field of pedagogy, are shown.

Yu. Lukyanova & V. Komar (2020) showed «...the necessity of using information and communication technologies in education; revealed the most promising ways of intensive development in the information society and showed the latest approaches to the use of information and communication technologies and their impact on education, scientific research, the nature of production, culture, etc».

S. Podlesny et al., (2019) considered «...the possibilities of information and communication technologies as a necessary part of the human life space of the 21st century, which have become an integral part for work, education, communication».

I. Dotsenko (2017) wrote out the obligations that Ukraine undertook in accordance with the "Geneva Declaration of Principles" ratified by the Verkhovna Rada of Ukraine.

I. Bezzub (2017) wrote Lifelong Learning. The author proves «...the inadequacy of knowledge regarding the use of information and communication technologies for a normal, fulfilling life, which a person receives during education». After graduating from a higher education institution and working professionally, possessing information and communication technologies at the level of an ordinary user, there is a need to constantly update knowledge on the use of information and communication technologies, because professional knowledge is rapidly aging, and information and communication technologies are developing and improving.

D. Dzvinchuk et al., (2020) proves by examples that «...the constant development of modern educational systems cannot exist without purposeful use of information and communication technologies». The authors showed the possibilities of integrating the educational and information environment,

proved the need for education to enter the global information space.

O. Semenikhina, et al., (2020) showed «...the effectiveness and necessity of quantitative characteristics of open educational resources in the field of information and communication technologies, the purpose of which is to identify the main ways of improving the professional training of students».

H. Murasova (2012) in the context of the application of information and communication technologies, identified the main forms of professional training of education seekers and considered distance education that meets the challenges of society.

### Methodology

At various stages of the work, theoretical research methods were used - the study of modern psychological, pedagogical and methodical sources on the content of professional education and the educational process gave us the opportunity to clarify the content of the main concepts of research, comparison, systematization; the analysis of the practical work of higher education institutions gave us the opportunity to identify the level of training of future specialists for the use of information technologies, to show the shortcomings that need to be eliminated; applied the design of content, forms and technologies for the formation of specialists' readiness for the use of information technologies in professional activities; analysis and synthesis became necessary to determine the structure of specialists' readiness to use information technologies and the system of its formation.

In the course of the study, praxis methods were also used (analysis of the activities of future specialists based on the results of their professional activities); structural genetic method; methods and information technology (identification of statistical dependencies; correlation analysis; computer-statistical data processing).

New information technologies are an indispensable component of the process of forming the professional potential of university students, so it is necessary to structure the didactic capabilities of these technologies and identify all the appropriate directions for using new information technologies at each stage of the professional training of future specialists. The professional potential of a future specialist is a

type of intellectual potential of a person, including motivational-targeted, meaningful, operational-activity, reflective-evaluative components that reflect the totality of personal qualities and abilities, psychological states, knowledge, skills and abilities necessary to achieve a high level his professional development.

The theoretical and methodological strategy for constructing a concept should be such a scientific approach to the formation of the professional potential of university students using new information technologies, which would ensure its adaptation to the conditions of an external constantly changing environment in the conditions of interaction of all subjects and objects. The principles underlying the theory and practice of the process of forming the professional potential of students with the use of new information technologies must be represented as a three-level system: theoretical, methodological and technological-oriented levels.

The methodology for forming the professional potential of university students using new information technologies should have a structural organization and be implemented in the following substructures: target, content, technological, organizational and executive, level-effective.

## Results and Discussion

According to the goal, we have identified the task of education using the leading trends of information and communication technologies.

The world society is constantly moving towards the "knowledge society", the era of the information society, in which there is an urgent need for information and computer technologies. And such a need becomes the main competence requirement for an individual at any stage of his existence. In accordance with the ratified "Geneva Declaration of Principles", education has set itself the task and made commitments:

- to improve the use of information technologies, communication infrastructure, knowledge information;
- update citizens' computer competence;
- increase the security of the use of information technologies;
- create a favorable information environment at all levels of human development;
- to develop new and expand the existing application of information

- to encourage cultural and informational educational diversity in education and to respect it;
- to expand the role of mass media;
- to improve the ethical aspects of the information society, to apply information and communication technologies in international and regional cooperation (Dotsenko, 2017).

Summarizing the best world experience, we will offer the following visualization of the leading trends in the use of information technologies during the transition of humanity to an information society. We describe the selected models and tools.

Computer Based Training - computer support for training plays a major role in the implementation of a high-quality educational process, it involves the following procedure for organizing the cognitive activity of education seekers, in which the key tools are: computer and communication equipment, information and communication technologies, information networks, software.

Global Education Net - an educational environment that is virtual and global, provides participants in the educational process with the opportunity to use the information bases of the world's leading educational institutions, national libraries, museum exhibits and other material useful for the educational space.

Open Educational Resources (OER) – free open educational resources, open to all education seekers and self-educators in freely accessible digital format textbooks, manuals, training programs, online courses, educational tests, video lectures, multimedia presentations, etc. including new software offered by educational centers and universities. The purpose of the proposed depositories is to provide free access to education for a large number of people from different parts of the world; improving the quality of education, improving the educational opportunities of people in the modern world, in which education takes the first place, which is the main guarantee of economic, ecological, and social progress.

Lifelong Learning (LLL) - learning throughout life. This idea is based on the understanding that "today it is not enough to graduate from an educational institution and work competitively with the acquired knowledge and without developing and improving one's abilities, possessing information and communication technologies at the level of an ordinary user.

Constant improvement of fundamental and applied knowledge, as well as knowledge of a technological and production nature, provides such conditions under which the rapid "aging of professional knowledge" occurs, and therefore, a decrease in the competence of a specialist by 50% is observed, and this happens in less than five years" Summarizing best world experience, we will offer such a visualization of the leading trends in the use of information and communication technologies during the transition of humanity to the information society. We describe the selected models and tools.

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such conditions under which rapid "aging of professional knowledge" occurs, and therefore, a decrease in the competence of a specialist by 50% is observed, and this happens in less than five years."(Bezzub, 2017), therefore, it is necessary to constantly update the specialist's professional competences, to provide opportunities for constant mastery of modern knowledge throughout life.

Education Roaming (eduroam) - the international roaming service of scientists and educators of higher education institutions is a network tool for accessing knowledge bases, a global system that provides access to the worldwide educational environment and any registered person (specialist, scientist, graduate student, student) who has a free roaming access to the Internet, can use any open educational resources for free.

Bring Your Own Device (BYOD) – integration of personal gadgets into the educational process. Microsoft Corporation launched a project based on the phenomenon of psychotechnology, the purpose of which is to give the opportunity to young people who are used to not letting go of their own gadgets, to constantly acquire knowledge and improve.

Long-Distance Online Learning (D-learning) - distance online education is a successful practice of using information and communication technologies in the educational environment.

Further development of the educational environment is impossible without the integration of the educational and informational environment, the constant use of information and computer technologies, the exit of the educational process into the global information space (Dzvinchuk et al., 2020).

The Microsoft company is engaged in a constant search for new opportunities for the use of information and communication technologies, the creation of new pedagogical technologies, the development of software and tools, in particular for the management of educational institutions, e-learning, etc. For example, Youth Spark from Microsoft works in three main directions: education, student employment and development of entrepreneurship, creation of innovation centers in higher education institutions.

Educational content, in particular, electronic educational resources in most countries of the world are cheaply and safely stored on cloud servers. This approach makes it possible not only to access them very quickly from a tablet,

smartphone, computer, smart TV, but also to study remotely using multimedia interactive electronic educational resources. The greatest value of Internet educational services is the availability of multimedia electronic educational resources for which distance does not matter, and the possibility of serving users is unlimited and does not depend on regions or countries of the world.

Electronic education is used in all countries of the world and globally. For example, in the USA, more than 90% of universities and schools use this form of education.

On the Internet, you can constantly find and use online courses from well-known educators, for example, Coursera, Muks; many online portals that provide educational materials for free.

To increase the level of knowledge, among the most common free courses available in your area are:

1. Massachusetts Institute of Technology - mit.edu - OpenCourseWare University project.
2. Open University – open.ac.uk – OpenLearn site.
3. Carnegie Mellon University - cmu.edu - materials using the Open Learning Initiative program.
4. Tufts University - tufts.edu - OpenCourseWare university curricula.
5. Stanford - stanford.edu - Stanford University has joined has Tunes U to provide access to Stanford courses.

The use of information technologies in education as a service is a new evolutionary step in the world (Podlesny et al., 2019).

The use of the latest massive open online courses (Massive Open On-line Course (MOOC) is a paradigm shift in the development of the educational sector worldwide. These are large-scale, free, interactive educational courses that operate in open access on the Internet.

The revolution in education is the launch of a new platform for MOEs - NovoED (access mode: <http://www.bing.com>) developed by experts from Stanford University, which grouped practice-oriented courses with mandatory features characteristic of them (rating system, lack of tests, work on projects, teamwork, increased communication in work groups, performance of joint tasks). Innovations motivate education

seekers to study and contribute to the successful assimilation of knowledge.

MOOC is not only a network project of US educational institutions, but also attracts a large number of educators from all over the world. For example, during the year, the following joined the EDX project: Hong Kong University of Science & Technology (HKUSTx), The University of Hong Kong (HKUx), Kyoto University, Japan (Kyoto University, KyotoUx), China (Peking University, PekingX), South Korea (Seoul National University, South Korea, SNUx), Peking University, Seoul National University, etc. The first European MOE was launched. The project contained 40 courses in 12 different languages, which is important - free and launched by the European Association of Distance Learning Universities (EADTU) (access mode <http://www.eadtu.eu>). The partners of the project are Italy, Lithuania, the Netherlands, France, Israel, Spain, Great Britain, Turkey, Portugal, Slovakia, etc. Therefore, there is no need for each institution of higher education to develop its own MOOC (Gurevich & Kademiya, 2016).

It is worth highlighting the work in this direction of South Korea, which has been using e-learning since 1997, creating more than 20 cyber universities in which all services are provided electronically. This approach is effective in society, saves time, is flexible, enables round-the-clock training, and is in demand from an economic point of view. Currently, in South Korea, more than 4.4 million students are on e-learning, which is an indicative resource for the country's development. In this country, it was the government that created such an infrastructure, an environment for the widespread use of computer technologies, a system of indicators for monitoring the activities of electronic universities, and this makes a significant saving of money. Control, development and distribution of e-education in the country are handled by established support centers, each such center includes 10 - 15 universities. Such a positive influence of the government on the use of open networks makes it possible to establish cooperation in the international space and to simplify the procedure for the recognition of foreign diplomas of higher education (Podlesny et al., 2019).

Scientists Semenikhina O. et al., (2020) offered «...the most popular platforms that provide access to open educational resources». Recently, the quantity of open informative resources presented by depositories and university project

sites has improved significantly. According to statistics from ClassCentral (Shah, 2018) the online course catalog, which is free, has provided more than 11,500 courses from more than 900 universities in recent years alone. This distribution of courses makes it possible to popularize developers in the fields of "Social Sciences" (about 11%), "Technology" (about 20%), "Business" (about 18%), there is a shortage of courses in the fields of "Art and Design" (5%) and "Mathematics" (3.1%). According to Class Central, the most popular platforms for education seekers are: Coursera - 37 million, Edx - 18 million, XuetangX - 14 million, Udacity - 10 million, FutureLearn - 8.7 million (Shah, 2018).

On the portal reviews.com (The Best MOOC Platforms, 2019) "The Best MOOC Platforms for 2018" rating was issued, which was influenced by: integrated forums for social interaction, evaluation and review of completed courses, quality and interactive content of presentation of materials by the educator, etc. Coursera received the highest score of 8.8 out of 10, followed by Edx with a score of 7.4 out of 10, followed by UdeMy with a score of 0.4 out of 10.

The generalization of the obtained results led us to choose the following, the most important, ten educational platforms: Coursera (Coursera, 2019), Edx (EdX, 2019), UdeMy (UdeMy, 2019), MIT OpenCourseWare (MIT OpenCourseWare, 2019), OpenLearn (Open University, 2019), Prometheus (Prometheus, 2019), UoPeople (University of the People, 2019), Open Learning Initiative (2019), Maidan Open University (Maidan Open University, 2019) Maidan Open University (vum.org.ua) is the first distance public education platform in Ukraine (Maidan Open University, 2019). The platform offers educational courses, represented by practical tasks, control questions, video lectures, from the best educators of business schools, the public sector, specialists of practitioners from the social sphere and business. Topics of educational courses are social, related to entrepreneurship, personality development, realization of potential (Semenikhina et al., 2020).

Let's consider the importance, necessity and difference of distance learning from traditional in terms of forms of interaction between the educator and the learner. The traditional model of education includes lectures, seminars, laboratories, games, independent work of students, etc. The basis of such training is a book and a educator who provides knowledge.

Distance learning provides fundamentally new learning models in the educational process: project work, trainings, holding conferences and other types of activities with information and communication and non-traditional technologies. The methodical approach to distance education maximally engages students in active learning, increases students' motivation to pursue education and offers their professional training through distance education, which provides the opportunity for: quick feedback, constant presence of a educator, consultations, at the time when it is convenient for the student, creating a forum for communication; interaction between students and the educator contributes to the satisfaction of students from the educational process (Murasova, 2012).

A person's life in the natural and social world and his direct participation in the modern digitalization of the educational process is evidence of his life in a complex civilized society, when there are no boundaries for intercultural constructive exchanges. Such conditions of digital global consumption emphasize the practical and scientific value of the corresponding products, broadcast without limits. In the context of the competence capabilities of a specific individual, the problem of the degree of their use arises (Kuchai, 2018). With this approach, constant innovative improvement of the educational sphere, which is primarily aimed at the creative development of the student of education, is mandatory. A person who is in the effective field of digitalization learns the number of situations, which is unlimited in terms of content. The situations sufficiently reflect human activity in the professional field. The nature of digital information correlates with the perfection of a person as an individual. Educators need to pay attention to the fact that education in modern conditions of society partially loses its potential. But socialization, in its digital form, plays a very effective transforming and personal role. This position must be taken into account in the modern educational process.

The formation of personality in digital global dimensions provides an opportunity to experience the world both in modern realities and in the future. And as a result, the conclusion will be that it is possible to predict education in the modern conditions of social existence and, as a result, to improve life activities with the help of world contacts. If a person joins the digital global space, then he is widely integrated into society and can join the world community. If a person has exceptional perspectives, then the whole

world obeys him.

With this approach, the young generation moves along an intensive path of development:

- accumulate a volume of information;
- formulate and structure information;
- expand the range of their prediction abilities;
- get the opportunity to predict their career from the perspective of expectations;
- enable prevention of possible failures.

Nowadays, a person's life in all its internal processes is subject to increased tension, because it is in an information all-encompassing intensive field. A person faces a task:

- to prevent mental deviations, actively using internal protective reserves, which a person must manage and own his psyche;
- respond intelligently and in a timely manner to progressive global challenges that dictate one's standards of communication, behavior, and activity.

Assessment of the quality of personality education in the space of using information and communication technologies involves the identification of criteria and indicators that reflect critical thinking, the clear application of digital information, digital and social competence, and the ability to communicate. Such criteria make it possible to determine the level of personal competence of students of education in the digital space of education with the help of: diagnostics, monitoring, testing, questionnaires, analysis of problem situations, the method of expert evaluations, observation and self-observation of students of education, etc. (Kremen et al., 2021).

## Conclusions

The importance of using information and communication technologies in the professional training of future specialists is shown. Visualization of the leading trends in the use of the latest tools for the transition of humanity to the information society is offered. The specified models and tools are characterized. Quantitative features of open educational resources in the field of information and communication technologies are analyzed and ways to improve the professional training of education seekers are outlined. Effective platforms available for open educational resources have been identified. Features of distance learning are listed and advantages and differences from traditional ones are indicated. The conditions that affect the

effectiveness of pedagogical support in the process of distance learning are revealed. The criteria and indicators that characterize digital information and its rational use, digital and social competence, critical thinking, readiness for communication is substantiated.

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## Use of smart technologies in the training of specialists in higher education institutions

### Використання smart-технологій у підготовці фахівців у ЗВО

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#### Abstract

Attention is focused on the importance of the use of smart technologies in the training of specialists in institutions of higher education. From the perspective of the educational system, smart society and smart education are presented, which are included in the content of a new type of education, in which the use of smart information technologies is mandatory. The main task of the educational space for smart education is written down - creating a basis for the possibility of realizing the intellectual and creative potential of education seekers. New opportunities for the education system created by smart technologies are described. The advantages of smart technologies and the features of their application in the educational process are listed. The main principles of smart education are highlighted and the components of smart education are listed. Online platforms, online services, portals, and applications, which are presented as smart technology tools within the scope of the study, were identified and divided into the groups of smart store, smart interaction, smart response, and smart trainer.

#### Анотація

Зосереджено увагу на важливості при підготовці фахівців у закладах вищої освіти застосування smart-технологій. З ракурсу освітньої системи подано smart-суспільство й smart-освіту, що входять до змісту освіти нового типу, в якому обов'язковим є використовуватися інформаційних smart-технологій. Прописано основне завдання освітнього простору для smart-освіти – створення основи для можливості реалізації інтелектуального та творчого потенціалу здобувачів освіти. Описано нові можливості для системи освіти, які створюють smart-технології. Запропоновано чинники використання smart-технологій: збільшення передачі інформації та знань швидким темпом; динамічність адаптації здобувачів освіти й молодих фахівців до соціальних змін і оточуючого середовища; реформування системи навчання у відповідності до можливостей інформаційного оточення (збільшення продуктивності праці фахівців; гнучкість та прозорість освітньо-виховних процесів; освіта, що відповідає потребам та здібностям здобувачів освіти). Перераховано переваги smart-технологій та особливості їх

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**Keywords:** smart technology, smart society, smart education, specialist training, higher education institutions.

застосування в освітньо-виховному процесі. Для сфери освіти визначено технологічні основи, що розглядаються як старт: smart-проектори (розумні екрани); smart-дошки; програмне забезпечення, що сприяє створенню і здійсненню навчального контенту, який вміщує комунікативний і інтерактивний характер. Виокремлено основні принципи smart-освіти, перераховано складові smart-освіти. Визначено онлайн-платформи, онлайн-сервіси, портали і додатки, що у межах дослідження представлено як інструменти smart-технологій.

**Ключові слова:** розумні технології, розумне суспільство, розумна освіта, підготовка спеціалістів, вищі навчальні заклади.

## Introduction

The world society makes modern demands on the new generation of education seekers, for which it is necessary: not only the creation but also the application of educational systems of a new format; changes in the educational process; updating methods, means, and forms of education. Therefore, it is necessary to introduce innovative technologies in education and realize opportunities in the educational process of professional training of future specialists in institutions of higher education. Not just the development, but the ultra-fast development of information and system technologies has offered profound transformations in all spheres of human activity. Therefore, today's information society is moving from an information society to a smart society, the main paradigm of which is the possibility of improving all spheres of an individual's life with the help of information technologies to ensure a new meaning of life (Rogulska & Tarasova, 2016).

In connection with the creation of a smart society, the very personality of the future teacher has changed, as well as his teaching methods, mechanisms for conducting classes, and technologies for forming the professional competence of a future competitive specialist.

**The purpose of the article.** To reveal the need to use smart technologies in training specialists in higher education institutions.

## Literature Review

The use of smart technologies in the modern educational space has been actively studied not only in recent years but also remains quite relevant right now.

A. Kushnir (2020) highlighted the meaning of the following concepts: "smart society", "smart technologies", "smart education"; the author's interpretation of the distribution of smart technology tools by the following groups is offered: smart interaction, smart store, smart response, smart trainer; the advantages and disadvantages of using smart technologies in the educational process are analyzed.

S. Podlesny et al., (2019) set the goal of finding out the possibilities of innovative technologies, showing the advantages and features, the prospects of using smart technologies in the educational process of a higher education institution to qualitatively form the professional competencies of future specialists.

Yu. Lukyanova, V. Komar (2020) showed varieties of smart technologies, noted and proved that smart technologies are the beginning of a new educational paradigm. We described the possibilities of smart technologies for implementation in the educational process and developed a trend for the implementation of tasks for the formation of a modern creative personality in this educational process; proposed ways to use smart technologies in the learning process that encourage students to creative, cognitive activities.

Yu. Drachuk, L. Savyuk, Ye. Snitko (2019) singled out the stages of using smart technologies, revealed their priority direction in the educational process of higher education institutions. Scientists have defined criteria and indicators; the principles of effective use of smart technologies are described. The professional competencies of specialists acquired with the help of smart technologies are indicated, the

possibilities of using smart technologies in the educational process are shown.

O. Rogulska & O. Tarasova (2016) revealed the meaning of the software-technological educational complex based on the smart Board, which is the main component of smart technologies and is known as the "interactive whiteboard". It allows the creation of an information and communication environment with the help of traditional and innovative pedagogical learning technologies.

T. Lagutina (2014) described the necessary factors for the use of smart technologies: fast transfer of information and knowledge; dynamic adaptation of future specialists to the surrounding environment and social changes; reforming the educational system by the requirements of the information society.

A. Sydorenko (2019) shows the significance of the following technological smart tools for the field of education: smart projectors (smart screens); smart boards; software for the implementation of an educational process of an interactive and communicative nature; programs: Bridgit, Calameo, Prezi, PhotoPeach, Dipity, which allows you to qualitatively carry out the educational process and quickly conduct presentations for partners around the world, etc.

### Methodology

Achieving the goal and solving the set tasks was facilitated by the use of a set of methods: theoretical - comparative analysis of Ukrainian and foreign works, theoretical analysis, synthesis, systematization and content analysis of philosophical, psychological and pedagogical works, concretization, typology, extrapolation – to reveal theoretical, methodological, and methodological the principles of using smart technologies in the training of specialists in higher education institutions, as well as the interpretation of the received empirical material; comparative-pedagogical analysis of research and classification – to clarify the essence of scientific definitions and the categorical-conceptual field of research; systematization and modeling; the selection of promising ideas and approaches that constitute the methodological and methodical basis for the generalization, design and correction of theoretical and methodological positions and experimental data - for the development of the educational and methodological use of smart technologies in the training of specialists in higher education institutions.

### Results and Discussion

Smart education became possible through the creation of e-learning and the use of distance education, which started a new global phenomenon. This training is freely available, is carried out with the help of global content in the interactive space of education and is a new philosophy of education and a system of innovative technological solutions (Kuzminskyi et al., 2021). Smart education allows students to generate acquired knowledge, create the personality of a smart person who is fluent in information and computer technologies, can find and analyze information, applying innovations. "Smart" training makes the educational process effective thanks to the transfer of the educational process to the electronic environment. The considered approach allows to "copy" the teacher's knowledge and make it available to everyone (Rogulska & Tarasova, 2016).

In a smart society, it is necessary that for competitiveness in the labor market, a lifelong learner must constantly acquire and update universal, life-affirming, professional competencies. Smart education is a formative paradigm in education. The smart component is necessary to determine the properties of the process, the system acting in relationship with the environment, which necessarily responds to adaptation or changes in the educational process. Smart education is an educational system that is based on an innovative type of education, which has the goal of adaptive implementation of the educational process, in which the use of smart information technologies is mandatory. In this way, a virtual educational environment is created, in which the use of interactive means of information and communication technologies is mandatory, there is a constant update and replenishment of knowledge, which is checked as part of monitoring the quality of education. Smart education is aimed at interaction with the economic, social, and technological environment; the acquisition of knowledge, skills, and competencies based on pedagogical, technological, and organizational components. The decisive factor, the main source of the growth of the educational process is the use of smart technologies, which are a priority direction in the educational process under the conditions of globalization of the country's economic development. The key figure in this process is education, first of all, the education of mankind, the competence of the individual, the creative abilities of competitive specialists and the possibilities of their implementation. It is the education and high-quality professional training

of a specialist that becomes the primary source of a specialist's competitiveness and advantages in the 21st century (Drachuk et al., 2019).

A new quality of the society is a "smart society" (Smart Society) in which a combination of technical means, services and the Internet, when used by trained specialists, leads to changes in the interaction of subjects and allows showing and discovering new economic, social and other advantages for improvement life (Smart Technologies, 2022). In the smart society, a transition is being made from traditional education to smart education. And professional education, which is the main reference point for the competitiveness of a specialist in the global dimension, is becoming one of the globally updated fields both in its content and in the application of educational technologies and teaching methods (Rogulska & Tarasova, 2016). Having proved the importance of application and showing the need for the development of a smart society, we assert that it is:

- 1) the paradigm of the modern development of the universe, for which the Internet is a necessity and professionally trained people who create new scientific systems are an important lever of modern society, a smart society that represents not just the development of a model of the future, but an attempt to characterize and reveal its essence;
- 2) the quality of society, which offers a new approach to the educational environment and professional activity, where the combination of technical means, services and the Internet, their use by professionally trained people leads to qualitative changes in the interaction of people and makes it possible to obtain progressive effects - economic, social and other advantages, which lead to a better life (Biletska et al., 2021).

An important quality of a smart society is such technologies, the basis of which was previously based on information and knowledge, and now it is being transformed into technologies based on the exchange of experience and interaction. Smart technologies give things and phenomena a new essence, starting a "smart" object based on innovative changes in its essence. People in a smart society are specialists who think creatively and flexibly, their thinking is open, creative, they work and think in new ways; have the ability to quickly and effectively find a result, competently apply knowledge, operate with information and

have an information culture (Kuzminskyi et al., 2018).

An information smart society is formed from various levels of educational institutions, enterprises, organizations, authorities and civil society institutes. The key basis of Smart-education is the introduction of an adaptive approach, which includes people's motivations for change and the mentality of the country's citizens (Shchyrbul et al., 2022).

The situation developing in the world raises the following questions:

- How to motivate staff?
- How to preserve intellectual property for the country?

The transition to smart education involves the answers to these questions: the wide implementation of international standards, the growth of electronic mass media, the opening of the content of educational institutions, the emergence of vertical and horizontal competencies, the use of electronic textbooks, educational platforms, the possibility of realizing the competitive potential inherent in scientists, teachers, students, specialists, increased attention to innovative resources (Podlesny et al., 2019).

The basis of the space for smart education is the development of conditions for the implementation of a creative approach and the increase of the intellectual potential of education seekers. Smart technologies are integration methods for the quality education of future competitive specialists who pass through the advanced aspects of information and educational technologies available in the world.

Let's list the new opportunities that the use of smart technologies creates for the educational system:

- integration of educational institutions into the international educational space;
- coverage of additional categories of students, foreign students;
- application of new educational technologies and innovative means in education;
- creation of new guidelines for education, education seekers, teachers, monitoring activities;
- strengthening the role of scientific research;
- introduction of new, innovative and effective models of management and administration (Kuchai et al., 2022).

Let's consider the requirements proposed for educational resources within smart education:

- openness. Open Educational Resources was launched in 1998 by UNESCO. Further development can be seen in the EU Memorandum on Lifelong Education in 2000 and the Cape Town Declaration "Open Education - the Future of Education" in 2001;
- modules containing structured educational resources, i.e. knowledge necessary for the modern development of society, elements of activity for the formation of necessary competencies in a certain direction of training;
- self-sufficiency in the module for the formation and improvement of professional competencies of future specialists, interactive learning of knowledge;
- subject orientation of the module on the development of the individuality of the student's personality for successful educational activities;
- meta description of the module, for automated search in repositories;
- availability of an intelligent authorized module search system based on its meta description;
- the possibility of using the module autonomously in any sequence, taking into account the use of individual elements, their transformation to form the personal trajectory of the student of education.

For high-quality mastering of the methods and techniques of smart technologies, interactive training of students in the field of smart education and updating the qualifications of higher education teachers through the creation of new methodological support for educational courses for the effective application of smart technologies is mandatory (Lukyanova & Komar, 2020).

Let's note the mobility, accessibility, ease of use, cheap introduction of smart technologies in education, which are becoming common means of education, influencing education from a methodical and didactic point of view. The teacher needs to possess a range of not only skills but also skills that offer confidence and adequate use of these technologies, the application of the teacher's organizational skills. All this leads to the necessary improvement of successful practices, the application of new competitive models of training specialists and innovative training methods:

- a group of methods of organizing and implementing the educational process: educational discussions, analysis of video situations, research method, method of independent activity and creativity - implemented with the help of such smart technology tools as blogs, smart textbooks, programs for conducting webinars, YouTube, Facebook, WiseMapping, LinguaLab, Kahoot, Lyricstraining, Twitter, Instagram, Word it out.
- a group of methods of motivation, stimulation of the educational process: storytelling and role-playing games, gamification - their implementation is possible with the help of YouTube, Lyricstraining, Learning Apps, Quizlet, Kahoot, Facebook, Twitter, Instagram.
- a group of methods of control, monitoring, self-monitoring for the effectiveness of educational activities (this group also includes the project method) - we offer smart technology tools, such as Learning Apps, Thinglink Kahoot for their implementation (Kushnir, 2020).

The use of smart technologies is determined by several factors. Let's list them:

1. increasing the transfer of information and increasing the speed of knowledge;
2. dynamic adaptation of education seekers and specialists to social changes in the surrounding environment;
3. the need to update the educational system to the capabilities and requirements of the information society (flexibility and transparency of education; increasing labor productivity; the educational process by the abilities and needs of education seekers) (Kiryakova et al., 2018).

We will reveal the advantages of using smart technologies in the educational process:

- the possibility of using smart technologies during the teaching of professional disciplines;
- effective assimilation of knowledge;
- increasing interest in education among students;
- modernization of the educational space with technologies and their perception and understanding by the students of education.

With the help of Smart technologies, it is easier for the teacher to collect material, present the material in an accessible form, make it interesting, quickly monitor the quality of

students' knowledge, increase interest in the educational process, and reveal the creative abilities of each student of education (Lagutina, 2014).

Smart education provides an opportunity to use all the advantages of the global information society to improve educational needs and increase the interests of those seeking education (Dake & Ofosu, 2019).

Smart education is a concept that enables the modernization of the comprehensive implementation of all educational processes, methods, and technologies that are present in these processes.

We emphasize the flexibility of the concept of smart education, which provides:

- availability of an unlimited number of sources;
- maximum multimedia diversity;
- quick and easy adjustment according to the level and needs of the students of education (Sydorenko, 2019).

Let's consider the main component of smart technologies, which is a software-technological educational complex based on SMART Board, which we know as an "interactive whiteboard".

The program and the technological educational complex include:

- touch-sensitive smart Board screen,
- Software,
- Personal Computer,
- multimedia projector,
- communication equipment.

The software-technological educational complex makes it possible to create an information and communication environment for the use of traditional and innovative technologies in the educational process. To work with the screen, it is enough to be a computer user. Interactive methods are built based on DVIT technology, which provides the opportunity for several users, independently of each other, to work on the board at the same time. Thanks to such innovativeness of the device, teachers use possible program resources and themselves create interesting development of various types of vocational tasks for individual or group forms of work, which have different levels of complexity for students of the appropriate level of training (Omonayajo et al., 2022).

The smart Board complex has application programs and settings: a program for conducting instant conferences, a recording program, etc., as well as an application program for ensuring collaboration with other Microsoft Office applications (Microsoft Office such as MS Word, MS PowerPoint, MS Excel). For students to create compositions from graphic and textual fragments, store materials, reproduce them during the demonstration, there is a smart Notebook application, which is the basis of the smart Board software complex. Learners of foreign languages use smart Notebook for various tasks: compose and act out dialogues, form sentences, connect their parts, finish sentences, place them in the correct order, highlight the main points in the text, play games, combine words with their meaning, determine parts of speech. Learning becomes easy, interesting, and relaxed. With this approach, the dynamism of the educational process, the desire to understand, learn, possess, and use innovative information increases (Rogulska & Tarasova, 2016).

Let's highlight the main principles of smart education:

- use of current information of the educational program when solving educational problems;
- independent, research, cognitive, and project activities of education seekers;
- implementation of the educational process in the distributed innovative educational space;
- interaction of education seekers with the professional community;
- individualization of education;
- flexibility of the educational trajectory;
- multifaceted activities in the educational space (Luo, 2022).

For the training of specialists, we will distinguish the following components of smart education:

- update of educational programs, use of information with the help of process innovation;
- project education;
- interactive forms of education (workshop, web quest, training, etc.);
- use of electronic notes of lectures;
- use of methodical recommendations for independent work of education seekers;
- distance education;
- practical education in a professional environment;

- an example of the activities of successful specialists in the information sphere;
- joint work of education seekers and teachers on projects during scientific research work;
- joint work of students and teachers in social networks (Telegram, WhatsApp, "Media Business" group on Facebook, groups on Instagram);
- formation of innovative, analytical competencies; problem-solving skills in a complex manner, the use of intercultural communication, etc. (Kuchai et al., 2021).

Therefore, smart education is a formative paradigm in the educational environment, constitutes an educational system laid as a basis for the education of a new generation, which provides for the adaptive implementation of education, where smart information technologies are used (Sydorenko, 2019).

Within the scope of the study, online services, online platforms, portals and applications were defined as tools of smart technologies, which are divided into groups of the smart store, smart response, smart trainer, and smart interaction.

Smart technology tools are used when introducing new material or checking learned topics to improve the skills of students.

Using the tools of smart technologies in education, students become active participants in the educational environment, cognitive interest is manifested through an active relationship to the subject of knowledge, that is, to smart technologies.

We justify the division of smart technology tools into groups (Diaz-Parra et al., 2022):

- smart response group. Smart technologies are included, which are necessary for creating and conducting testing or surveys using personal devices (Kahoot, Plickers). Smart stores use components that can be useful for hosting educational content that changes and is filled by users independently (YouTube, Smart textbook, blogs).
- smart interaction group. It can be used to create a communicative space and ensure relationships between teachers and students (Instagram, Facebook, programs for conducting webinars, Twitter).
- a group of smart trainers. Smart technologies are used, which independently create an interactive task, offer a wide range of created exercises that directly affect the training and improvement of language and speech skills

(Word It Out, Learning Apps, WiseMapping, Thinglink, LinguaLab, Quizlet, Lyricstraining) (Kushnir, 2020).

The new global task that Smart-society sets for higher education institutions is: training personnel with creative potential, i.e. thinking individuals who can work in the new world. For this purpose, it is mandatory to learn new skills of a practical nature: changing the nature of the educational process, communicating in social networks, working with electronic sources, compiling personal knowledge bases, and selecting useful information (Shunkov et al., 2022).

Smart e-learning is used for personalization and adaptation of training; flexible education in an interactive environment; free access to content at the global level.

Smart learning is used when using the Internet, technological innovations that allow students to acquire professional competencies based on a multidimensional system vision, studying the material taking into account their multifacetedness, and continuity of updating the content (Morze et al., 2017). Smart education should be a mandatory component in the life of an education seeker, be based on innovative technologies, and have an informal nature. To be in the context of new changes and growing demands of education seekers in institutions of higher education, it is necessary to meet the following requirements: innovation, flexibility, quality indicators, and adaptability (Kotiash et al., 2022).

So, smart technologies in education, which are gaining more and more importance in the world, allow to optimize of the costs of educational institutions for material and technical support and bring the quality of education services and learning products to a new level; are used to implement educational programs, which include not only instrumental technologies for conducting the educational process but also innovative curricula and disciplines; allow to develop innovative teaching and methodical materials, to form individual trajectories of educational activities for education seekers (Podlesny et al., 2019).

## Conclusions

Smart education is represented by an educational system, which is a mandatory component in a new type of education, which has an adaptive

implementation of the educational process, in which smart information technologies are used.

The justification of the smart society is presented as a new paradigm of the development of society, for which the necessary components are the Internet and trained specialists who provide new knowledge because the smart society represents a new quality of society in which the use of technical means, services, and the Internet leads to interactive changes in the relations of subjects. The main task of the space for smart education is written out. Factors for the use of smart technologies are proposed. The advantages of using smart technologies in the educational process are indicated.

The necessary technological tools for the field of education, which are considered as a start, have been determined; software for creating and implementing educational content; various programs.

For quality training of competitive specialists, the main principles of smart education and the components of smart education are highlighted.

Within the scope of the study, online services, online platforms, portals and applications were defined as tools of smart technologies and divided into groups of smart response, smart store, smart interaction and smart trainer.

Further research will be aimed at training personnel with creative potential who will be able to work in the new world.

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## Tolerance as an important aspect of the professional competence of future specialists

### Толерантність як важливий аспект професійної компетентності майбутніх фахівців

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#### Abstract

The article outlines tolerance as an important aspect of the professional competence of future specialists. The purpose of the article is disclosed, which substantiates the foundations of the formation of tolerance in students of education as an important aspect of the professional competence of future specialists. The main positions of the formation of tolerance among education seekers are shown and the necessity of an important aspect of the professional competence of future competitive specialists is shown. The definition of tolerance in various aspects is proposed. In order to reveal the essence of professional tolerance, its functions, which are important in our research, are summarized. A typology of tolerance was carried out according to the social spheres of its existence. The article proposes and analyzes three types of orientation of professional tolerance of an individual: intertolerance (external type of tolerance); intratolerance (internal type of tolerance); balanced type of tolerance (clear combination of intratolerance

#### Анотація

У статті окреслено толерантність як важливий аспект професійної компетентності майбутніх фахівців. Розкрито мету статті, в якій обґрунтовано основи формування толерантності у здобувачів освіти як важливого аспекту професійної компетентності майбутніх спеціалістів. Показано основні позиції формування толерантності у здобувачів освіти та показано необхідність важливого аспекту професійної компетентності майбутніх конкурентоздатних фахівців. Запропоновано визначення толерантності у різних аспектах. Щоб розкрити сутність професійної толерантності, узагальнено її функції, важливі в нашому дослідженні. Проведено типологізацію толерантності за соціальними сферами її буття. У статті запропоновано і проаналізовано три типи спрямованості професійної толерантності особистості: інтертолерантність (зовнішній тип толерантності); інтра толерантність (внутрішній тип толерантності); збалансований тип толерантності (чітке поєднання

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and intertolerance). In the article, the authors define various principles and components of professional tolerance. The criteria of a culturally tolerant personality are singled out. The principles and functions of professional tolerance are considered.

**Keywords:** tolerance, professional competence, future specialists, principles, functions, criteria of professional tolerance, competitiveness.

## Introduction

Integration processes and a democratic approach, which are urgent today, show the need for a set of requirements for the quality of professional training and upbringing of competitive future specialists based on a new humanization of education. Ensuring tolerance among students in modern conditions is due to a high level of mobility, constant growth of intercultural ties, relations, and international contacts. One of the urgent problems in the conditions of the socio-cultural environment, which leads to the improvement of the quality of life in institutions of higher education, is the problem of education of tolerance to form a culture of interpersonal relations among students of education (Kozlova, 2019).

The problem of forming tolerant relationships in an individual, and the need to overcome discrimination in the world has an ancient historical basis. Many generations of well-known philosophers, pedagogues, and psychologists worked on the problem of the formation of personality tolerance, in particular, developed forms, methods, and techniques.

The beginning of the worldwide movement for the ideas of tolerance in 1995 was the justification by the United Nations of the "Declaration of Principles of Tolerance". Such an event became a well-known, significant stage in the consideration of tolerance as "respect, acceptance and correct understanding of the entire diversity of culture, forms of self-expression and manifestation (Zhuravel, 2008).

**The purpose** of the article is to substantiate the foundations of the formation of tolerance in education seekers as an important aspect of the professional competence of future specialists.

## Literature Review

Modern science considers the problem of tolerance in philosophical, psychological,

інтратолерантності та інтертолерантності). У статті автори визначають різні принципи та складові професійної толерантності. Виокремлено критерії культурно-толерантної особистості. Розглянуто принципи та функції професійної толерантності.

**Ключові слова:** толерантність, професійна компетентність, майбутні фахівці, принципи, функції, критерії професійної толерантності, конкурентоздатність.

pedagogical and socio-cultural contexts. Various aspects of the problem of tolerance, in particular the understanding of the essence of the phenomenon "tolerance" and its special significance for the formation of the professionalism of the teacher's personality, have been investigated in the scientific works of many scientists.

I. Voloshchuk, A. & Vakulina (2020) considered the development of tolerance qualities of future specialists and showed ways to improve them in the professional training system for the formation of a competitive specialist. The problem of tolerance is considered from the point of view of professional significance and professional quality of the specialist, which is based on professional knowledge and professional abilities.

The theoretical content of the formation of tolerance of future specialists was carried out by G. Mukhina (2021). Problems of tolerance are grouped. The concept of tolerance is characterized as a psychological and pedagogical phenomenon, and based on the study of this concept in various sciences, a conclusion is made about the meaning and essence of the concept of tolerance. The definition of tolerance was also defined by T. Zhuravel (2008) in his work. The author defines tolerance in any civilized society as the moral basis of communication. Proves the popularization of tolerance not only as mutual understanding between individuals, but as personal interaction that reduces the level of conflicts and crimes. Proves the importance of the level of tolerance for the inmates of the colonies and notes that increasing the level of tolerance in human behavior contributes to the achievement of the goal of resocialization. The scientist substantiates the impact of the change in the negative behavior patterns of the inmates of the colonies, shows the change in their attitude towards society, moral restructuring, and the new

vision of the inmates of the colonies of their life prospects.

K. Khomenko, O. Khomenko, & Ya. Khizhnyia (2018) showed the importance of a doctor's tolerance for his professional competence. The formation of personal qualities of future doctors in the conditions of hostilities is substantiated and the abilities corresponding to the challenges of the time are determined.

I. Targonii (2020) conducted a study and substantiated the significance of the complex problem of tolerance of education seekers, showing the process of formation of tolerance of education seekers during professional training in pedagogical colleges and in extracurricular time. The author theoretically substantiated and experimentally verified the pedagogical conditions for the formation of tolerance of students of pedagogical colleges during professional training and in extracurricular hours.

The above-mentioned authors emphasized that tolerance is of primary importance in the work of a teacher, and it is precisely in this that, unfortunately, a rather significant lack of respect and tolerance is felt. The understanding of tolerance as respect and recognition of equality, rejection of domination and violence, recognition of the multidimensionality of human culture, norms, beliefs, refusal to reduce this diversity to uniformity or to the superiority of any one point of view should be the basis of a teacher's professional activity.

The author O. Bryukhovetska (2018), in turn, analyzed the process of formation of professional tolerance among the heads of educational institutions, made a theoretical generalization of this problem and presented its new solution, specified the content, presented the essence of the formation trends. of professional tolerance of heads of educational institutions, professionally important qualities of heads are grouped and the possible levels of formation of tolerance of heads of general educational institutions are determined, and the components of tolerance are highlighted: actual managerial tolerance, self-tolerance, tolerance to interaction. with subjects of the educational process.

A. Molchanova (2013) highlighted the direction of the specialist's professional activity, highlighted the essential signs of tolerance, revealed the substantive meaning, presented the types of the analyzed phenomenon, substantiated the value approaches to the education of

tolerance in students, considered cultural, psychological and communicative approaches to the specialist's tolerance, proposed the author's recommendations regarding the process of self-education of a future specialist, tolerant interaction with education seekers.

V. Lyapunova (2016) researched and analyzed the components of the professional training of specialists, singled out the main problems that affect the process of deepening the competence of specialists, and also devoted her research to the issue of the formation of tolerance in children. The scientist substantiated the psychological principles and presented the age-related possibilities regarding the level of children's assimilation of tolerant values, revealed the methodology of forming tolerance in children, analyzed the world experience of training teachers to form tolerance in children.

L. Kondrashova (2006) developed the criteria of a culturally tolerant personality, provided methodical advice on the formation of a personality as a unique personality, conducted a typology of tolerance according to spheres of socialization.

Analysis of the researchers' works revealed a number of problems that significantly reduce the level of tolerance. Among them, the following can be distinguished: inadequate attitude of many of them to each other; persistent need to discuss all the problems that concern them; inability to listen and lead a discussion; intolerance to the views of others, etc. Therefore, education workers have a difficult task to teach and educate young people along with the development of their own national culture, to educate them in the spirit of peace and respect for all peoples, to understand and appreciate the uniqueness of other cultures.

The analysis of modern scientific and pedagogical literature indicates the need for further study of the problems of tolerance of future specialists, since certain aspects of it remain incompletely covered, in particular: the peculiarities of the preparation of the future teacher for the education of tolerance in student youth and his readiness to create a tolerant educational environment; the influence of external and internal factors on the education of tolerance, etc. Under such conditions, the problem of tolerance of future specialists in educational institutions becomes especially urgent, and its solution requires changes in the domestic system of pedagogical education.

## Methodology

To achieve the goal and implement the research objectives, a set of methods was used: theoretical - analysis and systematization of scientific literature on the research problem - to determine the object, subject, goal of the research, formulation of its tasks, clarification of the essence of the concepts "tolerance", "development of tolerance among students - future specialists"; synthesis, comparison, classification, generalization and systematization of theoretical and empirical data; empirical - diagnostic (interviews, testing, the method of unfinished sentences, solving life situations), indirect observation, to determine the levels of tolerance development in future specialists in the process of professional training.

The methodological basis of the research is the main laws of dialectics (transition of quantitative changes to qualitative new formations of the personality); the position of the theory of knowledge; the position of philosophical meaning about the relationship of special, general, singular; principles of the interconnection of phenomena and processes in science, the universe, the educational process; psychological and pedagogical theories of personally oriented, axiological, activity, system, competence, environmental, integrative, approaches; psychological and pedagogical theories of the development of education seekers and self-development of the individual during life; interrelationship of quantitative and qualitative parameters, processes and phenomena in the educational system of learning, acquisition of professional qualities of the individual, their systematic analysis and modeling; general didactic and specific principles of training highly qualified specialists.

## Results and Discussion

For the comprehensive development of the individual as a unique integral structure, an important factor is the formation of a society that creates conditions for development in the process of active self-realization and improves creative potential in the system of interaction with other civil subjects. Great importance is attached to tolerance as the ability to interact with society, which manifests itself in the exchange of skills, information, abilities, activities, skills, and experience. Within the scope of his research, G. Mukhina (2021) considers "tolerance" as a meaningful characteristic of a developed personality, which is consciously carried out: in the settlement of emotional, and adverse factors,

in mental stability under stressful conditions, in the acceptance of different views, in manifestations of external influences, agreement of other people's opinions.

E. Koikova (2008) analyzes tolerance and reveals its essence in four aspects:

- 1) as a virtue of the individual, identified in the world with the art of living, acceptance of different ideas; which accepts the ability to obtain freedom and have one's rights, while not violating the freedom and rights of other people;
- 2) as the acquisition of an active life position, based on the recognition of another subject;
- 3) as an attitude towards a person who freely accepts another person as he is, with his multidimensionality and identity inherent in his culture, its norms and rules, respecting his personal point of view and position, understanding and accepting the traditions, values and culture of the representatives of a different religion or nationality;
- 4) as a quality of the personality, while considering the limitations of the personality or quality of the personality to be a stable property that can determine its activity, behavior, and thinking characteristics.

Analyzing tolerant qualities, we note that their development must organize the educational process in such a way that during its organization, mandatory elements include: the formation of behavioral and cognitive strategies of a humanistic orientation, communicative and tolerant attitudes, value-oriented personal formations, etc. Such a strategy makes it possible, when structuring the components of the personality, to show the ways of the harmonious development of a tolerant person, who can help build effective relationships with other people in the place of a competitive specialist, expand the boundaries of their understanding and world perception, and work on personal aspects of self-development and self-actualization (Voloshchuk & Vakulina, 2020).

Tolerance is the art of coexistence in the universe of different individuals and their ideas, with the ability to have their freedoms and rights, without violating the freedoms and rights of other individuals. Tolerance is based on the way of interaction, focused on determining the boundaries of self-identification, self-development, and self-knowledge, which promotes cooperation with people, the humanization of society, and those who differ in

language, beliefs, appearance, faith, or customs (Bartosh et al., 2021).

Let's find out what types of tolerance can be divided into according to the social spheres of its existence:

- 1) gender tolerance - the attitude of impartiality regarding a person's attitude towards representatives of the opposite sex, the inadmissibility of a priori attributing to another person the disadvantages of the opposite sex, the impossibility of giving preference to one gender over the other;
- 2) age tolerance – the impossibility of admitting a priori "flaws" of individuals that relate to the age censor, the combination of age tolerance with respect for persons of advanced (respectable) age, which is commendable in many cultures;
- 3) educational tolerance - observed in the household sphere, provided that the level of legal education of people is the main factor;
- 4) inter-ethnic tolerance - a positive attitude towards people of different nations, the ability not to apply negative actions and shortcomings of representatives of nationality to people who do not belong to this nationality, the ability to relate to any individual from the position of "presumption of national innocence";
- 5) racial tolerance – a positive attitude towards persons of a different race;
- 6) religious tolerance – a positive attitude towards religiosity, dogmas of any denominations from the standpoint of believers and unbelievers, persons from groups of different denominations;
- 7) geographical tolerance - the inadmissibility of disrespecting people living in provincial, small villages, towns, and other regions by people living in big cities or the capital;
- 8) cross-class tolerance – tolerant attitude towards people of different property strata – the positive attitude of the poor towards the rich and the rich towards the poor;
- 9) physiological tolerance – a tolerant attitude towards the disabled, the sick, persons with physical defects, the physically handicapped, etc.;
- 10) political tolerance – an unbiased attitude to the activities of various associations, parties, tolerance to the statements of party members, etc.;
- 11) sexually oriented tolerance – respect for individuals, regarding their choice of non-traditional sexual orientation;

- 12) marginal tolerance – impartial attitude towards drug addicts, beggars, prisoners, etc. (Bochkor, Dubrovska & Zaleska, 2014).

There are different approaches to the education of tolerance in students of higher education institutions, which are inseparable from the search for the mandatory settlement of intolerant tendencies during the communication of students who are not the same in terms of ethnic origin, racial principle, do not share worldview values that are different, but for I have different life goals (Kozlova, 2019).

It is the task and duty of every person throughout his life to constantly cultivate in himself the values of human dignity and respect for the human personality and inviolability. Tolerance is based on the formation of value orientations, taking into account the interests of the future highly qualified specialist. And the result should be the development of a spiritually rich person who will be able to resist inhumanity and technocracy (Khomenko, 2018).

One of the social institutions is education. It contributes to the formation of tolerance, provided that cooperation, dialogue, and mutual respect are used. Tolerance is considered from different positions. We justify these positions:

- 1) the dialectical essence is manifested in the form of empiricism and rationalism;
- 2) the moral and ethical basis is conscience, duty, pluralism, and non-violence;
- 3) tolerance manifests the optimal mechanism in interaction with society, manifests itself in the individual's desire to get along with other people, coordination of all possible motives, orientations, and attitudes, while not showing suppression of human dignity and violence;
- 4) with the help of cooperation, mutual understanding is realized, while clarification, and acceptance of all people in all their many aspects, dialogue is important;
- 5) tolerance is a form of socio-psychological adaptation and a human condition (Targonii, 2020).

Consider the professional tolerance of a subordinate and the head of an educational institution has three types of orientation:

- intolerance (the type of tolerance is external). This type of tolerance is aimed at the environment and learners of the educational process. This type of tolerance is characterized by: acceptance of others as

they are, excessive yielding to other people, rejection of one's own beliefs in favor of another person, change of goals and intentions of one's activities and living conditions, the ability to treat oneself too critically, to have self-doubt in the uniqueness of his personality and as a result, there is a decrease in the efficiency of the work of both his specialist and the organization in which he works, that is, the internal desire to externally comply with the norms of tolerant behavior about subordinates, colleagues, parents, the public;

- intratolerance (the type of tolerance is internal). This type of tolerance is aimed at the manager and his personality. This type of tolerance aims at self-respect, positive acceptance of one's personality, self-confidence and belief in one's abilities, attitude towards oneself as self-worth, personal independence, and attitude to the chosen profession for self-realization. Without a type of internal tolerance, the leader allows immersion in long-term reflection about his actions and himself. Therefore, such tolerance is the main prerequisite for the survival of the individual. This is a special system of attitudes, values, views, and motives, which is manifested in the desire of the boss to build relationships with himself with the help of a responsible and free choice;
- a harmonious combination of intratolerance and intertolerance (the type of tolerance is balanced). This type of tolerance is manifested in professional activity (in the active position of this activity) and is represented by a positive attitude both towards the surrounding reality and employees and towards oneself as an individual and a manager. The following positions are relevant in this regard:
  - striving for novelty and flexibility in personnel management, using one's original management techniques;
  - readiness for cooperation, dialogue, and positive interaction with persons of any social group while preserving one's own identity;
  - the ability to unconditionally and positively manifest all aspects of one's "I", to demonstrate a sense of one's competence and the ability to competently and tolerantly solve professional issues. Understanding the value of one's individuality of a manager or a subordinate as an individual and manager becomes the norm and is always supported (Fabian et al., 2022).

The professional tolerance of a subordinate or manager involves the willingness to accept other people as they are, but at the same time it is necessary to preserve individuality, one's values, respect, and to recognize the equality of each individual. All these positions inherent in tolerance should not be reduced to conformism, indifference, or limiting one's interests (Bryukhovetska, 2016).

Let's analyze the principles of professional tolerance:

- the inadmissibility of violence as an impossible means of attracting employees to the proposed idea, which must be turned into a result - implies mandatory voluntary choice, freedom of action, and belief. The idea of tolerance, in this case, can be a kind of reference point that provides commonality and makes employees like-minded. With this approach, one cannot condemn or blame those who have not yet had time to fully integrate into the team and are not able to work fully;
- without forcing others, the ability to force yourself. With this approach, no violence or coercion matters, but conscious, voluntary self-restraint. We proceed from this position because coercion and fear from the outside do not contribute to tolerance and restraint, although as a factor of education at a certain moment employees and the entire team are disciplined. Such an opportunity by example and behavior of employees to tolerance and this is necessary for employees and managers;
- strict observance of norms, laws, and traditions. An important factor in the development of the organization is the recognition of the legitimacy of others, obedience to the laws, and not to the whims that the manager comes up with;
- acceptance of another employee who differs in cultural, national, religious, and other characteristics. If the manager wants people to treat them tolerantly, he should treat his subordinates the same way, but without giving up his position and imposing it on his employees (Perveen et al., 2020).

To reveal the essence of professional tolerance, let's summarize its functions, which are important in our research:

- regulatory function - the essence of the analyzed function consists in the implementation of an adequate state about

- specific situations in management, to each individual, to professional activity, taking into account the relationship to one's behavior and employees in the performance of the professional activity. All these essential positions are possible only based on adequate self-esteem, which has always been, is and will be a regulator of behavior;
- motivational function - forms the strength and composition of the teacher's behavior, his motivation for professional activity, expands his horizons and, under the condition of managers, skillfully evaluates other points of view of employees and evaluates another vision of the problem and its solution, provides an opportunity to develop life experience;
  - evaluation and prognostic function - forms the ability of the individual to work constructively not only with the staff but also with the environment from the outside and in conditions that are constantly changing; show clarity of actions to build a strategy of behavior, taking into account the existing norms, possible consequences of the prosperity of management situations. With such a human position, it is necessary to be in the trend of constant demands from society, to expand contacts, dialogues, and activities;
  - adaptation function - can effectively counteract the negative factors of the professional environment, is aimed at preserving the adaptation potential, and allows the individual to apply an emotional, positive, constant, stable attitude to the object and subject of joint relations in their activities in the process of cooperation. The adaptation function is in constant connection with the positions that a person should demonstrate in the process of his professional activity: self-control, willpower, self-regulation, endurance;
  - developmental function - provides the ability for an active life position, for self-regulation, development, the autonomy of the individual, provides deeper motivation, contributes to the development of judgments based on moral values;
  - psychotherapeutic function - supports and develops the self-esteem of the individual, contributes to the reduction of a person's sensitivity to adverse factors, and is the main factor in normalizing the psychological atmosphere in a certain institution (support, an atmosphere of trust, recognition, respect);
  - integrative function - counteracts internal and external conflicts, which are threatening when preserving the workable atmosphere

of a certain team; ensures the stability of this team, and in further activities stimulates the further moral development of a person in a certain team and provides opportunities for self-determination to the professional during interaction and communication in the team (Bryukhovetska, 2016a; 2018).

The formation of intolerance or tolerance occurs during the evaluation of the object. With a positive assessment of the object, there is a positive attitude towards it, which leads to positive motivations regarding its position. The consequence of this is natural tolerance. If the evaluation is positive during evaluation, then we have positive intentions and attitudes toward the object. A positive assessment also includes an assessment of a person's behavior as a colleague, subordinate, or manager. Such a process is identity tolerance. If the assessment of the object is negative, then constructive tolerance appears, that is, there is an opportunity to benefit from those personality differences that appeared in the process of people's contact. If a person does not want to deal with the object due to a negative attitude towards the object, then this indicates the presence of adaptive tolerance, and this approach makes it possible to adapt to adverse factors (Stoykov, 2019).

The advantageous position of condescending tolerance is that what a person has a negative attitude toward does not affect him personally, otherwise he would not show tolerance. Permissive tolerance, in most cases, is formed during upbringing.

If a person receives a negative evaluation and if a negative motivation and attitude towards the object have developed, there is no cooperation, then intolerance arises. If there is an instruction for cooperation, even though the assessment is negative, problematic tolerance can be formed (Budnyk et al., 2022).

As the final result of the formation of human tolerance, there must be a culturally tolerant personality.

Let's note the criteria of a culturally tolerant personality:

- a person who respects ancestors and their cultural and ethical heritage;
- understands the ambiguity and multifacetedness of the educational environment;
- ready for adequate, unbiased evaluation, manifestation of empathy by subjects,

- perceives adequate judgments about themselves and other people;
- determined to respect, and positively interact with people of other cultures, adequately accept their traditions and views, etc.;
  - shows a tactful attitude toward the subjects of cooperation or communication, a respectful and benevolent attitude to the habits, traditions, beliefs, views, opinions, beliefs, and behavior of other people;
  - adheres to socially accepted norms of behavior in activities and communication, appearance, etc (Kondrashova, 2014).

Let's single out the most important criteria of a culturally tolerant personality (according to L. Kondrashova (2006). Such criteria are:

**Cognitive criteria.** They are characterized by the manifestation of the importance of understanding one person to another, the manifestation of humane feelings, and a benevolent attitude towards a colleague or interlocutor (expression of a personal attitude towards another person, benevolence, affection, friendliness, sympathy for a person, sympathy for the interlocutor, expression of joyful feelings from the success of a peer, whether an elderly person, the desire to please her); understanding showing respect for opinions, giving them importance, supporting ideas and values that are important to other people; respecting the equal rights of every individual (the right to play, the right to express one's opinion, etc.); confidence in the need to respect the opinion, culture, and traditions of the surrounding people;

**Emotional and evaluative criteria.** They provide an opportunity to speak when a person is ready to compare his actions with acceptable moral norms, taking into account interpersonal interaction and the ability to evaluate other people from the position of benevolence; the desire to assess the prediction of the consequences that may be due to any reason, to the ability to assess the state of a person and the further development of the situation, during which the emotion performs an anticipatory function and leads to the possibility of performing moral actions; the opportunity to evaluate one's actions and the actions of one's employees, comrades, or other people, relying at the same time on the norm of behavior in public places, etc.

**Behavioral criteria.** They focus on stable formulas in behavior, that is, on etiquette rules, using their independent use in situations of standardized speech communication (politely say goodbye, greet warmly, listen carefully, do not

interrupt the interlocutor, politely make a request, use words of gratitude, apologies during communication); the need for comfortable language interaction when working with subjects of communication, to maintain a friendly atmosphere during communication; to have an emotional and positive attitude to the actions of the community and to show cognitive interest and to comply with the norms of cultural behavior in transport, public places, in the theater; understand and accept someone else's way of thinking, feelings, ideas, thoughts or beliefs; to always be ready to cooperate with people, respond to the emotional state of people who differ in language, appearance, beliefs, etc.; the ability to tolerantly show interest in the opinions of other people, because every person has the right to his own opinion; in the process of realizing a valuable attitude towards the environment, treat other people loyally, give colleagues or friends, students of education freedom of choice, show selflessness; to positively direct one's actions towards partnership in behavior and communication; show kindness when communicating with peers; be ready for respectful, constructive interaction with people of different nationalities; be guided by the norms of benevolent behavior of people; show respect for representatives of other nationalities, be tolerant of their culture, language, etc.; show humane feelings in everyday life towards each other, etc.

Let's consider the components of a tolerant personality (according to V. Lyapunova (2016):

- motivational and value component – perception of the culture of tolerance as a value, formation of motivation;
- cognitive component – the presence of conscious knowledge about ways to react in different situations;
- emotional-volitional component – the manifestation of a positive attitude towards other people, self-control of the individual, human endurance, assessment, perception of one's actions and the actions of other people about a tolerant culture;
- behavioral component - tolerance is manifested in the restraint of criticism, relative to a different point of view; restrained reaction to troubles, conflict situations.

Today, great importance is attached to the researched question in the preparation of future teachers for the education of tolerance in education seekers. Education of a tolerant personality involves, first of all, familiarization

with the principles of tolerant pedagogical interaction and obtaining ideas about international tolerance, problems of tolerance, formation, and education of tolerance. Such training will be effective under the condition of ensuring the flexibility and multicultural focus of programs, and curricula of higher education institutions, as well as the use of the latest technologies in education, the mandatory integration of all educational courses, which are based on the following approaches: activity-based, competence-based, personally oriented, humanistic, comparative, cultural.

Tolerance is a global problem and education is the most effective way to its formation. Education contributes to the formation of students' thinking skills regardless of the situation, and critical thinking based on moral values.

Being a tolerant person means recognizing the possibility of a person differs in position, appearance, behavior, interests, and values and not belittling his individuality at the same time (Molchanova, 2013).

### Conclusions

The foundations for developing tolerance in individuals, as a primary aspect of professional competence for future specialists across all levels, are established.

Various definitions of tolerance are provided, and a typology of tolerance is developed based on the social spheres in which it exists.

Three types of individual professional tolerance orientations are analyzed: external tolerance (intertolerance), internal tolerance (intratolerance), and balanced tolerance (a harmonious combination of intertolerance and intratolerance).

The principles, functions, and criteria for professional tolerance and a culturally tolerant personality are emphasized.

A study of the current state of future specialists' training reveals that their preparation for fostering tolerance among young people primarily involves familiarization with the fundamentals of tolerant pedagogical interaction and acquiring general knowledge about international tolerance, as well as certain aspects of tolerance-related issues, its development, and education.

The typology of tolerance based on the social spheres of its existence requires further exploration, which will be the focus of our ongoing research.

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## Minimum wage in the system of state social guarantees: International comparative-legal experience

### Мінімальна заробітна плата у системі державних соціальних гарантій: міжнародний порівняльно-правовий досвід

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#### Abstract

In the conditions of the development of the market economy, attention is drawn to the problem of the appropriate level of wages as a state social guarantee. The level of earnings of each working citizen affects the total income of the population, which contributes to the formation of demand for goods, works, and services and the level of the economy. The purpose of the work is to study the current problems of the payment mechanism in current conditions and establish the minimum wage in different countries. The research methodology includes such methods as the dialectical method, the method of analysis and synthesis, deduction and induction, the method of analogy, the historical-legal method, the systematic method, the formal-legal method, and the comparative-legal method. As a result of the conducted research, the minimum wage standards in Ukraine, despite the increase, remain one of the lowest among European countries. It is outlined

#### Анотація

В умовах розвитку ринкової економіки, увагу привертає проблема належного рівня заробітної плати як державної соціальної гарантії. Так, рівень заробітку кожного працюючого громадянина впливає на сукупний дохід населення, що сприяє формуванню попиту на товари, роботи і послуги та на рівень економіки загалом. Метою роботи є дослідження актуальних проблем механізму оплати праці в сучасних умовах та встановлення мінімальної заробітної плати в різних країнах. Методологію дослідження складають такі методи, як: діалектичний метод, метод аналізу та синтезу, дедукція та індукція, метод аналогії, історико-правовий метод, системний метод, формально-правовий метод, порівняльно-правовий метод. В результаті проведеного дослідження стандарти щодо мінімальної заробітної плати в Україні, незважаючи на підвищення, залишаються одними з найнижчих серед європейських країн. Узагальнено, що в європейській практиці використовують три основних підходи до

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that in European practice, three main approaches are used to establish the minimum wage: based on the minimum needs of the employee; based on establishing a size that is 2-2.5 times higher than the subsistence minimum, and based on a comparison of the sizes of the minimum and average wages.

**Keywords:** minimum wage, social guarantees, wages, wage system, state regulation of wages.

## Introduction

With Ukraine's course towards European integration, a strategic goal has been declared - "achieving European living standards" and ensuring basic state social standards and guarantees at the level of the European Union countries.

Based on the analysis of the experience of foreign countries, which was carried out by experts of the International Labor Organization (hereinafter – the ILO), several normative legal acts were adopted regarding the standards of minimum wage provision. Thus, the Convention of June 16, 1928, No. 26 "On the Establishment of a Procedure for Establishing a Minimum Wage" (International Labor Organization, 1928) provides that the established minimum wage is mandatory for of the respective employers and employees and shall not be reduced either by individual agreement or, unless there is a general or case-specific authorization by the competent authority, by collective agreement. The same provisions are followed in Art. 2 of the ILO Convention of June 22, 1970, No. 131 "On the Establishment of the Minimum Wage with Special Consideration for Developing Countries" (International Labor Organization, 1970), in particular, emphasized the legal meaning of the minimum wage: it is not subject to reduction, therefore, the employer has no right to pay the employee a wage below this limit.

Following international standards, the level of the minimum salary is considered as a lower limit, which should guarantee the satisfaction of the basic life needs not only of the worker, but also of his family, while, as a rule, the "set" of such needs is not defined, but the possible criteria for their establishment are indicated.

The Charter of the European Community dated December 9, 1989, "On the Basic Social Rights of Employees" (European Community, 1989) defines that employees should be provided with a fair wage, that is, a wage sufficient to ensure a decent (satisfactory) standard of living, in

встановлення мінімальної заробітної плати: на основі мінімальних потреб працівника; на основі встановлення розміру, який у 2–2,5 рази перевищує прожитковий мінімум, і на основі зіставлення розмірів мінімальної та середньої заробітної плати.

**Ключові слова:** мінімальна заробітна плата, соціальні гарантії, оплата праці, система оплати праці, державне регулювання оплати праці.

addition, it is established that in the case of deductions from wages, measures should have been taken to continue receiving the necessary funds for the employee and his family members. So, as we can see, international documents provide for the obligation to ensure minimum standards for remuneration.

The current legislation of Ukraine practically duplicates the recommendations of the ILO. In particular, the Constitution of Ukraine, the Code of Labor Laws, and the Law of Ukraine "On Remuneration" state that the amount of the minimum wage is determined taking into account the needs of employees and their families, the value of which is sufficient to ensure the normal functioning of the body of an able-bodied person, the preservation of his health food products, a minimum set of non-food products and a minimum set of services necessary to satisfy the basic social and cultural needs of an individual, as well as the general level of average wages, labor productivity and the level of employment (Law 254k/96-VR, 1996; Law 322-VIII, 1971; Law 108/95-VR, 1995). However, the size of such "minimum" required provision differs in each of the states.

The article analyzes the institution of wages and investigates the issue of guarantees for the realization of workers' rights to fair wages in different countries, notes the problematic issues of the implementation of the wage function and its impact on the country's economy, taking into account various factors.

## Theoretical Framework or Literature Review

During the comparative legal analysis of the minimum wage in the system of social guarantees, the works of the following scientists were studied: Baranov, Galayda and Ryabukh, Gerasymenko, Golosnichenko and Dovzhik, Klymenko, Kupina, Krokhmal and Parkhomenko-Kutsevil, Laptev, Lopushnyak,

Mashevskaya, Pyzhova, Rekun, Stavarska, Shevchuk, and Gaidar, and Utvenko.

In the work of Baranov (2011), the global experience of building an effective system of remuneration at the enterprise was analyzed. In particular, the author researched the foreign experience of remuneration systems, personnel remuneration models, and their relationship with the results of the work of an individual employee, business unit, or enterprise as a whole. The criteria for the effectiveness of the labor motivation system and its effects on achieving the strategic goals of the enterprise are analyzed.

The European experience of applying effective systems of remuneration and motivation of the company's employees became the object of research by Galayda and Ryabukh (2016). The authors concluded that one of the most important problems of the organization of wages at enterprises in Ukraine is the lack of an effective mechanism for the interest of employees, which would be able to ensure as close as the possible relationship between their wages and the actual labor contribution of each employee and the enterprise team as a whole, on the one hand, but was economically justified and would correspond to the company's development strategy – on the other hand, it would not contradict either the laws of the market economy or the principles of social responsibility of business and social partnership.

Global standards and Ukrainian realities regarding the minimum wage are explored in the article by Gerasymenko (2011). The author notes that currently, Ukraine is significantly behind European countries in terms of the minimum wage. The author also researched that, taking into account changes in economic indicators and price growth in many countries, there is an automatic algorithm for increasing the minimum wage. However, in the legislative norms of a significant number of states, there are no clear instructions on when it is necessary to increase the salary, and, therefore, in recent years, the gap between the minimum and average salaries has become obvious.

Problematic issues and ways to solve them related to wages are considered in the article by Golosnichenko and Dovzhik (2014). The author confirms that the improvement of wage systems, the search for new solutions, and the in-depth study of Western experience can help solve several problems related to wages in Ukraine, qualitatively improve its condition, and create the

basis for increasing the interest of employees in highly productive work shortly.

The international legal and domestic context regarding social security standards and guarantees is regarded in the work of Klymenko (2019). Peculiarities of legal regulation of decent wages are studied in the research of Kupina (2021). The general principles of state management in the sphere of labor remuneration were studied in the study of Krokmal and Parkhomenko-Kutsevil (2022).

Theoretical aspects of remuneration in the context of effective motivation of the company's personnel are disclosed in the work of Laptev (2015).

The practice of Ukraine and European countries regarding the minimum wage is analyzed in the work of Lopushnyak (2017). The author suggests that the restoration of inter-job relations should bring the subsistence minimum to its actual size and, using the experience of EU countries, establish a legislative norm of mandatory adjustment of the major state social standards and guarantees in the field of income following the inflation index in the event of an increase in consumer prices by more than 2 %.

Mashevskaya (2022) noted the peculiarities of foreign experience regarding the use of labor systems and employee motivation.

Pyzhova (2020) analyzed the triad of the interaction of the minimum wage, fair wages, and a decent standard of living in the context of international experience. Thus, the researcher concluded that the core of the category guaranteeing the realization of workers' rights to fair remuneration is the issue of the minimum wage and fair remuneration. The author analyzes the Conventions of the International Labor Organization on the raised issue. At the same time, it is remarked that the minimum wage should be established taking into account the interests of employees, as well as their family members, and at the same time taking into account the interests of economic development. The challenges and prospects of the state regulation of labor remuneration in Ukraine were investigated in the work of Rekun (2017).

Stavarska, Shevchuk, and Gaidar (2018) also drew attention to the state policy of regulating wages in the context of sustainable development of the country. Utvenko (2018) analyzed in detail the theoretical foundations of the system of social security and social support.

Given the above, the study of such a social guarantee as the minimum wage was studied among scholars. However, a comprehensive study of international-legal experience on this issue has not been conducted so far.

### Methodology

The dialectical method played an important role in the study of the international legal experience of minimum wage regulation. Thus, with the help of general laws of development, which reflect the development of all spheres of social life and thinking, and not with partial laws, which reflect the development of only one sphere of reality, it was revealed what the legal nature of wages is, by what norms it is determined, on what grounds it is assigned, and why it is important to ensure minimum wage standards for workers.

In studies of international experience regarding wages, the method of analysis and synthesis should be rationally applied to examine the general interpretation of social guarantees and their essence, the characteristics of the properties of social legislation, the establishment of regularities regarding the application of the norms of social legislation, as well as the selection in the legislation of Ukraine of such elements that influence the formation of standards regarding the payment of the minimum wage.

Deduction and induction are of great value for the analysis of legal categories related to the subject of state social guarantees from individual to whole for the detailed disclosure of the problem, and analogy as a method that contributes to the identification of both external and internal factors that affect the process of providing minimal guaranteed by the state.

The use of the historical-legal method provided wide cognitive opportunities, as it made it possible to reveal the essence of the investigated phenomena in cases where it is not obvious, based on the available facts, and to identify the general and recurring, necessary and natural, on the one hand, and qualitatively excellent - on the other hand. With the help of a detailed retrospective analysis of the establishment of the minimum wage in the world and on the territory of Ukraine, it can be stated that the direct historical influence forms the current state. Thanks to the historical-legal method, the formation of social legislation was characterized in chronological order, as a result of which it will be clear what economic, political, and social conditions influenced the adoption of this or that

act and, in turn, reveal the features of this or that stage. Also, taking into account the historical features, it is possible to single out the shortcomings of the legislation on payment of labor at certain stages and determine the directions of optimization of this area.

The use of the system method is conditioned by the need to obtain a very specific result, when it is impossible to expect that this result will appear by itself, in a natural way, and it has to be constructed under the conditions of time and resource limitations, as well as the complication of social processes. The system method serves as an adequate means of research and development not of any objects that are arbitrarily called a system, but only of those that are an organic whole. Therefore, thanks to the use of the system method, it became possible to study the minimum wage in the system of social guarantees as a complex phenomenon.

With the help of the formal-legal method, the content of legal norms or phenomena in their stable state was isolated, and the general features of the researched object, its features, structure, and classification were determined. Due to the connection with the rules of logic and language, the specified method helped formulate the definition of legal concepts, make their description, classification, and systematization, and create a coherent conceptual system.

The application of the comparative legal method was laid out in the most significant part of the materials on the social legislation of foreign countries. Also, this method became useful for the optimization of national social legislation, as well as the comparison of legal norms of Ukraine in the social sphere with the norms of foreign countries making it possible to identify common and distinctive features and understand the patterns of development of social legislation in the world.

### Results and Discussion

Before analyzing the international comparative-legal experience regarding the establishment of the minimum wage, let's find out what role the payment of labor plays as a state social guarantee.

In the general sense, remuneration is understood as remuneration, as a rule, in the monetary equivalent, which the owner or a body authorized by him pays to the worker for the work performed by him (Golosnichenko, & Dovzhik, 2014).

The payment of labor performs the following functions (Table 1):

**Table 1.**  
*The Functions of Ppayment of Labor.*

<b>The Function of Payment of Labor</b>	
Reproducible	providing employees with the necessary life benefits for the reproduction of the workforce;
Stimulating	establishing the dependence of its size on the quantity and quality of work of a specific employee, his labor contribution to the results of the enterprise;
Regulating	optimization of the placement of the workforce by regions, and branches of the economy, taking into account the market situation;
Social	reflects the measure of living labor in the distribution of the consumption fund between the employee and the owner of the means of production;
The function of forming the solvent demand of the population	coordination of solvent demand, which is usually understood as the form of identifying needs provided by buyers' funds, on the one hand, and the production of consumer goods, on the other.

Data Provided by Golosnichenko, & Dovzhik (2014).

The specified wage functions are closely interrelated, but only with their totality is wage efficiency achieved. Given this, it is essential to ensure the minimum wage is under the real needs of the population to perform the functions of remuneration.

universal nature and the presence of international legal regulation, this noteworthy indicator of the population's standard of living does not always meet its real needs. We will analyze the international experience on this issue in more detail.

Therefore, a vital social guarantee operating in the world is the minimum wage. Despite its

The international practice uses three approaches to calculating the minimum wage (Table 2):

**Table 2.**  
*International approaches to calculating the minimum wage.*

<b>Approaches to Calculating the Minimum Wage</b>	
Consideration of the minimum needs of the employee	The size of the minimum wage is determined based on the subsistence minimum.
Setting a size that is 2-2.5 times higher than the subsistence minimum	Expenses for providing a "consumer basket" are taken into account.
Consideration and comparison of minimum and average wages	This comparison takes into account EU indicators and ILO recommendations.

Data provided by Lopushnyak (2017)

The minimum wage institute operates in many countries. But the models for establishing minimum wage standards are different.

**Table 3.**  
*Models of setting the minimum wage in foreign countries.*

<b>Models for Setting the Minimum Wage</b>		
<b>Model</b>	<b>Country</b>	<b>The essence</b>
Determination of minimum standards by the government	Portugal, Slovenia, Spain, the Czech Republic, Poland, Greece, Slovakia, Croatia, the Netherlands	The level of the minimum wage is determined unilaterally by the government
Determination of minimum standards by the government, taking into account the recommendations of social partners	Bulgaria, Estonia, Latvia, Lithuania, Hungary, Romania, Germany, Ireland, Great Britain	Consultation with a special advisory body or group of social partners

Determination of the minimum wage takes place in accordance with the established rule and on the basis of consultations with social partners	Belgium, Luxembourg, Malta and France	Periodic review of standards and mandatory automatic indexation according to the consumer price index
Establishing the federal and regional minimum wage	USA	On the basis of consumer prices and standards, minimum wage standards are established both nationally (minimum) and minimum in each region
Establishing only the regional minimum wage	Japan, Canada	Minimum wage requirements for each region are established
There are no laws on minimum wage standards	Finland, Norway, Italy, Germany, Denmark, Austria, Sweden	There is a tradition of concluding collective agreements between interested parties

Data provided by Gerasymenko (2011).

Despite the establishment or lack of minimum wage standards in various countries, today, in countries with a developed market economy, considerable attention is paid to strengthening the stimulating role of tariff wages, the basis of which is the concept of a flexible tariff. That is, it is the improvement of the qualifications of employees and the stimulation of individual results of their work, primarily production and quality of products (Mashevskaya, 2022). At the same time, the mechanism of state regulation of wages is increasingly based on the ratio of such components as the minimum wage, the limit of its growth in the period of inflation, tax policy, the general procedure for indexation of incomes, forms, and systems of labor remuneration, etc. (collective contractual regulation on branch level); amounts of tariff rates and salaries, surcharges, and allowances (collective agreements); average salary (labor market). This mechanism opens up good opportunities for social dialogue and social partnership.

Taking into account the fact that, compared to the CIS countries, the minimum wage in Ukraine is lower than in Azerbaijan, Armenia, Belarus, and Kazakhstan and much lower than in European countries, Ukraine needs to implement standards for the comprehensive assessment of an employee to pay for his work, providing opportunities for his proper financial condition. Establishing effective wage levels, optimizing wage costs, and at the same time developing and applying an effective motivational mechanism is an important and difficult task. However, it is only by implementing positive European and international experiences that it is possible to solve some problems that are reflected in the general state of the country's economy.

## Conclusions

1. The payment of labor performs such functions as reproductive, stimulating, regulatory, and social, and the function forms the solvent demand of the population. Wage functions are interrelated, but wage efficiency can only be achieved when they interact.
2. Among foreign countries, there are different models of wage setting: determination of minimum standards by the government; determination of minimum standards by the government, taking into account the recommendations of social partners; determination of the minimum wage takes place under the established rule and based on consultations with social partners; establishment of federal and regional minimum wages; establishing only the regional minimum wage; there are no laws on minimum wage standards. Each of the models contributes to ensuring the social function of the state.
3. The study of the experience of foreign countries and the provisions of international legal acts made it possible to assert that during the development of the institution of labor remuneration, it is important to guarantee the rights of workers to fair wages and at the same time implement a system of motivating workers to receive higher wages per their efficiency.

As for further scientific research, we consider it necessary to analyze in detail the ways of solving the problem of forming and providing minimum state social guarantees regarding the minimum wage both in Ukraine and abroad.

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## The question of digital prostitution's criminalization and decriminalization: International-legal experience

### Щодо питання криміналізації та декриміналізації цифрової проституції: міжнародно-правовий досвід

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#### Abstract

Regulation of the digital sex industry is a topic of debate at both national and international levels. While there is an increasing interest in decriminalizing sex work, digital prostitution remains illegal in many countries. Therefore, it is crucial to analyze the international experience of criminalizing and decriminalizing digital prostitution, and to pay attention to the problematic issues that arise during this process. The objective of the study is to explore the international experience of criminalizing and decriminalizing digital prostitution, while the subject of the study is the social relations that emerge during this process. The research methodology employs various methods, including philosophical, logical, special-legal, system analysis, and formal-dogmatic methods. The research concludes that different countries treat the criminalization and decriminalization of digital prostitution differently. Sex workers in this industry advocate for decriminalization as it

#### Анотація

Регулювання цифрової секс-індустрії є темою дискусій як на національному, так і на міжнародному рівнях. Незважаючи на зростаючий інтерес до декриміналізації секс-бізнесу, цифрова проституція залишається незаконною в багатьох країнах. Тому вкрай важливо проаналізувати міжнародний досвід криміналізації та декриміналізації цифрової проституції та звернути увагу на проблемні питання, які виникають під час цього процесу. Метою дослідження є вивчення міжнародного досвіду криміналізації та декриміналізації цифрової проституції, а предметом дослідження є суспільні відносини, що виникають під час цього процесу. У методології дослідження використовуються різноманітні методи, зокрема філософські, логічні, спеціально-юридичні, системного аналізу, формально-догматичні. В результаті дослідження встановлено, що країни по-різному ставляться до криміналізації та

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puts power directly in their hands and eliminates legal barriers. Countries that have decriminalized digital prostitution believe that sex work is legitimate work and should be treated with respect. However, countries have different models of criminalizing prostitution, including the legalization of digital prostitution with criminal liability for deviations from established state rules.

**Keywords:** crime, criminal code, online prostitution, sex workers, criminal liability.

## Introduction

The use of information technologies brings about changes in people's lives each year, leading to the emergence and transformation of various phenomena. One of these phenomena that has been affected by the digital transformation and the new opportunities for communication on the Internet is prostitution, which has given rise to the existence of digital prostitution.

Different countries have varying attitudes towards regulating the provision of sexual services and the distribution of intimate images for a fee on the Internet. However, recognizing prostitution as a legal activity did not follow an evolutionary process starting with a complete ban and ending with legalization. Calls for legalizing and taxing prostitution were already present thousands of years ago in different parts of the world. For instance, prostitution "for religious reasons" was legally permitted in temples in the Middle East and Mediterranean regions, and ancient Sumerian texts included prostitution as a common occupation. Researchers have observed similar practices among the Aztecs, while the Incas regulated prostitution through government officials, and Greek heterosexuals had to pay taxes on it. In Ancient Rome, prostitution was legal, registered, and widely practiced. In the East, Japanese brothels were popular among Asians and Western travelers, and West Indian trading companies were involved in the trade of Japanese women for prostitution. Even in Muslim societies, prostitution was formally banned, but legal harems were created, which effectively legalized the sexual slavery of women.

декриміналізації цифрової проституції. Секс-працівники цієї індустрії виступають за декриміналізацію, оскільки усуваються правові бар'єри здійснення даного роду діяльності та підвищення прибутку. Країни, які декриміналізували цифрову проституцію, вважають, що секс-бізнес є законною роботою і її слід сприймати на рівні з іншими професіями. Проте, слід відзначити, що в країнах існують різні моделі криміналізації проституції, зокрема легалізація цифрової проституції з кримінальною відповідальністю за відхилення від встановлених державою правил.

**Ключові слова:** злочинність, кримінальний кодекс, інтернет-проституція, працівники секс-бізнесу, кримінальна відповідальність.

The way in which society views the legalization and decriminalization of prostitution varies, with some countries opting to protect women from sexual exploitation and violence instead of upholding liberal values and free choice. Although prostitution is illegal in most countries, including Ukraine, the ban is often just a formality. The Ukrainian Constitution (Law 254k/96-VR, 1996) prioritize the protection of a person's life, health, dignity, and sexual freedom. Furthermore, in Ukraine, both prostitution and pimping are subject to criminal and administrative liability as stipulated by Article 303 of the Criminal Code (Law 2341-III, 2001) and Article 181-1 of the Code of Ukraine on Administrative Offenses (Law 8073-X, 1984).

However, there are differing opinions within the public regarding the legalization and taxation of prostitution, and the criminalization of prostitution with more severe punishment. To understand the role of digital media in ensuring the rights of women and men in the sex trade, it is important to analyze the existing definitions of digital prostitution and the various approaches to its regulation internationally. This will aid in better understanding the impact of prostitution on modern society.

As there is no agreement on the definition of prostitution at the international level, it is useful to look at individual states' policies on the matter. Generally, four main political models for prostitution are recognized: full criminalization, full decriminalization, partial decriminalization, and legalization. However, many states have not yet decided on which model to adopt, making it

crucial to examine the potential benefits and drawbacks of criminalization and decriminalization. Additionally, the regulation of digital prostitution is still largely unexplored. Therefore, it is necessary to study the international legal experience of criminalizing and decriminalizing digital prostitution, as well as identify key trends in regulating this issue.

### Theoretical Framework or Literature Review

Researchers from both domestic and foreign backgrounds have studied the international legal approaches to criminalizing and decriminalizing digital prostitution. Zaitseva (2018) examined the Swedish model of combating prostitution and concluded that it represents a third way beyond the traditional dilemma of "forbid/allow," emphasizing a systemic approach to reducing prostitution and human trafficking while supporting women. The author argues that the Swedish model is effective in achieving its goals. Mykhaylyn and Radutny (2020) researched the issue of legalizing prostitution and pimping as a legal and social problem. They suggest that engaging in prostitution and related activities does not pose a threat to society or harm public interest. They also argue that legalizing prostitution would have several advantages, such as increasing state revenue through taxation, improving the welfare of prostitutes, reducing the spread of venereal diseases, and decreasing corruption in law enforcement agencies.

Onishko (2020) conducted an analysis of the legal, social, and historical aspects of legalizing sexual services. Savinova (2012) focused on the general provisions of criminal law and the development of the information society in Ukraine. Armstrong (2016) examined the changes in the relationship between police and street sex workers in New Zealand after sex work was decriminalized in 2003. Azzopardi (2021) wrote an article discussing the legalization of prostitution in Malta and the social problems it may or may not solve. Jong B. (2021) analyzed the different models of legalization of prostitution that could be implemented in Malta. Koenig B., Murphy A., Johnston S., Pearson J., Knight R., Gilbert M., Shannon K., and Krusi K. (2022) analyzed the regulation of digital prostitution and the need to decriminalize sex work while promoting it as a form of work, developing standards for online sex work platforms, and prioritizing the safety of sex workers.

Alexander (2010) conducted a study on human rights in the context of sex work. Mgbako C.,

Bass K., Bundra E., Mehak Jamil, Jere Keys, and Lauren Melkus (2017) examined the decriminalization of sex work in South Africa, while Machat S., Shannon K., Braschel M., Moreheart S., and Shira M. Goldenberg (2019) analyzed the effects of criminalizing prostitution in Canada. The authors found that criminalization may not improve working conditions and safety for sex workers, and may even lead to negative consequences such as further shadow activities. Samuel Lee Petra Persson (2022) emphasized the need for optimal regulation of sexual service markets and highlighted the possibility of a prostitution market with both voluntary and forced participants. The author argued that criminalization harms voluntary service providers, while decriminalization may promote human trafficking. Lucy Platt, Pippa Grenfell, Rebecca Meiksin, Jocelyn Elmes, Susan G. Sherman, Teela Sanders, Peninah Mwangi, and Anna-Louise Crago (2018) focused on health issues faced by women engaged in sex work.

Melanie C. Basil (2015) argues that while it may not be safe to say that prostitution should be legalized in the United States, it is safe to say that the current political model is ineffective. The author points out the flaws in the current system of regulating prostitution in the US, including the social stigma attached to those labeled as "criminals" due to their forced labor in illegal conditions, as well as the reduction in identifying potential victims of human trafficking as a result of criminalizing prostitution.

Yvette Tan (2022) examined Singapore's legislation on regulating digital prostitution, and the issue of digital prostitution was also explored. Davis B. (2022) analyzed the features of digital prostitution through the functioning of the OnlyFans platform. The literature reviewed highlights that prostitution's criminalization and decriminalization have been extensively studied by scholars, both nationally and internationally. However, there is a lack of research on the international legal experience of criminalizing or decriminalizing digital prostitution, indicating the need for further investigation into this issue.

### Methodology

By utilizing a variety of techniques for understanding legal concepts, it has become feasible to examine the international legal experience concerning the criminalization and decriminalization of digital prostitution. The study of digital prostitution is based on

philosophical methodologies, which serve as methodological principles for knowledge and methodological functions in understanding particular subjects. Philosophical categories, which are integral components of scientific knowledge, are used in this study. The utilization of dialectical knowledge principles, such as comprehensiveness, concreteness, objectivity, complete knowledge, bifurcation of the one, and understanding of its contradictory aspects, enabled the comprehension of the nuances of criminalization and decriminalization of digital prostitution. Furthermore, it facilitated the discovery of the contents of legalization and decriminalization models in various countries.

The investigation of the cause-and-effect relationship between legislative changes and social changes related to the criminalization and decriminalization of digital prostitution was made possible through the application of logical methodologies, such as analysis, synthesis, induction, deduction, analogy, and movement from abstract to concrete and vice versa. These logical techniques were utilized throughout the entire process of analyzing the subject matter. In particular, logical methods were of significant importance in formulating the concepts of "digital prostitution," "criminalization," "decriminalization," and "legalization," identifying the characteristics of these phenomena, and examining their operations in specific countries. Furthermore, logical techniques facilitated the analysis of normative legal acts, comparison between them, and identification of the common features connecting them.

Throughout the research, a concrete historical method was employed, which enabled a better understanding of the essence and underlying reasons for the enactment of legislation in various countries. Analyzing a state's history can provide valuable insights into the state's present role and functions, aiding in understanding its past. Simultaneously, understanding both past and present trends can help identify the direction of the state's and its legislation's future development. The identification of general properties was given special attention to particular historical events that reflected unique factors that influenced the formation of specific legal norms. Every society has its unique culture, historical experience, traditions, and worldview, which can affect the development of legal norms. Specific historical methods helped to reveal the dynamics of legislative development concerning criminalization and decriminalization of prostitution (including digital) across different

countries, highlight the features of the periods influencing these phenomena, and identify the legislative changes' distinctive features.

System analysis methodologies were used to comprehend the structure and components of different countries' legal systems. In particular, these methods helped clarify the connection between the legal system and the criminalization/decriminalization of digital prostitution.

The formal-dogmatic method was applied to analyze the external forms of law expression and interpret legal norms. This was necessary to understand the guiding principles underlying the adoption of legislative acts and norms of both international and national law. This method facilitated the identification of certain patterns in the formation, functioning, and development of criminalization and decriminalization legislation concerning digital prostitution in various countries worldwide.

## Results and Discussion

The emergence of digital platforms that facilitate the sharing of sexual content has revolutionized the traditional concept of prostitution and enabled individuals to earn money without physical interaction by using such platforms.

One prominent example of such a platform is OnlyFans. This platform operates as a subscription-based service where content creators upload exclusive content, and subscribers pay to view it. In 2021, OnlyFans introduced new terms of service that prohibited users from posting sexually explicit content. This move was justified as necessary to comply with the requirements of banking partners and payment service providers and to ensure the long-term operation of the platform. However, due to the low risk associated with such content, these rules were eventually reversed. The practice of posting content on OnlyFans for financial gain, known as digital prostitution, is treated differently in various countries. While such services are not legally prohibited in most countries where OnlyFans operates, those who post such content still face stigma and legal consequences depending on the nature of the content and the legal regulations in each country. The content posted on OnlyFans can be categorized into three types: erotic, sexual, and pornographic (Sex workers alliance Ireland, 2021). All three types are allowed on the platform, but their legality varies by country.

Customers who pay to access such content currently face no legal repercussions.

The legislation of various countries regarding the criminalization and decriminalization of prostitution is an important topic to consider.

In June 2003, New Zealand decriminalized prostitution, which resulted in better working conditions for sex workers, improved access to health services and justice, and increased confidence and well-being.

The Swedish model, which criminalizes pimps and clients but not prostituted persons, is aimed at combating demand for prostitution. This model is focused on customers/buyers as the main reason for the existence of prostitution and recognizes pimping and mediation in human trafficking as crimes. The shift from perceptions of voluntary prostitution to the reality of poor women and girls being forced into prostitution due to poverty, blackmail, threats, or hopelessness has led to the punishment of clients with fines or imprisonment (up to 6 months in Sweden) in order to address demand.

Currently, prostitution is illegal in Malta, but the implementation of the Northern model of decriminalization is being discussed. This model would decriminalize sex workers and criminalize their clients and traffickers, while services like pimping and running brothels would remain illegal. On the other hand, there is also a debate about adopting the Finnish model, which distinguishes between voluntary sex work and those working under the guidance of a pimp, minors, or victims of human trafficking.

In Canada, the purchase of sexual services is illegal under the Protection of Communities and Exploited Persons Act (PCEPA), but selling sexual services is legal. South Africa is currently discussing the possibility of decriminalizing prostitution, while in Singapore, the production, transmission, and distribution of obscene material is widely considered to go against Singapore's moral standards and norms.

The UN Convention on Combating Trafficking in Human Beings and the Exploitation of Prostitution by Third Parties (United Nations, 1949) highlights that prostitution and its associated issues pose a threat to the dignity and well-being of individuals, families, and society as a whole. This definition is included in the Convention on the Elimination of All Forms of Discrimination Against Women (United Nations, 1979).

The international community recognizes that prostitution and human trafficking are harmful and that the prostituted person is the victim. Even if some individuals claim to enjoy selling their bodies, it does not justify the violence and systemic inequality faced by those engaged in prostitution.

The development of policies aimed at reducing human rights violations in the sex industry demonstrates a shared goal among states to combat sex trafficking and avoid human rights abuses.

Therefore, international legal experience shows that various approaches to the legalization or decriminalization of prostitution are primarily focused on protecting human rights and bringing people engaged in prostitution out of the shadows.

### Conclusions

After studying the international legal experience of criminalization and decriminalization of digital prostitution, the following conclusions can be drawn:

Digital transformation has enabled the use of digital resources for engaging in prostitution through the placement of relevant content on special platforms, which may result in legal liability in many countries depending on the type of content.

The legalization (decriminalization) of sex work, including on the internet, is being discussed in many countries, with some considering it to enhance the safety of sex workers and increase revenue through taxation. However, the illegal nature of such activities may prevent tax payment.

The regulation of such activities is based on the analysis of prerequisites, key factors of interaction between the state and society, and the main threats for persons involved in such activities. The Swedish and Finnish models, as well as the experiences of other countries like New Zealand, Singapore, and Canada, provide examples of successful regulation of prostitution. The main goal of criminalization and decriminalization of prostitution, including digital prostitution, is to ensure the rights of persons involved in such activities and combat the sex trade and pimping.

Further research is needed to explore the possibilities of legal regulation of information

platforms where pornographic content is posted and the establishment of restrictions for persons carrying out activities on such platforms.

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## Suprastatehood and supranationality in the prism of modern international law

### Надержавність та наднаціональність у призмі сучасного міжнародного права

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#### Abstract

Suprastatehood and supranationality is a legal quality of an international organization that allows it, following the procedure approved by the member states, to make binding decisions, including without the direct consent of an individual state. In modern international law, the role of suprastatehood and supranationality has changed. Therefore, taking into account the dynamics of development and the rapidity of change, it is necessary to analyze the place of suprastatehood and supranationality in the prism of modern international law. The purpose of the work is to examine the peculiarities of the influence of supranational institutions on international relations and international law. The methodological basis of this study is such methods as a method of formal-logical analysis, historical method, comparative method, and functional method. As a result of the conducted research, the peculiarities of the manifestation of suprastatehood and supranationality in the prism of modern international law were analyzed. Definitions of the terms "suprastatehood", "supranationality", "supranational Union" are provided. The peculiarities of the contractual regulation of relations between states and the impact of such regulation on the international legal order and international law are remarked on. It is finalized that the presence of supranational and suprastatehood institutions is a characteristic feature of modern international relations.

**Keywords:** supranationality, suprastatehood, international law, European Union, integration.

#### Анотація

Надержавність та наднаціональність є правовою якістю міжнародної організації, що дозволяє їй, відповідно до затвердженої державами-членами процедури, приймати рішення обов'язкового характеру, в тому числі без прямої згоди на те окремої держави. У сучасному міжнародному праві роль наддержавності та наднаціональності змінилася. Тому, зважаючи на динаміку розвитку та стрімкість зміни, важливо проаналізувати місце наддержавності та наднаціональності у призмі сучасного міжнародного права. Метою роботи є аналіз особливостей впливу наддержавних та наднаціональних інституцій на міжнародні відносини та міжнародне право. Методологічним підґрунтям даного дослідження слугують такі методи, як: метод формально-логічного аналізу, історичний метод, порівняльний метод та функціональний метод. В результаті проведеного дослідження проаналізовано особливості прояву наддержавності та наднаціональності у призмі сучасного міжнародного права. Надано визначення понять "наддержавність", "наднаціональність", "наднаціональний Союз". Зауважено на особливостях договірного врегулювання відносин між державами та впливу такого врегулювання на міжнародний правопорядок та міжнародне право. Підсумовано, що наявність наддержавних та наднаціональних інституцій є характерною рисою сучасних міжнародних відносин.

**Ключові слова:** наддержавність, наднаціональність, міжнародне право, Європейський союз, інтеграція.

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## Introduction

The issues of suprastatehood and supranationality in international law are quite controversial. On the one hand, this is due to the lack of definition at the international level about the content of superpower. On the other hand, supranationalism and supranationalism without normative consolidation are often found in the activities of international organizations, including the European Union, the North American Union, and others.

The problem arises of the relationship between supranationality and the sovereignty of member states of international entities (organizations, associations, etc.). In particular, there is a duality of positions regarding whether the presence of supranational elements in the structure of a certain international organization leads (does not) to limiting the sovereignty of its member states.

There are positions that even when a supranational organization qualifies as a confederal union of states that acts in the international arena not only on its behalf but also on behalf of its members, the latter do not lose their sovereignty, because they simply transfer part of their powers to a jointly created to the union. Although there are positions on the limitation of the sovereignty of such states. Several scholars arguing the existence of mutual obligations towards other member states, the existence of a common policy, and other factors, believe that being a member of a suprastatehood association, the "effectiveness" of the state is limited.

Given the above, the question of the study of suprastatehood and supranationality in the context of modern conditions of international law is extremely relevant and requires research.

The article analyzes the peculiarities of the doctrinal consolidation of the concepts of suprastatehood, supranationality, "supranational Union" and others. The peculiarities of the functioning of such supranational and supranational entities as the Council of Europe, the European Union, and the North American Union have been studied in detail. Modern trends in international law and the activities of supranational and supranational entities as an integral part of international relations are noted.

## Theoretical Framework or Literature Review

During the study of the phenomenon of suprastatehood and supranationality in the context of modern international law, the research of such scientists as Baimuratov, Vegera, Vyshnyakov, Voytenko, Vodyannikov, Zadorozhna, Yefimenko, Maletych, Matveeva, Moiseev, Skorokhod, Khomenko, Shperun, Yakovyuk, Kiljunen, Rosenau, Amerasinghe was analyzed.

Thus, Baimuratov (2022) analyzed the peculiarities of the constitutionalization of international public law and the internationalization of the constitutional legal order of states in the context of the strategic formula of legal globalization. The author noted that the formation and development of the architecture of modern international public law, its institutional and structural system, are usually related to its branch structure, however, today, in the formation of new branches, an important role is played by the fundamental strategic-paradigmatic and functional-status tendency, which actually transformed into the corresponding formula of a new form of globalization - legal, which has the following nomenclature – constitutionalization of international public law and internationalization of the constitutional legal order of states. Moreover, Vegera (2018) considered some aspects of the relationship between the supranationality of the EU and the sovereignty of the member states. The author concluded that the presence of manifestations of supranationalism in the essence of the European Union does not harm state sovereignty, although it somewhat limits it. Such restriction is carried out only with the consent of the states and within the limits established by them, which are determined by the norms of Union law and recognized by the national legislation of the EU member states. In general, it was concluded that supranationality and state sovereignty are mutually determined, and their interconnection is a necessary feature of an integration association.

Further, Vyshnyakov (2014) studied supranationality as a legal phenomenon in his work. The researcher concluded the interconnectedness and interdependence of supranational and national law.

Additionally, Voytenko (2009) examined supranational institutions of the European Union. Vodyannikov (2001) also explored supranationality in European Union law in detail. Thus, the author investigated the phenomenon of

supranationality, which arises as a result of the activities of intergovernmental organizations and the transfer of part of their sovereign powers to them by their member states. It is substantiated that by acquiring membership in a certain international organization, states do not lose their sovereignty, because they continue to act in the international arena as independent subjects of international relations, the theoretical approaches of domestic and Western schools of international law are given, based on which it is determined that modern science offers separate concepts of supranationality, without, however, creating a single universally recognized theory. It is concluded that, by joining an international organization with supranational elements of regulation, states exercise their sovereign rights and international legal personality, and do not lose them.

Modern principles of international law in the hierarchy of norms of international, supranational, and national law are analyzed in the work of Zadorozhna (2019). Features of the application of the principle of subsidiarity as a balance of the interaction of institutions were studied by Yefimenko (2022). The author emphasizes the importance of understanding the fundamental ideas and concepts that form the basis of modern principles of administrative law, their genesis, and influence on the processes of state formation, and the issue of the distribution of competencies in the hierarchy of subjects of different levels (in this case, the principle of subsidiarity), which, in their turn, actively influence mutual relations in society, and as a result, further development and potential improvement of their interaction.

The question of the ratio of supranational and national administrative proceedings in the countries of the European Union and Ukraine was analyzed in the study of Maletych (2022).

What is more, Matveeva (2022) examined current transformational processes in international private law.

The transformation of the superpower of the European Union after the entry into force of the Treaty of Lisbon was analyzed by Moiseev (2012). The author concluded that the basis of the existence of a suprastatehood is the institutional mechanism of international organizations. At the same time, suprastatehood can manifest itself at various stages of the activity of an international organization, regardless of the indication of this quality in its statutory documents. The essence of the phenomenon of suprastatehood lies precisely

in the ability and opportunity of almost any international organization to make decisions that are binding on member states.

Problematic issues related to ensuring the right to sovereignty in the law of the European Union were analyzed by Skorokhod (2012).

It should be remarked that Khomenko (2004) studied certain issues regarding international legal cooperation within the framework of the North American Free Trade Agreement. Furthermore, Shperun (2012) investigated in detail the question of the supranational status of the International Monetary Fund. Finally, Yakovyuk (2008) researched the European Union through the lens of an international organization.

Modern conceptual approaches to the law of the European Union are analyzed in the work of Yavorska (2012).

Separate issues regarding the institutional principles of the European Union and other suprastatehood and supranational entities are explored in the works of Kiljunen (2004), Rosenau (1998), and Amerasinghe (1996).

### Methodology

During the study of the phenomena of suprastatehood and supranationality through the prism of modern international law, the method of formal-logical analysis was used. This method helped to research and study the norms regulated in the framework of international legal relations and regarding the activities of international organizations and their place in the states. In particular, the formal-logical method as a means of mental activity of people made it possible to better understand and investigate the objects of this research. Therefore, the formal-logical method plays a vital role in scientific activity and scientific knowledge and helps to solve specific theoretical and practical problems in the field of international law and to acquire new knowledge in the process of cognitive conditioning.

The application of the historical method helped to study the norms governing the activities of international and supranational unions in the process of their formation and development. At the same time, it is worth noting that the historical method was used in the study as a method of studying the development of social phenomena from their inception to their termination, as well as their current state (due to the sequential disclosure of the properties,

functions, and changes of the reality under investigation in the course of its historical movement). At the same time, the historical method was used together with the comparative method to compare supranational and supranational formations in space and time and identify similarities and differences between them. Also, the interaction of historical and typological methods was used to identify common features in spatial groups of historical events and phenomena or to identify homogeneous stages in their continuous-time development. The application of the tools of historical and systemic methods provided an in-depth analysis of socio-historical systems, revealing the internal mechanisms of their functioning and development.

The comparative research method is of great importance for the conducted research. With the help of this method, the general and special were identified, and the norms of the EU legal system itself, as well as the norms of member states, other socio-political systems, and international organizations, were compared. The methodological toolkit of comparative analysis of supranational and supranational politics is based on the principles of similarities and differences, deductive theoretical models of organizations, and inductive methods of their verification with the help of diachronic-historical and synchronous-functional methods of data collection. In addition, the work compares the impact of regulatory and legal regulation of various supranational institutions and their peculiarities of activity and development due to the cause-and-effect relationship of legal consolidation of provisions on activity and their implementation in practice (EU, MERCOSUR, NAFTA, etc.). Also, the basis of the comparison is the agreements that regulate the activities of these organizations and their influence on the legislation of individual participating countries.

The functional research method played an equally important role. When using this method, the functions of individual power bodies of individual Communities, the European Union, and other supranational and supranational institutions as a whole were studied and analyzed. The extraction of such an approach through the prism of the functional characteristics of various organs, and their real activity, helped to understand not only the formal place of the latter in the system of organs but also the actual situation, actually performed functions, and opportunities for further development and transformation.

## Results and Discussion

Supranationality and suprastatehood are legal qualities of an international organization that allows it, following the procedure approved by the member states, to make binding decisions, including without the direct consent of an individual state.

suprastatehood arises at the stage of implementation of the goals and objectives of the international organization established in the founding treaty or other international treaties of the organization.

Sovereign member states enshrine in their legislation provisions the possibility of assigning state rights to an international organization.

Supranational Union (English supranational union) is a type of multinational political union where the agreed powers of the governments of the member states are delegated. The concept of supranational association is sometimes used to describe the European Union (EU) as a new type of political organization (Vodyannikov, 2001).

The European Union is the only organization that provides international elections beyond the level of political integration usually provided by international agreement (Kiljunen, 2004).

The term "supranational" is sometimes used in a loose, vague sense in other contexts, sometimes as a substitute for the term international, transnational, or global. Another method of decision-making in international organizations is intergovernmentalism, in which state authorities play a more prominent role.

Examples of such suprastatehood and supranational entities are the Council of Europe, the EU, the North American Union, and others.

The Council of Europe is the leading human rights organization on the continent. It includes 46 member states, including all members of the European Union. All member states of the Council of Europe have signed the European Convention on Human Rights, a treaty aimed at protecting human rights, democracy, and the rule of law (Council of Europe, 2023).

The Council of Europe helps member states in the fight against corruption and terrorism, as well as in the implementation of necessary judicial reforms. A group of constitutional law experts known as the Venice Commission offers legal advice to countries around the world.

The Council of Europe protects human rights under international conventions such as the Convention on Preventing and Combating Violence against Women and Domestic Violence and the Convention on Cybercrime. The organization monitors the progress of member states in these areas and makes recommendations through independent monitoring bodies.

The European Union, sometimes also the European Union (German – Europäische Union; French – Union européenne; abbreviated: EU) is an economic and political union uniting 27 member states located in Europe. It dates back to the creation of the European Coal and Steel Community (ECSC) and the European Economic Community (EEC), which consisted of six countries in 1957. In the following years, the territory of the EU was increased due to the inclusion of new member states, simultaneously increasing its sphere of influence through the expansion of political powers. In its current form, it exists based on the Maastricht Treaty, signed on February 7, 1992, and in force since November 1, 1993. The last significant revision of the constitutional principles of the EU was approved in the Lisbon Treaty, which entered into force in 2009. Legally, there is no capital in the EU, but de facto it is the city of Brussels, where most of the institutions of the European Union are based.

The EU operates through a system of independent supranational institutions and jointly agreed on decisions of member states. The most important institutions of the EU are the European Commission, the Council of the European Union, the European Council, the Court of Justice of the European Union, the European Central Bank, and the European Parliament, which is elected every 5 years by the citizens of the European Union.

The purpose of the EU is to: promote the implementation of a balanced and long-term social and economic policy, in particular by creating a space without internal borders, employing economic and social equalization, the creation of an economic and monetary union, which aims to introduce a common currency; the establishment of the European Community in the international arena, in particular by conducting a common foreign policy and a policy in the field of public security, which could lead to the creation of a common defense system if necessary; strengthening the protection of the rights and interests of citizens of the participating states through the introduction of citizenship of

the Union; development of close cooperation in the field of judicial practice and internal affairs.

Maintaining the achieved level of integration of the Community and, based on it, determining to what extent policies and forms of cooperation established by the Treaties need to be revised to ensure the effectiveness of EU mechanisms and institutions.

The effectiveness of EU activities is ensured by its relevant bodies. The organizational structure of the EU is based on the general principles of the Western political system, but its specific forms differ significantly from national systems. Its characteristic features include 1. Association of institutions of two types – interstate and supranational. 2. Flexible distribution of competencies between EU bodies and national governments. 3. A significant number of types of decisions are made – from regulations and directives, which are mandatory for implementation by national governments and all members of the association, to conclusions that are only recommendatory. 4. The supremacy of EU law over the national legislation of the member states within the limits determined by the content of the founding treaties.

The organizational structure of the EU is based on the principle of separation of legislative, executive, and judicial functions. The main bodies of the EU include the European Parliament, the European Council, the Council of Ministers, the European Commission, the European Court of Justice, and the Chamber of Auditors.

The North American Free Trade Agreement (NAFTA) is an agreement between Canada, Mexico, and the United States. According to this agreement, the formation of the largest market in the world began in January 1994, the creation of which was supposed to be completed in 2009.

The specificity of NAFTA was determined by several characteristics that to some extent distinguished it from both Western European and other models of international economic integration. On November 30, 2018, in Buenos Aires (Argentina), the United States, Mexico, and Canada signed a new trade agreement, the USMCA (Agreement between the United States of America, the United Mexican States, and Canada), which will replace the North American Free Trade Agreement trade (NAFTA) (Khomenko, 2004).

The North American Free Trade Agreement has continental dimensions. In the world economy, this is the first integration grouping with such a characteristic. It unites only three, but quite large in terms of territory, human resources and economic potential of the country. The USA, Canada, and Mexico are countries in which the oil industry is quite well developed.

The countries that joined NAFTA have different levels of economic development, moreover, the level of Mexico is in sharp contrast with the level of the USA and Canada. Actually, this is not an exceptional phenomenon: in the Western Hemisphere, a similar example is demonstrated by MERCOSUR, which, along with such giants of Latin America as Brazil and Argentina, includes Uruguay and Paraguay, which are significantly inferior to them in terms of economic development.

The clearly defined center of the North American Free Trade Zone remains the United States, a world leader with scientific and technical potential and a competitive economy.

Reflecting on modern trends in the organization of interstate relations, James Rosenau noted that "the state-centric traditional world is by no means replaced by a new world consisting of numerous centers of power, but, on the contrary, it exists and interacts with this multicentric world. State actors operate both in the traditional state-centric world and in the new multicentric world, participating simultaneously in negotiations and meetings held both within the framework of intergovernmental cooperation (multilateral summits, bilateral meetings, regional conferences) and the framework of international activities of non-governmental organizations. At the same time, non-state actors are increasingly active in the sphere of world politics, interacting with its state-centric world through public consultative meetings; influencing the content of state policy with the help of coverage of certain public actions by mass media, the result of which is a kind of diffusion, penetration into the stable set of norms and principles of the traditional system of general security - alternative norms and principles related to human rights, global civil society, human security, global governance" (Rosenau, 1998).

Therefore, we can state that the presence of supranational and supranational institutions is a characteristic feature of modern international relations.

## Conclusions

As a result of the conducted study of suprastatehood and supranationality through the prism of modern international law, the following conclusions were drawn:

- 1) Although the concepts of suprastatehood and supranationality are not fixed at the legislative level, and their content is defined only in the doctrine of international law, the essence of suprastatehood is determined by the interests of participating states, which are reflected in the statute and activities of international organizations, associations, unions, etc.
- 2) Suprastatehood arises at the stage of implementation of the goals and objectives of the international organization established in the founding treaty or other international treaties of the organization, and sovereign member states enshrine in their legislation provisions on the possibility of assigning state rights to the international organization.
- 3) The suprastatehood of individual organizations is manifested in the cases of adoption of relevant regulations, directives, or decisions, which are mandatory for implementation by individual institutions of such a union (association, etc.). In other cases, relations between the union (organization) and its member states should be qualified as traditional interstate relations.
- 4) In modern conditions of development and transformation of international relations, the presence of suprastatehood and supranational institutions is a characteristic feature of such relations.

Regarding further scientific research, we consider it necessary to investigate the peculiarities and problematic issues of supranationality of the European Union in modern conditions.

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## Features of legal regulation of franchise agreement in Spain

### Особливості правового регулювання договору франчайзингу в Іспанії

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#### Abstract

The purpose of the article is to study features of legal regulation of franchise agreement in Spain. Research methodology. The research is based on the use of general scientific and special-scientific approaches such as dialectical, abstraction and generalization, logical, system analysis, historical and legal method, comparative and legal, logical analysis. Research results. Among the EU Member States, which have adopted special acts regulating franchise agreement issues, Spain is especially notable for its Royal Decree 201/2010, which regulates the procedure for concluding franchise agreement in detail. Practical implication. It is stated that there is statutory provision on pre-contractual disclosure in Spain, the main purpose of which is to protect a potential franchisee by providing him with the relevant information. Value /originality. This scientific work is the first research in Ukraine devoted to the characteristics of franchise agreement in a separate country (in Spain).

#### Анотація

Метою статті є дослідження особливостей правового регулювання договору франчайзингу в Іспанії. Методологія дослідження. Дослідження базується на використанні загальнонаукових та спеціально-наукових підходів, таких як діалектичний, абстракції та узагальнення, логічний, системного аналізу, історико-правовий, порівняльно-правовий, логічного аналізу. Результати досліджень. Серед країн-членів ЄС, які прийняли спеціальні акти, що регулюють питання договору франчайзингу, Іспанія особливо виділяється Королівським указом 201/2010, який детально регламентує порядок їх укладення. Практичне значення. Зазначається, що в Іспанії існує законодавче положення про переддоговірне розкриття інформації, основною метою якого є захист потенційного франчайзі шляхом надання йому відповідної інформації. Цінність/оригінальність. Ця наукова робота є першим в Україні дослідженням, присвяченим

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**Keywords:** franchising, franchise agreement, franchisor, franchisee, pre-contract disclosure duty.

особливостям договору франчайзингу в окремії країні (в Іспанії).

**Ключові слова:** франчайзинг, договір франчайзингу, франчайзер, франчайзі, переддоговірний обов'язок розкриття інформації.

## Introduction

The history of franchising dates back to the 18<sup>th</sup> century, when this term was first used in America. The widespread use of this form of cooperation began in the 60s of the last century during the period of mass sales and the spread of services in business activities. The most striking examples of the use of the franchise in this period are Holiday Inn, Burger Inn, MC Donalds, Dunkin Donats, etc. (Tsesliv 2013, p. 352)

Over time, the application of this organization of relationships between business entities only expands, as it contains a number of advantages for each of the parties. In particular, for the franchisee, such a legal structure gives the opportunity to start a new business successfully tested by the franchisor. He also gets the right to use a trademark known to consumers, the opportunity to have all the benefits of the franchisor's extensive advertising activities, business technology, as well as the access to credit resources, since it is enough often the franchisor acts as a loan guarantor.

In turn, the franchisor expands its business in new markets, gets closer to the consumer, reduces the risk of losing its own capital and receives additional income due to franchisee fees.

The subject matter of the commercial concession contract is the right to use objects of intellectual property, commercial experience and business reputation. The commercial concession contract must describe in detail the goods and services that must meet a certain standard, stipulate all elements of the use of objects of intellectual property rights. In addition, the contract defines the terms of transfer, continuation and termination of business relations between the right holder and the user, the method and forms of use of the object of intellectual property, as well as the territory of its application, which can be established according to the geographical principle or the principle of administrative division of a certain country.

Taking into account the European integration course of our country, the Covid-19 pandemic,

which caused an adverse affect on the stable function of economic and social spheres of the society (Kharytonov et al. 2021, p. 158), it is advisable to examine the experience of leading European countries related to this issue for the further implementation of positive practice into our legislation.

Thus, the purpose of the presented research is to determine the features of legal regulation of franchise agreement in Spain, since this State developed rather detailed and regulated legislation in respect of this institution.

## Methodology

The methodological basis for the research is general scientific and special methods.

Among general scientific methods, dialectical method was applied when analyzing the development of the institution of franchising in the world in general and in Spain in particular.

The method of abstraction and generalization made it possible to determine the advantages of franchising activity.

Logical method helped to build the structure of the research, moving from general issues such as franchising activity to special ones (definition of the franchise agreement in the studied country, rights and obligations of the parties to the franchise agreement, termination of the contract, etc.).

As for special scientific methods, the method of system analysis was applied during the study of the concept of franchise agreement in Spain.

With the help of the historical and legal method, the evolution of franchising in Spain, as well as individual aspects and features of the franchise agreement establishment in this country were examined.

The comparative legal method was used when considering the rules of Spanish legal

instruments, governing the procedure for concluding this type of contract.

The method of logical analysis was applied in the process of determining the main concepts of the research, such as “franchising”, “franchise agreement”, “disclosure obligations”, “principle of acting in good faith”.

### Literature Review

Over the last few years, the phenomenon of the franchise as a modern method of doing business has seen a marked rise in Spain, with annually increasing indicators of around 40%. As a result, Spain’s retail trade undergoes considerable transformations and becomes ever closer to the characteristics to that prevailing in other EU States (Gámir & Méndez 1999).

Rodríguez and Díez (2021) provided the definition of franchise agreement, which is a contract between companies (the franchisor and the franchisee) with the objective of creating a uniform distribution network with limited investment.

Quintana and Cazalilla (2022) proposed the following concept of franchising activity, which is defined in Spain as that which is carried out by virtue of a contract whereby a business entity (the franchisor), gives another (the franchisee), in a provided marketplace, in return for a financial remuneration, the entitlement to manage a franchise, on a business activity that the first has performed with considerable accomplishment, in order to sell particular goods or services.

Salinas (2021) stresses that franchisors can work in Spain without being enrolled as franchisors and there is no need to sign up their franchise agreements in the Franchising Registry. Prior Spanish legislation required such enrolment, but this obligation was cancelled in 2018 to address unnecessary bureaucracy and ease the distribution of franchising in the State.

Lourdes and Ballesteros (2018) investigate the abovementioned franchisors’ duty of disclosure and registration and the legality of its suspension by the Spanish Ministry of Economy.

Ester (2018) considered breach of obligations under franchise contracts in Spain. In particular the lawyer investigated the Supreme Court judgment 438/2018 of 11th September which deals with the breach of obligations contractually agreed between a franchiser and a franchisee and proposed his qualified conclusion on this issue.

### Results and Discussion

Spain has rather strong economy compared to economies of other European countries. Currently, it ranked 49<sup>th</sup> out of 183 countries in the World Bank Group’s Ease of Doing Business Ranking (the countries with the most favorable conditions for doing business).

The largest sectors of franchising in Spain are: the food products sector (with an average turnover 2,151 million euros); restaurant business and fast food (with an average turnover 1,730 million euros); retail trade (with an average turnover 1.192 million euros); service sector (with an average turnover 1,233 million euros).

In 2015 there was an increase from 83% to 89% in new franchises, and a growth of 11% to 17% in international brands, totalling 138 new franchisors. Most new franchises in 2015 appeared in the such spheres: online entrepreneurship, self-care, training, restaurants and take-away, specialized foodstuffs, personal hygiene (Echarri 2016).

In 2020 a total of 1,381 franchised brands operated in Spain, and although the Covid-19 pandemic influenced the franchising sector in 2021, it was only temporary and its extension continued in 2022 (Salinas 2021).

The main franchise association in Spain is the Spanish Association of Franchising (Asociación Español de Franquicias – AEF), which belongs to the Iberian-American Federation of Franchising, the European Federation of Franchising and the World Franchising Council. Membership in the national association is not mandatory, but it is recommended as it promotes the participation of franchisors in international and national exhibitions; provides funds for specific commercial missions; helps to harmonize relationship between a franchisor and a franchisee; grants data and conducts education on franchising issues; provides information to potential investors, etc.

On May 28, 2014, AEF entered into an agreement with the World Intellectual Property Organization (WIPO) to promote arbitration in master franchise agreements. Spanish lawyers working in the field of franchising have been fully trained on WIPO’s Alternative Dispute Resolution (ADR WIPO), and the AEF is currently helping to determine if a potential candidate has sufficient experience to be appointed as an arbitrator of WIPO.

Franchisees set up franchise networks in the country, using different legal and organizational forms of legal entities, but the most common in Spain are: *sociedad limitada* (is a type of business venture, where the asset is split into shares and the liability of the associates is restricted by this fund), *sociedad limitada nueva empresa* (this company will compromise a maximum of five members) and *sociedad anónima* (the capital of the company is divided into shares and includes the contributions of all its members who do not bear responsibility for private assets). *Empresa conjunta* (joint venture) is also a widespread form of franchise in this State. The joint enterprise is not foreseen by Spanish law, but it falls under the regulation of the civil legislation, which permits the establishing new contract-based forms in accordance with the principle of contractual freedom (Sönke 2019).

There is no special law on franchising in Spain. Relationships between the parties are regulated by the Law 7/1996 on retail trade, the Royal Decree 201/2010 of February 26, 2010 regulating franchise business and transferring data to the Register of Franchisees, the Law 14/2013 (2013) on the support of entrepreneurs, the Law 20/2013 of December 9, 2013 on the guarantee of market unity.

According to clause 62.1 of the Royal Decree 2485/1998 of November 13, 1998 to the Retail Trade Act (Real Decreto 2485/1998), commercial franchise activity is the occupation which is carried out under the contract by the company called the Franchisor, which transfers to another company – Franchisee the right to realize activities within the Franchisor's business system for the sale of goods or services.

Definition of a franchise agreement was first provided in the Law 7/1996 of January 15, 1996 on regulating the retail trade (hereinafter – the Law 7/1996) (Ley 7/1996). It states, in particular, that «commercial activity is carried out under the agreement, according to which the franchisor transfers the franchisee the right to use his marketing system of goods and services».

This definition has been somewhat improved by the Royal Decree 201/2010 (Real Decreto 201/2010). Thus, clause 1 of this Decree states that franchising is a business in duty-free treatment, regulated in article 62 of the Law 7/1996, which is carried out under the contract by which a company, the franchiser, gives way to another, the franchisee, in a given market, in exchange for a direct financial consideration (indirect or both), the right to the

exploitation of a franchise, about a business or commercial activity the first come previously developed with sufficient experience and success, to market certain types of products or services.

According to the Royal Decree 201/2010 (Real Decreto 201/2010), the franchise should compromise at least: a) the use of a name or common label or other rights of intellectual or industrial property and a uniform presentation of the premises or means of transport subject to the contract; b) transfer the basic, definite and distinctive proficiency to the franchisee; c) day-to-day tech and entrepreneurial aid provided by the franchisor for the duration of the agreement, without considering the implementation of the general supervision that can be set in the contract.

This definition clearly demonstrates the main purpose of the contract – marketing of goods and services, with an emphasis on commercial distribution. On the other hand, the Supreme Court of Spain (Tribunal Supremo) has decided that the franchise agreement is the contract concluded between juridically and commercially autonomous parties, according to which the franchisor provides the franchisee with the right to applicate, under particular terms, within determined timeframe and in a identified territory, a procedure in a certain type of activity, in return for relevant payments by the franchisee.

There is a statutory provision on pre-contractual disclosure in Spain. Thus, section 62, paragraph 2 of Law 7/1996 provides for the obligation of the franchisor to register in a special register within three months from the beginning of its activity. The Register of Franchisees of Spain records information on those entities that transfer rights to use certain objects of intellectual property right on the basis of franchise agreements. The physical person or legal entity intending to perform franchise operation of transfer of franchise in Spain must communicate their data, within three months from the beginning of the activity, or the registration of the autonomous community where they plan to start their activities, or when the autonomous community does not establish the need for communication of data to the same, to the register of franchisors from the Ministry of industry, tourism and trade, for informational purposes. Communication to the register of franchisors does not condition the start of the activity. The lack of data communication expiry of the aforementioned period will result in the corresponding sanction, in accordance with the

penalties provided for in the Law 7/1996 and other applicable legislation.

At least of twenty business days delivery by the future franchisee to the franchisor of any payment or the signature of the contract or pre-contract of franchise, the franchisor or main franchisee must give the potential franchisee the following truthful and not misleading identification data in written: name or company name, address and registration in the register of franchisors as well as, in the case of a commercial company, social capital picked up in the last balance sheet, with expression of is fully paid up or in what proportion and registration data in the register, as appropriate.

The main purpose of this commitment is to protect a potential franchisee, which, according to the legislator, is a «vulnerable» party, by providing him with the relevant information in order it could value the terms of the future contract before it is concluded. In addition, the Royal Decree also protects the interests of the franchisor, allowing him to demand from the franchisee of non-disclosure of all pre-contractual information that has been disclosed (Article 4).

Franchisors are obliged to provide potential franchisees with the following information: 1) information about the franchisor (name, address, data on its share capital on the last balance sheet, etc.). Foreign franchisee must disclose the information on its registration in the Franchisors Registry in accordance with their national rules; 2) confirmation of ownership or license allowing the use of the trademarks and other intellectual property rights; 3) a description of the franchisor's practice that includes the day of registration and the main phases of its development and the evolution of the franchising scheme; 4) the nature and features of the franchise and the terms of its use, i.e. clarification of the entrepreneurial concept, the know-how and the content of continual economic or technical support provided by the franchisor; 5) an assessment of the required initial costs and investment.

In relation to the civil effects of the default by the franchisor in complying with its pre-contract disclosure obligations, the question is whether non-compliance with section 62.3 of the Law 7/1996 affects the validity of the franchise contract, that is, whether the contract is invalid because of a previous violation of the rules of «public order». In some cases, Spanish courts (including the decision of the Supreme Court)

recognized the franchise agreement invalid on the basis of non-observance the franchisor's pre-contract disclosure obligation or for serious misrepresentations made in the disclosure document. However, in some cases, courts decided that non-observance of the pre-contract disclosure obligation is an administrative default, since it is a violation of the Royal Decree 201/2010 and therefore does not imply the nullity of the franchise agreement. If the misrepresentations made by the franchisor in the disclosure document are insignificant, Spanish courts do not assert the complete nullity of the franchise agreement. Instead of it a franchisee obtains the right to terminate the agreement and claim damages (Echarri 2016).

Besides the pre-contract disclosure obligation, there is a requirement to act in good faith in Spanish legislation. According to it the parties to any agreement has to act faithfully. This commitment is stipulated in clauses 7 and 1258 of Código Civil (1889) and clause 57 of the Code of Commerce (1885). In addition, a franchisor and a franchisee may compose codes of good practice, in which additional provisions concerning the good faith would be foreseen. It should be noted that even during the franchise agreement negotiations, the parties must act conscientiously (*buena fe in contrahendo*).

This principle, when applied to a franchise agreement, should restrict the freedom of choice of the parties in order to protect their legitimate expectations during contract negotiations. For example, both parties may disclose confidential information about their activities, but for the protection of their interests they may conclude a non-disclose agreement. This document may be also signed when performing the agreement (for, that the franchisor possesses all intellectual property rights used by the franchisee during the execution of the contract) (Sönke 2019).

Rights and obligations of the parties to the franchise agreement are not prescribed at the level of legislation. Therefore, the franchise agreement must clearly specify only those rights and obligations which are specific to a particular type of the franchise. All common pledges or activities (non-payment, dissolution, etc.) are regulated by the Civil Code and the Commercial Code. Though, in fact, the more comprehensive the agreement is preferably.

The franchisee is entitled to: 1) the application of the franchise and its intellectual property rights; 2) receiving regular tech aid and learning; 3) obtaining know-how; 4) obtaining constant

commercial and promotional assistance; 5) holding of its particular area, if provided; 6) non-competitively by the franchisor, if provided; 7) dissolution of the contract in case of non-fulfillment of obligations by the franchisor.

The franchisee, as a rule, is obliged to: 1) afford duties and fees; 2) respect franchise specification; 3) not to violate intellectual property rights and report local infringements; 4) comply with territorial restrictions; 5) observe all instructions, know-how and learning duties; 6) respect all native rules and customs; 7) observe the requirement of confidentiality before, during and after the termination of the contract; 8) comply with accounting and reporting standards; 9) act in good faith and as a diligent business person.

The franchisor is eligible for: 1) receiving payments and royalties in due course; 2) reviewing the accounts and audits by the franchisee; 3) obtaining reports on the franchisee's activity; 4) monitoring the performance of the franchisee's duties; 5) set the franchisee's territory; 6) demanding learning and observance of the guidelines; 7) offering and setting boundary prices; 8) providing goods; 9) creating promoting schemes; 10) interfering in case of non-fulfillment of obligations; 12) applying non-competition rules; 13) dissolving the contract in case of non-execution by the franchisee.

The franchisor is obliged to: 1) provide reliable information prior to the conclusion of the contract; 2) ensure the safe use of franchise and other intellectual property rights; 3) provide ongoing technical help and education; 4) direct advertising and promotional support; 5) observe the franchisee's area; 6) adhere to all relevant rules and orders; 7) to act faithfully and honestly (Echarri 2016).

The duration of franchise agreement in Spain is not legally binding; the parties may determine it at their own discretion. Depending on the type of franchise, the franchise agreement is concluded for a period from five to ten years.

The franchise agreement, which is concluded for a limited period, is terminated only after the expiration of this term. The law, as it was already mentioned, does not provide for the fixed term of the franchise contract, however, according to the doctrine of the courts, usual contractual relations should be limited in time. This means setting a certain limit for the debtor. Therefore, in accordance with the Spanish civil legislation, any

provision imposing an indefinite period of validity of the franchise agreement will be considered as invalid.

Based on the foregoing, it can be concluded that franchise contracts, in which it is provided for a limitness period of the contract, may be one-sidedly terminated by either party. In addition, contracts limited by a certain period of time, but containing provisions for automatic prolongation may also be terminated by either party at the end of the agreed period.

It is prohibited to terminate the contract as a result of abuse of the law; during the termination the principles of equity and good faith must be observed; in case of non-execution of terms of the contract, the damages incurred must be reimbursed. The agreement may also be dissolved by shared consent of the parties.

Until the expiration of the franchise contract, the franchisor has the right to terminate the agreement in case of: 1) failure by the franchisee to fulfill his obligations under the contract or the statute, or the repeated failure to fulfill his obligation, if he was given such an opportunity in accordance with the terms of the franchise agreement; 2) death of the franchisee, if the contract is inseparably linked with his person; 3) unauthorized shift of monitoring in the franchisee; 4) dissolution of the franchisor's rent/subrent agreement during the term of the franchise contract; 5) criminal proceedings in relation to the franchisee; 6) withdrawal of the franchisee or franchisee's funds by the third party or the public authority; 7) failure to observe native franchising rules (Echarri 2016).

Unlawful termination of the agreement obliges the franchisor to renew it and to compensate any harm suffered by franchisee or to compensate for losses if it isn't possible to renew the contract.

Cancellation of the contract by expiration of its term does not oblige the franchisor to resume it or to pay compensation to the franchisee for refusal to renew it, unless it is foreseen by the franchise contract itself. Refusal to renew the contract, if it contains a provision for renewal, allows the franchisee to apply to the court for the protection of his rights and to demand the renewal of the franchise agreement and compensation for losses incurred.

In practice, the franchisee obtains the right to renew the contract under certain conditions. These conditions are as follows: 1) franchisee performs all obligations under the contract;

2) franchisee does not violate any local laws or rules of business activity; 3) franchisee agrees with the terms of the renewed franchise agreement; 4) the franchisee pays a contribution for the renewal of the contract.

### Conclusion

Consequently, on the basis of the foregoing, the following conclusions can be made. In Spain, there is no special law on franchising, but this issue is sufficiently regulated, in particular by the Law 7/1996, in which the definition of the franchise agreement was first formulated. Among the EU Member States, which have adopted special acts regulating franchise agreement issues, Spain is especially notable for its Royal Decree 201/2010, which not only secured the franchisor's obligation to reveal the potential franchisee all the information in writing concerning the franchisor itself and the subject matter of the franchise agreement, which is necessary for the franchisee for objective assessment of the need to conclude the relevant franchise agreement, but also in which the procedure for the registration of franchisors, franchisors' record-keeping and computerization of the Register is regulated in detail. Another feature of Spain is that in this country the legislator has not only taken care of the interests of the potential franchisee, but also of the franchisor's, who when disclosing the information in the pre-disclose document, takes the risk of losing his trade secrets or other confidential information. The franchisee, in its turn, also obliges not to disclose information received from the franchisor.

It should be noted that the pre-contract disclose obligation is secured in internal regulatory acts. This means that there is no need for courts of this country when considering cases connected with the breach of this obligation to refer to the general principle of contract law «culpa in contrahendo» (the principle of pre-contract obligation), which is adjusted to the litigation of the countries where such an obligation is not provided for.

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## The content and essence of the anti-corruption strategy as a tool to combat corruption in Ukraine

### Зміст і сутність антикорупційної стратегії як інструменту протидії корупційній злочинності в Україні

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#### Abstract

The purpose of the article is to analyze the content and essence of the anti-corruption strategy as a tool for countering corruption crime in Ukraine. Research results. It was established that anti-corruption strategy should include a number of basic measures to counter crime in the field of anti-corruption activities. In addition, the position that the preparation and authorization of the corresponding document is carried out on the basis of quantitative and qualitative indicators, which should be collected in advance, according to defined criteria and taking into account a certain period of time, is substantiated. Practical implementation. According to the authors, considerable attention should be paid to the practical method of determining the main priorities in the anti-corruption policy of Ukraine and the use of strategic planning as the main tool. Value/originality. It is argued that strategic planning in the state anti-corruption policy and the specific form of its manifestation – adoption of the State anti-corruption strategies – has a

#### Анотація

Метою статті є аналіз змісту і сутності антикорупційної стратегії як інструменту протидії корупційній злочинності в Україні. Результати дослідження. Установлено, що антикорупційна стратегія має передбачати низку основних заходів щодо протидії злочинності в сфері антикорупційної діяльності. Додатково обґрунтовано позицію про те, що підготовка й санкціонування відповідного документа здійснюється на підставі кількісно-якісних показників, що належить зібрати попередньо, за визначеними критеріями та враховуючи певний проміжок часу. Практичне значення. На думку авторів, найбільшу увагу слід приділити саме практичній методиці визначення основних пріоритетів у антикорупційній політиці України та використанню стратегічного планування як основного інструменту. Цінність/оригінальність. Обґрунтовано, що стратегічне планування в державній антикорупційній політиці та конкретна форма

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significant positive effect on the provision of human and citizen rights and freedoms, effectively and efficiently contributes to the functioning of all public authorities and the development of democracy and the rule of law in Ukraine.

**Keywords:** counteraction, corruption, crime, prevention, strategy.

## Introduction

Corruption in Ukraine and the world is one of the most dangerous social factors. (Odnolko et al., 2023, p. 249). Being a destructive phenomenon it negatively affects all spheres of social life, makes it impossible to establish legal statehood and the normal flow of democratic processes, which accordingly requires a response from the relevant state institutions with responsibilities to counter and directly respond to such manifestations.

The ongoing large-scale armed aggression of Russia against Ukrainian independence necessitates an effective response to all illegal phenomena that can have a destructive effect on the stability of social legal relations in Ukraine, and in addition, Ukraine's recent accession to European Union candidate status places a high responsibility on politicians in general and legislators in particular, to ensure effective counteraction to corruption manifestations in all spheres of social life.

It actualizes the need to research the processes of ensuring anti-corruption policy and, in particular, anti-corruption planning at the strategic level, as well as transient social relations in this segment, since only the dynamism and content of all political and legal reflections on any manifestations of corruption can protect society from this phenomenon. Proper quality strategic planning of anti-corruption policy and, in particular, measures minimizing any possible factors that lead to it, also ensure effective prevention and countermeasures against this illegal phenomenon.

Accordingly, in our opinion, a proper scientific study of the essence and content of the anti-corruption strategy as a tool for countering corruption crime in Ukraine will allow to optimize a number of socio-legal processes in the specified segment and bring to a qualitatively new level of functioning the mechanism of

його прояву – затвердження державних антикорупційних стратегій – значною мірою позитивно впливає на забезпечення прав і свобод людини і громадянина, результативно й ефективно сприяє функціонуванню всіх органів державної влади та становленню й розвитку демократії та правової державності в Україні.

**Ключові слова:** протидія, корупція, правопорушення, запобігання, євроінтеграція, стратегія.

protection of human and citizen rights and freedoms.

Therefore, the purpose of the article is to analyze the content and essence of the anti-corruption strategy as a tool for countering corruption crime in Ukraine.

## Literature Review

As world experience has shown, corruption is to some extent common to all States without exception. Even States that effectively combat it are not safe from its manifestations at different levels of government, in particular the highest ones (Yemelyanov & Plekhanov, 2019, p. 66). It is even bigger threat to those countries that aim to develop (Lisitsyna et al., 2022, p. 42).

Anti-corruption policy is designed to prevent and counter corruption. Its priority direction should be identification and elimination of conditions that contribute to, or may contribute to the emergence of corruption, and the prevention of attempts to create these conditions (Maletov, 2021, p. 58).

According to Kovbasiuk (2011, p. 325) anti-corruption policy is a set of legal, economic, educational, organizational and other measures aimed at creating the system of preventing and countering corruption and eliminating the causes of its occurrence. Understanding the mission of the anti-corruption policy of the State can be explained as a combination of three components: maximum reduction of the level of corruption; protection of society from its threats, influence and consequences; identifying and eliminating its causes and conditions. The purpose of the anti-corruption policy is to protect the interests of the state budget; strengthen economic and political positions of Ukraine in the world community; improve countermeasures against corruption; create a comprehensive system of public control

over the implementation of anti-corruption legislation; activation of Ukraine's participation in the development of international cooperation in the field of anti-corruption; bringing the legislation of Ukraine into compliance with international legal acts ensuring the rights and freedoms of citizens, completing the formation of civil society.

Having analyzed the work by Buiadzhy (2018), we came to the conclusion that, in practice, only the National Agency for Corruption Prevention and the authorized units (persons) for the detection and prevention of corruption have real functions for prevention this phenomenon.

In this regard Haman (2018) states that the most important and still relevant components of the anti-corruption strategy are the following:

- real and effective provision of transparency and publicity of all branches and levels of government by domestic political leaders;
- systematic and complex personnel moral and ethical education. Creation of a socially oriented environment, norms and organizational practices and a morally mature and psychologically comfortable atmosphere of public service;
- providing employees with high social protection, which would contribute to their professional competition and high work motivation;
- increasing the responsibility of employees for corrupt or corruption-related actions. Active use of anti-corruption examination of normative legal acts and their projects;
- clear legal requirements regarding the performance of official duties and provision of social control.

### Methodology

The methodological basis for the research are modern general and special methods of scientific knowledge, the systematic application of which ensured the solution of the formulated problems and the achievement of the goal of the work.

The main general scientific method in the work is the dialectical one, with the help of which the genesis of scientific view on the formulation and definition of the features of such categories as “state anti-corruption policy”, “anti-corruption strategy”, “combating corruption”, “corruption manifestations” were investigated.

Historical and legal method was used to reveal the genesis of anti-corruption strategy as a legal

category, its tasks, goals, priority directions and guarantees of its provision.

Logical and legal method was applied to formulate the basic definitions of the Article such as corruption, countering crime, anti-corruption strategy.

The method of system analysis made it possible to determine the features of the anti-corruption policy, its tasks, priority directions, principles, guarantees.

With the help of comparative and legal method, the provisions of previous and current anti-corruption strategies were compared.

Modeling, analysis, and synthesis methods helped to develop promising directions for further improvement of the State anti-corruption policy in Ukraine.

### Results and Discussion

Attention should be paid to the fact that issues related to the formation and implementation of anti-corruption strategies are quite multifaceted, since, first of all, they are characterized by a variety of terminology that needs to be clarified before studying the main content of strategic planning in anti-corruption activities.

Researchers have repeatedly pointed out that, taking into account the rapid progress of society and emergence of new spheres of relations, which are the main object for corruption, with each year the legislative framework establishing the basis for prevention and counteraction, needs to be analyzed and improved, new methods that help reveal facts of corruption in various spheres of society should be created (Romanov, 2020). That is why the questions raised in the scientific article remain relevant, which allows us to gradually improve and work on them in the future.

Nikitin (2009, p. 3) notes that today's development of Ukraine, along with positive ideas and the influence of the implemented democratic reforms, is characterized by negative and rather long-term consequences of the systemic economic and political crisis, which affects the processes of economic restructuring, sharp social polarization of society, in rather complex relations between branches power and (most negatively) widespread criminalization of various aspects of social life, which consists in increasing manifestations of organized crime, drug addiction, corruption, and extremism on an

interethnic basis. All this is a list of processes that constitute internal sources of threats and dangers for stability, and therefore internal security of society. In this regard, in the internal political aspect, the following priority tasks are outlined for the state: 1) maintenance of peace as a universal human value; 2) preserving the integrity of the state; 3) guaranteeing the realization of human rights and freedoms; 4) combating crime as a systematic and purposeful activity of law enforcement agencies.

In the context of corruption manifestations, as one of the most dangerous destructive factors of society, in our opinion, strategic planning in the fight against crime in general and corruption crime in particular come into a new light, which allows us to characterize them using not only the views of scientists, but also current legal acts.

Mishchenko (2011, p. 10) notes that combating crime is law enforcement activity by its nature, which is considered as a multi-functional and multifaceted concept that covers almost all spheres of State activity. It is implemented at the social and specialized levels. General social countermeasures against crime are the basis for special countermeasures. Special countermeasures are carried out through legal response to the commission of a crime and special criminological prevention of new crimes. Accordingly, this position should be described in two respects: establishing the State anti-corruption policy is a form of general social counteraction to crime, while implementing a number of rules establishing clear liability for acts of corruption committed in the Criminal Code of Ukraine and the Code of Ukraine on Administrative Offenses, are direct forms of influence on already existing criminal behaviour in this system of legal relations. At the same time, researchers have repeatedly characterized these phenomena from different perspectives, since even today there is a certain terminological uncertainty in the issues of "counteraction" and "prevention" of crime in general and corruption crime in particular.

According to Kuts (2009), countering crime is a complex socio-legal phenomenon and its concept reflects the theory and practice of specific social-management activities and public and private initiatives, as well as criminal justice efforts to prevent the commission of criminal offences and response to their commission. Combating criminal manifestations takes place at various levels of society, which correlates with the previously outlined views on this issue. At the same time, the issue of corruption crime is

currently not sufficiently highlighted in the research of scientists, although the list of such acts is clearly contained in the legislation of Ukraine.

Concerning international legislation, it should be noted that the Civil Law Convention on Corruption (Council of Europe 1999), interprets corruption as directly or indirectly demanding, offering, giving or receiving a bribe or any other unlawful benefit or the possibility of receiving it, which violate the proper performance of any duty by a person who receives a bribe, an improper benefit or the opportunity to obtain such a benefit, or the behavior of such a person<sup>7</sup>. Such an interpretation of corruption undoubtedly influenced the formation of national consciousness and attitude to such a phenomenon, and accordingly increased its social danger in the eyes of society.

For example, corruption is also considered as: 1) bribery and corruption of public or other employees (according to this approach, corruption is equated with bribery); 2) abuse of power or functions for profit; 3) abuse of authority or official position committed out of any personal interest; 4) use of official powers, status, as well as its authority and related capabilities to satisfy personal or group interests; 5) element (sign) or type of organized crime; 6) the concept, the definition of which is limited only to general characteristics, the absence of clear formulations that would allow to highlight the essential features of this legal category. All these forms and manifestations of corruption phenomena, first of all, require the further development of state programs and systems of response to them, with the aim of preventing and making it impossible to commit them, since such actions directly affect the security of the rights and freedoms of a person and a citizen.

Thus, the establishment of public policy and formulation of their main goals in strategic documents is a constant practice both in the European space and in all other civilized societies, which in turn also confirms the democratic efforts of Ukraine.

Zubkova (2019) notes that creation of an effective system for preventing and countering corruption, identifying and overcoming its social prerequisites and consequences, exposing corrupt acts, compulsory prosecution of perpetrators are the main goals of the state anti-corruption policy. Successful combating corruption is possible with proper anti-corruption legislation, its effective application by relevant

State authorities and coordination, public awareness on the implementation of measures to prevent and combat this phenomenon, interaction of civil society institutions with public authorities in the field of formation and implementation of State anti-corruption policy, support of anti-corruption measures by civil society. Therefore, the effectiveness of the implementation of measures to prevent corruption crimes cannot be achieved through isolated and non-systematic actions at different levels, but requires long-term socio-economic, political and legal transformations. This activity should be based on a combination of a number of prophylactic and repressive measures. Thus, anti-corruption strategy, as a tool for ensuring the performance of the state anti-corruption policy, is the main and most progressive way to achieve the corresponding goals in a legal way, which, accordingly, is what a modern democratic, legal society needs.

According to Hrechaniuk (2019), the anti-corruption strategy is a normatively determined reference point, which is specified by a certain period of time, identified problem and predicted result. However, this document is a declarative act without negative consequences for non-compliance, which leads to its ignoring or improper execution. Therefore, we believe that in the process of forming the Anti-corruption Strategy, it is necessary to provide for guarantees of its proper implementation, including measures of responsibility, as well as to determine the mechanisms of relevant control in this area.

Analyzing the provisions of one of the anti-corruption strategies already in force in Ukraine (Decree No. 1001/2011, 2011), attention should be paid to the main terminological burden in its content. The tasks of the National Anti-corruption Strategy were as follows:

outlining the range of causes and conditions that lead to corruption, determining ways to minimize the factors that determine its occurrence and negative consequences;  
determining the main directions of state policy in the field of corruption prevention and counteraction this phenomenon;  
increasing the degree of trust in State authorities and local self-government bodies;  
implementation of the system for monitoring the effectiveness of anti-corruption legislation and ensuring its implementation.

This strategy has already become history and allows to establish its complete non-compliance. The reasons were the objective circumstances of

the transition of the State to legal anarchy, ignoring the principles of the rule of law by representatives of the authorities, law enforcement agencies, and courts. The events of the Revolution of Dignity and subsequent revolutionary and military events demonstrated the absolute failure of the State's anti-corruption policy and strategy, as well as the unification of power institutions with criminal ones, which became the basis for the impossibility of democratic development of Ukraine. The revolution that took place in Ukrainian society and the state significantly changed the moods, desires of people, as well as the tools of state and public anti-corruption activities.

Later, the principles of the state anti-corruption policy in Ukraine (Anti-corruption Strategies) have begun to be approved by a special law of Ukraine. According to the results of their expert analysis, these documents are of high quality, but do not fully cover the prevention and counteraction of corruption in some specific areas. In addition, there are some inconsistencies between the measures of the Anti-corruption Strategy and the tasks of the State Program regarding its implementation. Individual blocks of measures were left out of the attention of the State Program. Analyzing the state of realization of the State Program, it was found that quantitative indicators are the clearest illustration of the scope of its implementation: out of 210 identified tasks, 82 are completed, 66 are partially completed or are in the process of being implemented. Thus, it can be noted that the implementation of the tasks is taking place, although not always fully and on time. A significant number of unfulfilled and partially completed tasks indicate that not all assignments are carried out efficiently and conscientiously. A considerable quantity of tasks performed were essentially legislative changes or the adoption of by-laws – and these are the objectives that have been largely accomplished. At the same time, measures for their practical realization and proper implementation of legislation are still problematic (Marchuk & Nesterenko, 2017, p. 64).

Thus, previous Anti-corruption Strategy (Law of Ukraine No. 1699-VII, 2014) focused on priorities related to the creation of a system of modern anti-corruption tools (legal institutions) and the development of a system of anti-corruption bodies that were supposed to ensure the effective implementation of these tools. At the same time, thanks to the adoption of other program documents by the Government,

opportunities for corruption in certain sectors were narrowed.

It was not possible to realize its full potential primarily because of the long process of creating anti-corruption institutions that took place during 2014 –2019. As these policy documents have never been revised or updated, their provisions have gradually lost relevance since 2016. At the end of 2017, the anti-corruption strategy period for 2014-2017 ended and any new document was adopted, which led to unbalanced and ineffective anti-corruption activities of public institutions.

The purpose of current Anti-corruption Strategy (Law of Ukraine No. 2322-IX, 2022) is to achieve significant progress in preventing and countering corruption, as well as ensuring coherence and systematic anti-corruption activities of all state authorities and local self-government. The anti-corruption strategy addresses corruption as a key obstacle to stable economic growth and building of effective and inclusive democratic institutions.

The results of the analysis of the state of corruption in Ukraine, the effectiveness of the anti-corruption policy of previous periods, international standards and the best global practices in the field of prevention and countering corruption made it possible to formulate the following basic principles of the anti-corruption policy for 2021 – 2025:

- 1) optimizing the functions of the State and local self-government, the realization of which primarily involves: elimination of duplication of powers by various bodies; suspension of ineffective powers, accompanied by a high level of corruption until the introduction of appropriate procedures that will minimize the corresponding corruption risks; elimination of the exercise of the same authority, the combination of which creates additional corruption risks;
- 2) digital transformation of the exercise of powers by public authorities and local self-government agencies, transparency and data disclosure as the basis for minimizing corruption risks in their activities;
- 3) creation, in contrast to existing corrupt practices, of more convenient and legal ways of meeting the needs of individuals and legal entities;
- 4) ensuring the inevitability of legal responsibility for corruption and corruption-related offenses, which creates an additional deterrent effect for all legal entities;

- 5) formation of social intolerance to corruption, affirmation of the culture of integrity and respect for the rule of law.

Accordingly, the above substantiates the position that strategic planning in the state anti-corruption policy and the specific form of its manifestation – the approval of state anti-corruption strategies positively affects the provision of human and citizen rights and freedoms, effectively and efficiently contributes to the functioning of all state authorities and the establishment and development democracy and rule of law in Ukraine.

## Conclusions

The article analyzes the content and essence of the anti-corruption strategy as a tool for countering corruption crime in Ukraine and outlines possible ways to optimize the functioning of the relevant institution.

It has been established that the anti-corruption strategy, as a comprehensive founding document, which is regulated by the entities specially authorized to ensure anti-corruption policy and law enforcement in the specified field, should provide for a number of basic measures to combat crime in the field of anti-corruption activities.

In addition, the view that preparation and authorization of the relevant document is carried out on the basis of quantitative and qualitative indicators, which should be collected in advance, according to defined criteria and taking into account a certain period of time, has been substantiated. This approach will make it possible to clearly and effectively define implementation priorities, establish the sequence of realization of certain initiatives laid down in the basis of the relevant document.

It has been also stated that the importance of adopting and standardizing anti-corruption initiatives at the legislative level is due to the rapid European integration efforts of Ukraine. At the same time, taking into account a number of requirements of the European Union regarding the further integration of Ukraine, special attention, in our opinion, should be paid to the practical methodology of determining the main priorities in the anti-corruption policy of Ukraine and the use of strategic planning as the main tool.

The perspective of further research lies in the need to analyze the anti-corruption strategies of other countries (or related regulatory documents

that provide for the planning of measures to counter anti-corruption manifestations in the country), as well as the regulatory basis that currently exists in Ukraine.

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## Concept and essence of public railway transport of Ukraine as the object of financial and legal relations

### Поняття та сутність залізничного транспорту загального користування України як об'єкта фінансово-правових відносин

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#### Abstract

The purpose of the article is to reveal the concept and essence of railway transport of general use in Ukraine as an object of financial and legal relations. Research results. Scientific and legislative approaches to the concepts of "transport", "railway transport", "financial and legal relations" are considered. The essence and features of the latter are defined. Factors affecting the development trends of rail transport are studied. Practical meaning. It is established that financial and legal relations directly related to railway transport may include issues of financing, taxation, regulation of tariffs and other financial aspects of the activity of such business entity. Such relations are governed, among other things, by financial legislation, as well as by other legal norms relating to the financial activities of economic entities. Value/originality. The article defines the concept of railway transport of Ukraine as an object of financial and legal relations as relationship between business entities, as well as the State, which arise in the process of implementing financial activities, that is, in interactions connected to the circulation of

#### Анотація

Метою статті є розкрити поняття та сутність залізничного транспорту загального користування України як об'єкта фінансово-правових відносин. Результати дослідження. Розглянуто наукові та законодавчі підходи до понять «транспорт», «залізничний транспорт», «фінансово-правові відносини». Визначено сутність та особливості останніх. Досліджено фактори, які впливають на тенденції розвитку залізничного транспорту. Практичне значення. Встановлено, що фінансові правовідносини безпосередньо пов'язані з залізничним транспортом, можуть включати в себе питання фінансування, оподаткування, регулювання тарифів та інші фінансові аспекти діяльності такого суб'єкта господарювання. Такі відносини регулюються в тому числі фінансовим законодавством, а також іншими правовими нормами, що стосуються фінансової діяльності суб'єктів господарювання. Цінність/оригінальність. У статті сформовано поняття залізничного транспорту України як об'єкту фінансових правовідносин як взаємин між суб'єктами господарювання, а також

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funds, securities, banking services and any other financial assets.

**Key words:** object, financial and legal relations, participants in legal relations, railway transport, transport.

## Introduction

Material goods, necessary for the existence and development of human society, are created in four main areas of production: in the mining and processing industry, in agriculture and in transport.

Transport is a necessary general condition for the production of any product. Thanks to the transport system, it is possible to ensure connections between industries, enterprises, regions of the country, and foreign countries (Sirko et al., 2022, p. 198). This is explained by the fact that in the production process, the movement of objects and the means of work necessary for this, as well as labor force, to the places of production plays a major role. However, this does not end with transport involvement in production, because the products are ready for consumption only when they are available to the consumer. Therefore, transport of finished products from production to consumption is carried out by transport. Transportation in the sphere of rotation is mainly carried out by public transport (railway, sea, river, road, air), as well as special (pipeline, power transmission lines and railway access tracks of enterprises connecting them with the main railway network). These types of transport are the material basis for the rotation process.

Railway transport is considered a means of material production – a very important element in the production of any goods. And even carrying out the transportation of passengers, it satisfies the important need of people to move – a need material by its nature material, since the transportation of passengers is a consumer goods of a special kind – commodity service.

The current stage of the development of railway transport in Ukraine has a number of features significantly affecting financial relations in the industry, namely:

- considerable influence of the state as the owner on the economy of railway transport, which, on the one hand, leads to the

державою, що виникають у процесі реалізації фінансової діяльності, тобто у взаємовідносинах, пов'язаних з обігом коштів, цінних паперів, банківських послуг та будь-яких інших фінансових активів.

**Ключові слова:** учасники правовідносин, об'єкт, фінансово-правові відносини, залізничний транспорт, транспорт.

centralization of management processes, and on the other one – to an ambiguous assessment of the activities of the State-owner;

- existence of a large number of enterprises of mixed ownership, where the interests of the state and private individuals are combined;
- limited capabilities of the State-owner state regarding financial support at the expense of centralized sources, in particular budget funding;
- lack of a clear State strategy for the development of railway transport in Ukraine (State Statistics Service of Ukraine, 2021).

In terms of the functioning of railway transport in Ukraine, the symbiosis of administrative and financial law is quite important, which complicates this topic and necessitates scientific research.

Therefore, the purpose of the article is to reveal the concept and essence of the public railway transport of Ukraine as an object of financial and legal relations, based on the theoretical foundations of financial and administrative law, the norms of current legislation and the practice of the activities of executive authorities.

## Methodology

The methodological basis for the Article is the set of general and special methods of scientific knowledge, the use of which made it possible to achieve the goal and ensure the scientific reliability and clarity of the obtained theoretical results. All methods were applied comprehensively, which ultimately contributed to versatility, completeness and objectivity of scientific conclusions.

In particular, the methods of analysis and synthesis helped to examine the studied problem in the unity of its elements, as well as each of its component separately.

Dialectical method was used to investigate the origin and development of scientific knowledge on the concept and essence of public railway transport as the object of financial and legal relations.

Among the special scientific methods, the formal-legal method was applied, which contributed to the clarification of legal terminology such as “transport”, “railway transport”, “financial and legal relations”, etc.

With the help of monographic method both scientific works on the features of railway transport and financials relations governing this issue were studied.

Statistical method made it possible to analyze the trends of development of the railway transport in Ukraine.

Structural method was used to clarify the advantages of this type of transport, as well as to determine features inherent in financial legal relations.

Logical method was helpful in drawing proper conclusions.

### Literature Review

The purpose of the study by Shevchenko (2020) is to improve and further develop the conceptual foundations and scientific and practical approaches to the determination of benchmarks for the promotion of strategies for the sustainable development of the production infrastructure of the national economy in the medium- and long-term perspective (on the example of railway transport), as well as proposing the recommendations for institutional support for the achievement of priority guidelines in the implementation of these strategies.

The object of the research by Stasiuk (2022) is the process of liberalization of the rail freight transportation market, because in the conditions of Ukraine’s increased participation in the process of European integration there is a need to strengthen the logistics potential of the country, where the railway plays a leading role. The railway is the basis of the country's economy and ensures its viability, stability and safety even in critical situations. The railway is ecological, accessible, reliable, cheap, "smarter" every year and is currently being transformed under conditions of liberalization, deregulation and privatization.

Alyoshinsky (2009) tried to establish the process of international freight rail transport taking into account resource saving, which ensures the adaptability of the transport system to customs procedures to reduce the number of cargo delays, reduce unproductive time spent during customs operations and resource costs of all kinds during the processing of export-import rail transport. The thesis solves the problem of forming the transport process of international freight rail transportation, which, unlike the previously known ones, takes into account the rationing of resource costs and the reduction of the number of delays of wagons and containers for customs reasons.

Lapin (2019) devoted his work to the importance of ensuring fire protection of objects and rolling stock of railway transport, increasing the combat readiness of railway fire departments and optimizing costs for their maintenance and operation. Under railway transport reform, improvement of new forms of fire protection management, one of which is the introduction of a systemic approach considering fire risks as an important component of threats to the economic security of railway transport enterprises, is required.

Pozdniakova and Deineka (2010) created their scientific work to study the processes taking place on the railway transport in the course of management; to analyze these processes and identify the tendency of their change, to determine the factors influencing these processes; to develop recommendations for improving the processes taking place during production on railway transport.

### Results and Discussion

In recent years, railway transport has been affected by a number of socio-economic destructive factors, which is reflected in the trends of its development. In 2021, 314.3 million tons of cargo, an increase of 2.9% compared to the previous period, but 7.4% lower the level of 2017, when the volume of cargo transportation was 339.5 million tons.

The development of passenger transport by rail should be indicated by a gradual increase in the volume of work. Thus, in 2021, the volume of passenger transportation amounted to 81.3 million people, an increase of 19% compared to 2020. However, compared to 2017 (164.9 million people), there is a significant gap of more than twice – by 50.7% (Main Department of Statistics in Luhansk Oblast, 2021).

Kirdina and Ukrainska (2022) believe that such negative trends in the development of railway transport are largely due to the long-term accumulation of systemic problems, including:

- deterioration of the condition of the railway track and infrastructure in general as a result of the postponement of repair works;
- reduced fleet of technically serviceable rolling stock due to ignoring the need for its timely renewal and modernization;
- increasing wear and tear of the production and repair base of railway transport enterprises;
- implementing ineffective investment, innovation, personnel, and marketing policies by the company.

Before considering railway transport of Ukraine as an object of financial and legal relations and a subject of financial control, it is necessary to investigate and define the following legal categories: "transport", "railway transport", "financial and legal relations" and "subject of financial control".

According to Bilodid (1979), the term "transport" refers to:

- 1) a branch of the national economy that carries out the transportation of passengers, delivery, cargo movement, etc. by various means;
- 2) one or another type of means of transport;
- 3) any means of transport, as well as a combination of such means;
- 4) means of transport of a certain territorial subordination;
- 5) a certain section of transport as well as the number of vehicles serving it.

The authors of the textbook on market statistics (Pidhornyi & Samotoienkova, 2014) note that the term "transport" comes from the Latin words *trans* (through) and *portare* (carry). The product of transport is the process of transportation, that is, the process of moving goods and passengers in the environment of human life. Transport is a branch of economic infrastructure, which is considered one of the priorities in the state. The peculiarity of transport as a type of economic activity for the provision of services is that the production process of other sectors of the economy is completed by moving products from the producer to consumers, and the value created by the labor spent on this movement, is added to the cost of transported products, although new material values are not created in this area.

According to Kushnir (2015, p. 42), transport is one of the most important industry branches, providing production and non-production needs of the economy and the country's population in all types of transportation.

The legislator also fixed the definition of the term "transport". Thus, according to the Law of Ukraine No. 232/94-VR (1994), transport in the system of public production is one of the most important branches of public production and is designed to meet the needs of the population and public production in transportation. The development and improvement of transport is carried out in accordance with state target programs, taking into account its priority and based on the achievements of scientific and technical progress and is provided by the state.

Thus, the transport of Ukraine should be understood as a system of various types of vehicle ensuring the movement of people and goods on the territory of Ukraine and international transit. It includes rail transport, road transport, sea transport, river transport, air transport and pipeline transport. The transport system of Ukraine is an important component of the country's infrastructure and plays a crucial role in ensuring economic development. It ensures the movement of people and goods between different regions of Ukraine, which is necessary for the development of trade and other sectors of the economy.

As far as rail transport is concerned, the Law of Ukraine No. 232/94-VR (1994) states that it includes railway transport enterprises carrying out the transportation of passengers, cargo, baggage, mail, rolling stock of railway transport, railway lines of communication, as well as industrial, construction, trade and supply enterprises, educational institutions, technical schools, children's preschools, health care, physical education and sports institutions, culture, scientific research, design and construction organizations, industrial railway transport and other enterprises, institutions and organizations regardless of ownership that ensure its activity and development.

Along with this, the Law of Ukraine No. 273/96-VR (1996) defines the main legal, economic and organizational principles of the operation of public railway transport, its role in the economy and social sphere of Ukraine, and governs its relations with executive bodies, authorities, local self-government bodies, other modes of transport, passengers, senders and receivers of goods, baggage, and mail, taking into account the

specifics of the functioning of this mode of transport as a single industrial and technological complex.

According to its provisions, railway transport is a production and technological complex of railway transport enterprises, designed to meet the needs of public production and the country's population in transportation in domestic and international connections and to provide other transport services to all consumers without restrictions on ownership and types of activity, etc. It is one of the important basic branches of the economy of Ukraine that provides internal and external transport and economic connections and satisfies the needs of the population in transportation. The activity of railway transport as part of the unified transport system of the country contributes to the normal functioning of all branches of public production, social and economic development and strengthening of the State's defense capability, international cooperation of Ukraine.

Railway transport enterprises, in cooperation with other modes of transport, must carry passengers and cargo in a timely and high-quality manner, ensure traffic safety, and develop the sphere of transport services for the national economy and the population.

Railway transport, as one of the economic types of transport, is capable of mastering the most massive cargo flows, which ensures reliable delivery of products to the consumer and the least negative impact on the environment. Its significant role in the economy is also evident in the fact that it is a large consumer of material and labor resources.

The advantages of this type of transport are:

1. The possibility of mass transportation of goods and passengers increasing the capacity of railway lines;
2. Regularity of transportation regardless of climatic conditions, time of year and day;
3. Higher volumes of cargo delivery and, as a rule, a shorter track compared to river and sea transport, including through transport corridors;
4. Great efficiency during the transportation of bulk cargo over long and medium distances, especially when organizing routes;
5. Relatively low cost;
6. High traffic safety (Pozdniakova and Deineka, 2010, p. 22).

The main feature of railway transport is versatility, high carrying capacity and regularity of transportation. The economic efficiency of railways largely depends on the volume of transportation. With large flows of mass cargo, railways quickly pay back the capital investments used for their development. This type of transport effectively serves the manufacturing and mining industries.

Regulatory acts defining the procedure and conditions of transportation, use of means of the public railway system, traffic safety, labour protection, ensuring public order, crossing railway tracks by other modes of transport and communications, fire safety, sanitary norms, and rules on railway transport of Ukraine, are mandatory for all legal entities and individuals on the territory of Ukraine.

According to functional features, rail transport is divided into freight and passenger. This is due to the fact that transport is a necessary prerequisite for the functioning of both material production and the service sector, including passenger transportation. Passenger railway transport is a branch of the non-production sphere and belongs to the infrastructure industries.

Freight transport is a branch of production infrastructure. Without directly producing material products, freight transport is the fourth branch of material production after mining, processing industry and agriculture. None of the named three main branches of material production is able to function without transportation. The product is ready for consumption only when it is delivered to the consumer.

That is, railway transport of Ukraine is a system of railway tracks, stations, electrified and non-electrified sections, locomotives, wagons and infrastructure, which provides passenger and cargo transportation throughout the territory of Ukraine and connects it with international railway transport networks. Railway transport of Ukraine is state property.

As Peroshchuk (2014, p. 175) correctly points out, not only the actual behavior of the subjects of financial legal relations, but also the achievement of the ultimate goal of such legal relations depends on how fully and correctly the object will be defined. Considering railway transport as an object of financial and legal relations, it should firstly be noted that financial legal relations are considered by legal theorists as social relations regulated by the rules of financial

law, the participants of which act as bearers of subjective rights and legal obligations regarding the formation, distribution (re-distribution) and use of public money funds. According to the authors, financial legal relations (like any other legal relations) arise between certain actors regarding a specific object and have a meaning that is revealed through the respective rights and obligations of its participants. Reflecting the general nature inherent in any legal relationship, financial and legal relationships also have specific characteristics due to the peculiarity of the sphere of their occurrence (Bandurka & Hetmanets, 2015).

Vinnitskyi (2003) states that financial legal relations are generated by a phenomenon (financial activity of the state), which at the same time constitutes its content. We completely share the point of view by the scientist and believe that, determining the nature of financial legal relations, a modern scientist should depart from the traditional approach and abandon the indication that financial legal relations arise in the field of financial activity. This is due to the fact that under this approach, reasoning further, and recognizing that financial activity, like any activity in general, constitutes certain relations, we must summarize that financial legal relations arise, change and terminate in the sphere of relations.

Financial legal relations:

are property relations between the State (even when it acts indirectly in these relations), on the one hand, and other actors on the other one;  
they flow in cash;  
arise at the initiative of the State;  
emerge in order to create and distribute state monetary funds;  
accompany the public interest of the state;  
are characterized by imperativeness, coercion, which is ensured by the state legal means – by recognizing financial relations as a subject matter of legal regulation (Nesterenko, 2015, p. 120).

The following features are also inherent in financial legal relations:

they arise and develop exclusively in the field of financial activity of the state and local self-government bodies (they are of a property nature), related to the mobilization, distribution and use of centralized and decentralized funds;  
they are power relations, because one side of this relationship is the State through certain bodies with authorities;

they emerge, change and terminate on the basis of legal facts (Filipenko & Filipenko, 2018).

In view of the peculiarities and diversity of financial legal relations, the most acceptable opinion is one, according to which the object of such legal relations is what the subjective rights and obligations of the actors of these relations are aimed at and what the latter seek to achieve by their behavior. At the same time, taking into account the unity of the field of financial law, which is a set of legal norms that regulate relations regarding the mobilization, distribution and use of funds of public funds, it is possible to talk about the separation of the general object of financial legal relations (Makukh, 2017, p. 163).

The need to determine the legal regime of the object of financial legal relations is also due to their diversity. Thus, money, securities, certain financial instruments, property, documents, estimates and other material goods can be the object of various types of legal relations. At the same time, it is the legal regime of each specific object that will allow them to be demarcated and provide the appropriate specifics in accordance with the applied method of legal regulation. At the same time, the legal regime of a certain object of financial legal relations is determined by normative legal acts.

The legislation on the public railway system consists of the laws of Ukraine “On Transport” (Law No. 232/94-VR, 1994), “On Specifics of Creating a Public Railway Transportation Public Joint Stock Company” (Law No. 4442-VI, 2012), the Law “On Railway Transport” (Law No. 273/96-VR, 1996), Railroad Regulations of Ukraine approved by the Cabinet of Ministers of Ukraine (Order No. 457, 1998), and other legislative acts of Ukraine.

## Conclusion

Thus, railway transport is one of the most important basic sectors of the Ukrainian economy, provides its internal and external transport and economic relations and the transportation needs of the population. Operation of the railway transport as part of the integrated transport system of the country contributes to the proper functioning of all branches of public production, social and economic development and strengthening of the state's defense capability, and international cooperation of Ukraine.

Rail transport of Ukraine, as the object of financial legal relations, is a relationship between

economic entities, as well as the state, arising in the process of financial activity, that is, in relationships related to the circulation of funds, securities, banking services and any other financial assets.

Financial legal relations directly related to railway transport may include issues of financing, taxation, regulation of tariffs and other financial aspects of the activity of such an economic entity. Such relations are regulated, among other things, by financial legislation, as well as by other legal norms relating to the financial activities of economic entities.

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## Peculiarities of personality resilience formation in modern conditions

### Peculiaridades de la formación de la resiliencia de la personalidad en las condiciones modernas

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#### Abstract

The speed, complexity, and all-encompassing nature of modern socioeconomic processes place high demands on such personal qualities as resilience, stress resistance, competitiveness, and the ability to self-develop and self-help. These qualities are essential for successful functioning in society and overcoming serious social challenges. According to psychologists, the modern conditions in which people live and realize themselves are extreme and stimulate the development of stress. The article aims to outline the key trends in the modern scientific literature on issues related to the formation of resilience. It is equally important to study the practical aspects of the development of this trait as one of the key factors of a successful life in modern conditions. In the course of the study, the analytical and bibliographic method was applied to study the scientific literature on resilience formation. Furthermore, the authors of the study conducted an online questionnaire survey to clarify the most important issues related to the formation of personal resilience, given the challenges of today. According to the results of the study, the

#### Resumen

La velocidad, la complejidad y la naturaleza integral de los procesos socioeconómicos modernos imponen grandes exigencias a cualidades personales como la resiliencia, la resistencia al estrés, la competitividad y la capacidad de autodesarrollo y autoayuda. Estas cualidades son esenciales para funcionar con éxito en la sociedad y superar serios desafíos sociales. Según los psicólogos, las condiciones modernas en las que las personas viven y se realizan son extremas y estimulan el desarrollo del estrés. El artículo tiene como objetivo esbozar las tendencias clave en la literatura científica moderna sobre temas relacionados con la formación de la resiliencia. Es igualmente importante estudiar los aspectos prácticos del desarrollo de este rasgo como uno de los factores clave de una vida exitosa en las condiciones modernas. En el transcurso del estudio, se aplicó el método analítico y bibliográfico para estudiar la literatura científica sobre la formación de resiliencia. Además, los autores del estudio realizaron una encuesta en línea para aclarar los temas más importantes relacionados con la formación de la resiliencia

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main most important theoretical aspects of the issue of the formation of personality resilience in modern conditions are identified. Moreover, the viewpoints of scientists and practicing psychologists on the key aspects of this issue are studied.

**Keywords:** resilience, overcoming life's difficulties, stress resistance, self-help, vitality, effective social interaction.

## Introduction

The current stage of development of psychological science is characterized by the growing interest of researchers in the formation of human vitality. This situation can be explained, on the one hand, by the general need to solve real practical problems of personal expression and forms of interaction with the social environment. On the other hand, it can be explained by the development of psychology as a science, the achievement of a high level of theoretical and methodological basis, and the possibility of fruitful research on personality resilience.

The theoretical part of this study substantiates the relevance, concepts, components, and prerequisites for the formation of human resilience.

The practical part of the article includes an assessment of the importance of the factors of change in public life. This should be taken into account when planning work on optimizing resilience, and identifying the most important components of the concept. This is especially relevant in terms of the need to give priority to the concept in the process of practical work with people in need of psychological assistance. Meanwhile, the survey allowed for the identification of the main aspects of resilience. These aspects require special attention as areas of preventive measures to ensure a person's resilient attitude to changes in the environment in the future. The study also identified negative factors that can have a significant negative impact on the development of human resilience in adulthood. Moreover, the characteristics and traits of the personality, the formation of which is positively influenced by the presence of resilient beliefs, are identified.

Based on the results of the study, conclusions have been drawn on the issues raised. It was found that rapid social and political changes in

personal, frente a los desafíos de hoy. De acuerdo con los resultados del estudio, se identifican los principales aspectos teóricos más importantes del tema de la formación de la resiliencia de la personalidad en las condiciones modernas. Además, se estudian los puntos de vista de científicos y psicólogos en ejercicio sobre los aspectos clave de este tema.

**Palabras clave:** resiliencia, superación de las dificultades de la vida, resistencia al estrés, autoayuda, vitalidad, interacción social efectiva.

society are the key factors of changes in public life that should be considered when planning work to optimize resilience. According to the survey results, it was found that one of the most important components of the concept of resilience is the ability to build a full life in difficult conditions (adaptability). These aspects should be considered in the process of practical work with people in need of psychological assistance. However, among the aspects of resilience that require special attention as areas of preventive measures to ensure successful personality development and create prerequisites for a person's resilient attitude to changes in the environment in the future, it is worth noting stability and balance. The survey participants identified the most important factors that, if present in a person's childhood, can have a significant negative impact on the development of their resilience in adulthood. These include the lack of support and encouragement from loved ones, as well as the presence of alienation from significant adults. Furthermore, the study showed that individuals with high resilience scores have a greater sense of competence and higher cognitive scores. Moreover, they have better-developed coping skills and are more capable of building trusting relationships, and can maintain high standards of personal interaction with others.

The research aims to determine the position of scientists studying the issues of personality resilience and practicing psychologists on the peculiarities of forming personality resilience, given the challenges and peculiarities of today's conditions.

## Literature Review

Nowadays, it is no longer enough to successfully overcome another life crisis and draw the right conclusions for a successful life. The changing present forces people to live effectively in an

extreme environment, in conditions of the need to constantly set personal goals, work with their feelings, communication skills, etc. (Melnychuk et al., 2022), (Bertrams et al., 2020).

Many scientists nowadays pay special attention to the study of a person's internal capabilities that help him or her to withstand difficult life conditions and preserve personal essence, integrity, and identity. According to psychologists, this ability can be characterized as resilience. This concept is usually viewed from two perspectives: as a set of components that help an individual build a fulfilling life in difficult conditions; as a functional ability to adapt, protect and maintain the stability of the personal system. Thus, resilience is the individual ability of a person to manage their resources in the context of social norms and environmental conditions. One of the specific and basic forms of resilience is overcoming unfavorable conditions for personal development (Cangiano, Parker & Yeo, 2019), (Lavrusheva, 2020).

When studying the mechanisms of social transformation, scholars point out that a modern personality must navigate the expanded social space and demonstrate internal flexibility. Moreover, he or she needs to strive for a variety of interests, and self-improvement, and perceive the present as a special important temporal dimension of human existence (Chang, Kuo & Ni, 2022).

Therefore, the efforts of scientists in this area are primarily aimed at studying the specific abilities of an individual that help him or her successfully adapt to a complex dynamic environment. According to psychologists, this ability is interpreted as flexibility, resilience, elasticity, and resistance to external influences (Logan, Berman & Prescott, 2023).

Resilience is an integral and stable personality trait. It varies depending on the type of stress, its context, and other factors that can be defined as risk and protective factors (Leontiev, Mospan & Osin, 2022).

From another perspective, resilience is viewed as a person's energy potential, which reflects the degree of ability to overcome adverse circumstances, as well as the degree of effort made to work on oneself and one's life circumstances. This trait is an integral feature of personal maturity and a form of manifestation of personal potential and self-determination (Keefer & DeBeliso, 2020).

One of the specific forms of manifestation of resilience (personal potential) is overcoming unfavorable conditions for personal development. There are objectively unfavorable conditions for the formation of a personality that can affect its development. However, such influence can be overcome following the external and personal capabilities of a person (Gray et al., 2018).

The level of development of resilience as a trait that reflects the ability of a subject to find a balance between compliance with existing conditions determines the degree of protection of a person from various threatening influences. These are associated with a person's perceptions of his or her ability to achieve expected results, successfully implement the necessary forms of behavior and overcome the negative impact of the environment (Buchner et al., 2022).

### Methodology

An empirical study of current trends in the formation of personality resilience was conducted by interviewing 246 scientists and 211 practicing psychologists who conduct research and practice in Lviv, Ivano-Frankivsk, Zhytomyr, Khmelnytsky, and Kyiv oblasts of Ukraine.

When organizing the survey, respondents were asked to evaluate the importance of each option in every question in the questionnaire as a percentage from 0 to 100, based on their perceived importance.

When processing the survey questionnaires, the average value of all respondents' answers for each answer option was calculated. After summarizing the results of the survey, the respondents reviewed the data obtained and, having agreed with its results, gave permission to publish the results of the study.

The group of respondents was selected considering the gender and age proportions of the population in each region of the study.

The study was conducted using the SurveyGizmo service.

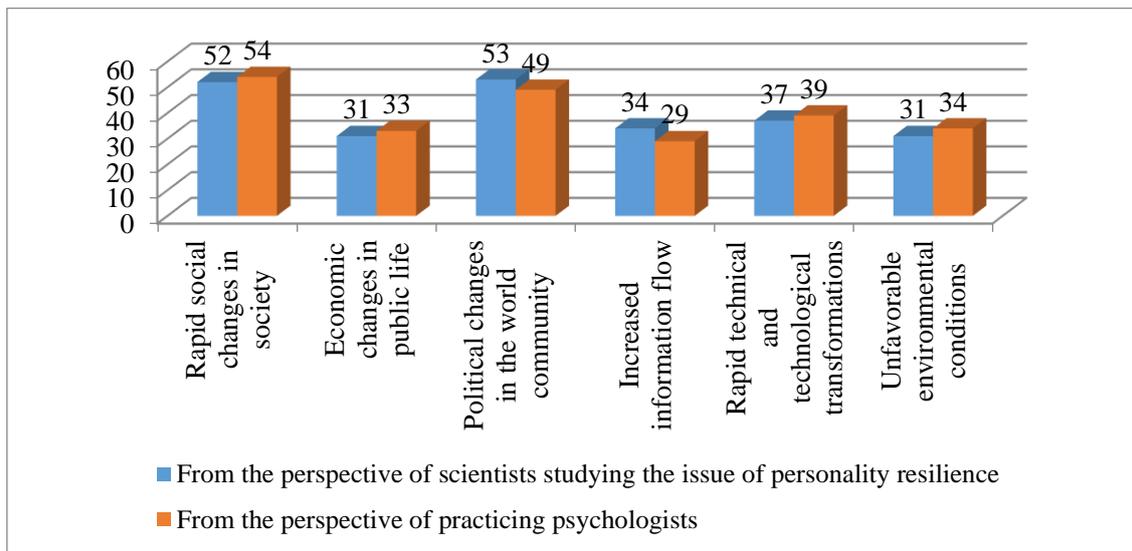
### Results

According to the survey participants, in today's conditions, the key factors of changes in public life that should be considered when planning work to optimize resilience are primarily (Figure 1).

Thus, the survey showed that, according to both scientists and practitioners in the field of psychology, rapid social and political changes in society affect people's mental health and well-being. They cause stress, neuroses, depression, and inadequate behavior and, accordingly, require increasing the resilience of individuals exposed to such factors. Therefore, the issues of formation and preservation of subjective well-being, quality of life, high vitality, and resilience

of a person are of increasing need and scientific and practical interest for research.

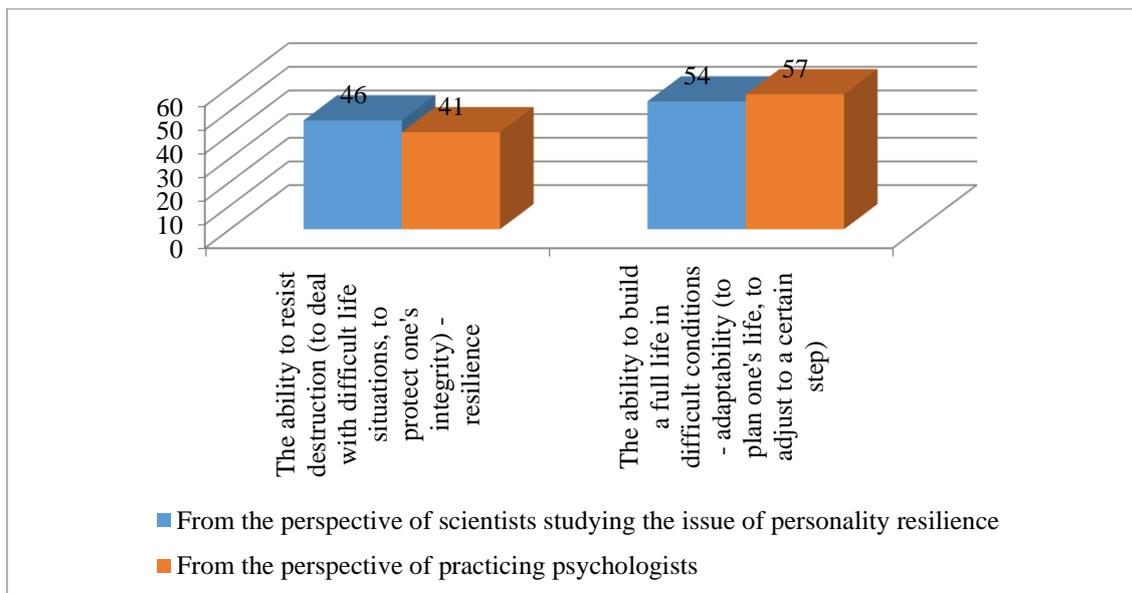
In the course of the survey, respondents identified the most important component of the concept of resilience for them, which should be given priority in the process of practical work with people in need of psychological assistance (Figure 2).



**Figure 1.** Distribution of importance of factors of changes in social life that should be considered when planning work to optimize resilience, %  
Source: built by the authors.

As can be seen from Figure 2, both components are extremely important in the work of strengthening the resilience of an individual in

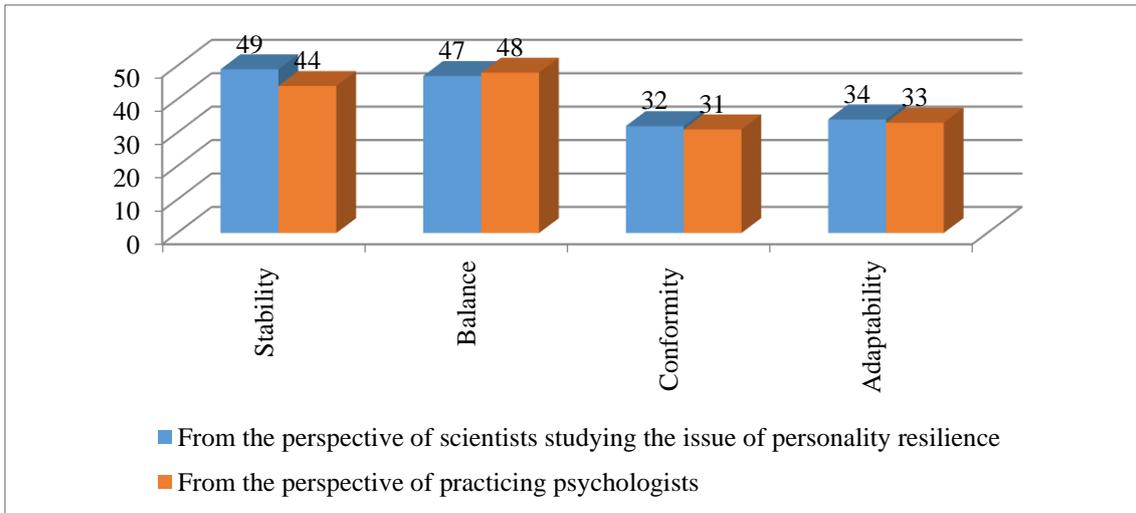
life circumstances. However, the ability to build a fulfilling life, namely adaptability, is the most important vector of resilience formation.



**Figure 2.** The most important component of the concept of resilience, which should be given priority in the process of practical work with people in need of psychological assistance, %  
Source: built by the authors.

During the survey, respondents identified aspects of resilience that require special attention as areas of preventive measures to ensure successful

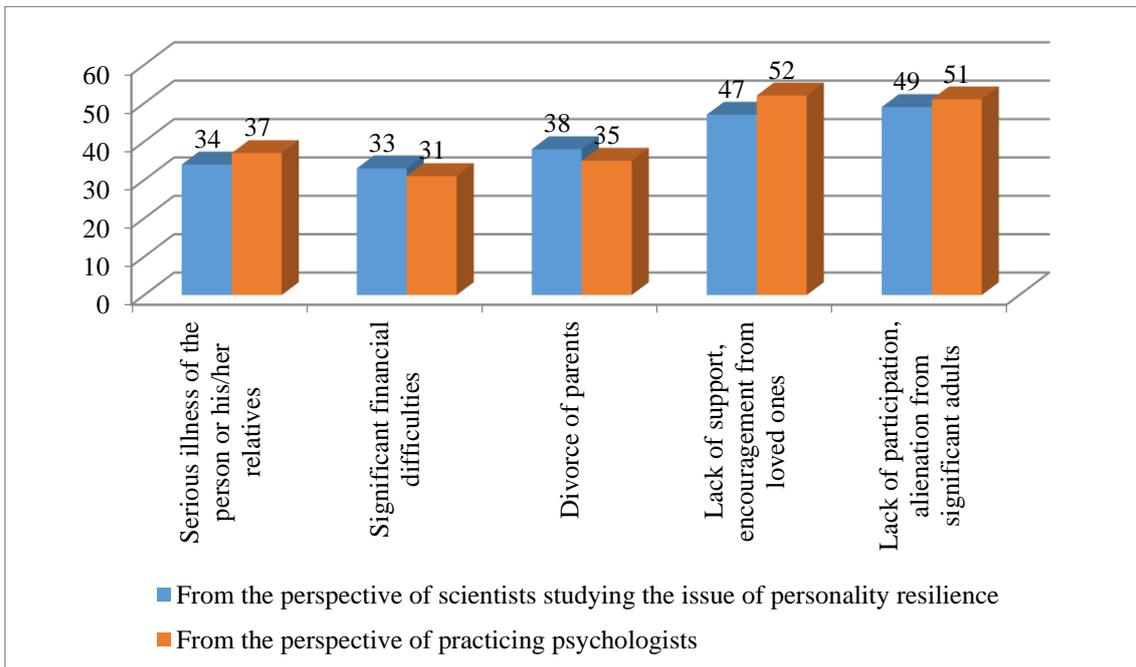
personal development and create prerequisites for a person's resilient attitude to changes in the environment in the future (Figure 3):



**Figure 3.** Aspects of resilience that require special attention as areas of preventive measures to ensure a person's resilience to changes in the environment in the future, %  
Source: built by the authors.

As shown in Figure 3, these aspects are primarily stability and balance. An essential result of the survey was to identify the most important factors

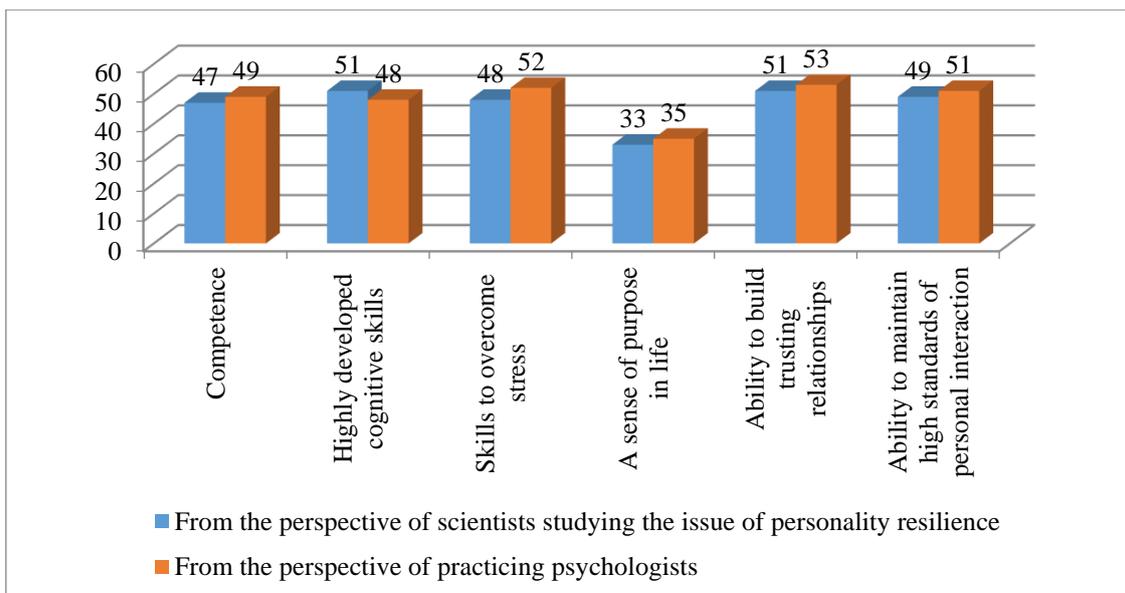
that, if present in a person's childhood, can have a significant negative impact on the development of their resilience in adulthood (Figure 4).



**Figure 4.** Negative factors that, if present in a person's childhood, can have a significant negative impact on the development of their resilience in adulthood, %  
Source: built by the authors.

As shown in Figure 4, the development of resilience in adulthood is most negatively affected by the lack of support, encouragement from loved ones, and the alienation of significant

adults in childhood. In the course of the survey, the participants identified the characteristics and personality traits that are positively influenced by the presence of resilient beliefs (Figure 5):



**Figure 5.** Characteristics and personality traits that are positively influenced by the presence of resilient beliefs, %

Source: built by the authors.

Research has shown that people with high resilience scores have a greater sense of competence and higher cognitive scores. Moreover, they have better-developed coping skills and are more able to build trusting relationships and maintain high standards of personal interaction with others.

### Discussion

The problem of human resilience to various life difficulties is and has been one of the most important at all times in any society. It has always attracted and continues to attract the attention of philosophers, writers, doctors, educators, and psychologists. Researchers rightly characterize the rhythm of modern society as stressful, sometimes even extreme and critical. The optimal overcoming of difficult stages of life is very topical for the modern development of our society (Carrillo, Etchemendy & Baños, 2018), (Fruchart & Rulence-Pâques, 2022).

Resilience is considered the main functional component of vitality that maintains the stability of the personality system and is a systemic factor that sets the parameters of the main components of life. Furthermore, resilience is a central personality variable that mediates the impact of stress factors on somatic and mental health, as well as on the success of individual activities (Kokou-Kpolou & Park, 2020), (Stuart-Edwards, 2023).

Resilience in overcoming difficulties is manifested as the ability to believe in oneself,

self-confidence, self-reliance, and the ability to effective mental self-regulation. Moreover, it is manifested in the preservation of the individual's ability to function, exercise self-determination, develop, and adapt. Reduced resilience encourages a person to overcome a risky situation with negative consequences for mental and somatic health, personal development, and established interpersonal relationships. The balance of resilience is defined by scientists as the ability to correlate the level of stress with the resources of one's psyche and body, to minimize the negative impact of stress, and the ability to keep stress within acceptable limits (Goldbeck, Hautzinger, & Wolkenstein, 2019), (Yin et al., 2022).

The most important aspect of resilience is individual and personal self-sufficiency in terms of freedom from dependence. Resilience is a personality trait, some aspects of which are stability and balance. This allows a person to withstand life's difficulties and unfavorable pressure, and to maintain health and efficiency in various challenges (Kukita, Nakamura & Csikszentmihalyi, 2020).

Scientists mainly see the main function of resilience as ensuring the ability of an individual to effectively interact socially and find optimal ways of self-development and self-realization in difficult life circumstances. The personal property of vitality emphasizes the attitudes that encourage a person to transform stressful life events. A person's attitude to change, as well as his or her ability to use available internal

resources to effectively manage it, determines to what extent a person can cope with the difficulties and changes he or she faces daily (Chen, Wu & Biljecki, 2021), (Garau & Annunziata, 2022).

The essence of constructive forms of behavior in difficult situations is that they allow one to cope with a difficult life situation, to act vigorously, consciously, purposefully, and adequately to the objective conditions of the situation and one's capabilities. Depending on the situation, attention can be paid either to changing the situation or to activating and developing one's skills. In the broadest sense, constructive behavior is ensured by a person's vitality, his or her ability to withstand life's difficulties, and preserve oneself as a holistic personality (Purvis, Mao & Robinson, 2019).

### Conclusions

Thus, the analysis of the scientific literature on the research topic and the results of the questionnaire survey showed that rapid social changes are constantly increasing the importance of the degree of development of human vitality in various spheres of life. Largely, this also applies to professional resilience, which is one of the most important components of a person's overall viability.

The theoretical analysis of the literature on this issue and the results of the survey indicate the crucial importance of resilience. It is considered the main functional component of personal development that maintains the stability of the personality system. Moreover, resilience is a system-forming factor that sets the parameters of a person's basic capabilities. Through resilience, people perceive life problems as less threatening and respond to them in a more productive way for their health, personal, and professional life.

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## Psychological resources of the individual style of overcoming stress in the conditions of military aggression

### Психологічні ресурси індивідуального стилю подолання стресу в умовах військової агресії

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#### Abstract

Currently, world statistics clearly shows the growing relevance of stress-related issues as a result of military and peacekeeping operations, wars and conflicts. Both military personnel and persons who are representatives of other professional areas are subject to a significant influence of stressful factors in the conditions of military aggression leading to a violation of their mental activity, and, consequently, complete or partial loss of combat capability and ability to work. The effectiveness of overcoming stress in such a case is to a great extent determined by a person's ability to use available individual psychological resources. The purpose of the academic paper is to systematize the scientists' standpoints regarding the features of the individual style of overcoming stress during military aggression, as well as to clarify the

#### Анотація

Світова статистика сьогодні яскраво свідчить про зростаючу актуальність проблем, пов'язаних зі стресом внаслідок бойових і миротворчих операцій, війн і конфліктів. Як військовослужбовці, так і особи, що є представниками інших професійних напрямків, в умовах військової агресії підпадають під значний вплив стресогенних факторів, що призводять до порушення їх психічної діяльності, і пов'язаними з цим повною або частковою втратою боєздатності і працездатності. Ефективність подолання стресу в такому випадку багато в чому визначається здатністю особи до використання наявних індивідуальних психологічних ресурсів. Метою статті є систематизація точок зору науковців щодо особливостей індивідуального стилю подолання стресу під

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practical features of the issue outlined. Methodology. In the course of the research, system-structural, analytical-bibliographic, comparative, logical-linguistic methods, analysis, synthesis, induction, and deduction were applied to process scientific information on applying individual psychological resources in war conditions. A questionnaire was used to study practical issues on the research topic. Along with this, idealization was used to study and process statistical, analytical data and the survey results. Results. Based on the research results, information in scientific works on applying individual psychological resources to overcome stress in the conditions of military aggression was selected and systematized; certain practical aspects of this process were also clarified.

**Keywords:** Stress, coping behavior, models of coping with stress, personal resources, stress resistance, personal potential, “military aggression”.

## Introduction

In the modern world, many people, especially military personnel, work in extreme conditions. During the war, the effectiveness of such activities is determined by professional knowledge, abilities and skills, as well as by the presence and level of developing relevant personal qualities, individual properties, in particular, stress resistance, which is a component of personality adaptability.

The theoretical part of the present research substantiates the concepts, components and main tendencies of the investigations in the scientific literature regarding the features of establishing individual psychological resources to overcome the stressful state in conditions of military aggression.

The practical part of the research includes revealing the most significant skills that determine a person's potential ability to individually overcome stress in conditions of military aggression, a person's psychological characteristics requiring special attention and shaping his personal adaptation potential from the perspective of stress resistance. The survey made it possible to establish the individuals' most negative psychological tendencies hindering the effective formation of individual psychological resources to overcome stress, as well as skills and forms of behavior contributing

час військової агресії, а також з'ясування практичних особливостей даного питання. Методологія. Під час дослідження застосовано системно-структурний, аналітико-бібліографічний, порівняльний, логіко-лінгвістичний методи, аналіз, синтез, індукцію, дедукцію при обробці наукової інформації з питань застосування індивідуальних психологічних ресурсів в умовах війни, анкетне опитування для вивчення практичних питань з теми дослідження, а також ідеалізацію для вивчення та обробки статистичних, аналітичних даних та результатів анкетування. Результати. За результатами дослідження виділено та систематизовано інформацію в наукових роботах з питань застосування індивідуальних психологічних ресурсів для подолання стресу в умовах військової агресії, а також з'ясовано окремі практичні аспекти даного процесу.

**Ключові слова:** стрес, копінг-поведінка, моделі подолання стресу, особисті ресурси, стресостійкість, особистісний потенціал, «військова агресія».

to the most effective accumulation of individual psychological resources to overcome stress in conditions of military aggression. In addition, a person's psychological characteristics have been singled out, which require more thorough scientific investigation and development of practical recommendations for effectively overcoming stress during the war.

Based on the research results, conclusions were made regarding the issues raised. In particular, it was revealed that the primary skills determining a person's potential ability to overcome stress in conditions of military aggression individually are self-control, endurance and the ability to “qualitatively” communicate. At the same time, a person's psychological characteristics, which need to be paid attention to and which form his personal adaptation potential from the perspective of stress resistance, are primarily the individual's stress resistance and personality self-esteem. The survey participants also determined people's negative psychological tendencies that make it difficult to effectively form individual psychological resources to overcome stress and require additional work. They are negativism, resentment, envy and hatred of others for real and imaginary actions, distrust and feelings of guilt. The components of resistance to stress, which should be paid particular attention and which form its personal

adaptation potential from the perspective of resistance to stress, and, accordingly, have the greatest significance in practical activities to overcome it, according to respondents' standpoints, are motivation, willpower and professional training, awareness and readiness of a person to perform specific tasks. The survey showed that the skills contributing to the most effective accumulation of individual psychological resources to overcome stress in conditions of military aggression are the ability to mobilize effective efforts to overcome stress and the ability to reduce mental stress using state correction methods.

### Literature Review

Attempts to comprehensively understand the personal qualities responsible for successful adaptation and overcoming life difficulties are defined in modern psychology by the concept of personal adaptive potential and a person's determining resistance to external circumstances. At the same time, scientists consider adaptability mainly as a person's individual, personal quality (Steingraber et al., 2021).

Psychologists also consider the individual ability to overcome stress as a property of a living self-regulating system (Prykhodko et al., 2020).

Overcoming stress is the process of forming and implementing cognitive behavioral actions, efforts, as well as protective and adaptive emotional reactions intended to conduct external and internal requirements. This process includes the following phases: development of motivation and goal orientation to overcome stress in specific conditions; based on perceiving and comparing information, an assessment of the external situation and own resources is formed, the necessary preparation and decision-making on using appropriate behavioral strategies take place; mechanisms for regulating emotions and will are included to implement the chosen strategy; specific actions are taken to overcome stress; an assessment of the result of work with stress is issued (Kokun, Pischko & Lozinska, 2022).

In the process of overcoming stress, a successive change in the stages of psychological activity takes place for assessing a specific stressful situation and personal resources, as well as for selecting and implementing a relevant strategy of behavior in the conditions of stress development. There is a close interrelationship between these components, characterizing the regular

alternation of stages of overcoming stress (Nassif et al., 2019).

Individual stress coping should be considered taking into account the features of an individual's personal and social resources, depending on manifesting specific cognitive and behavioral strategies that a person uses to manage his emotional reactions in stressful conditions, as well as considering the individual ways and methods of coping with stress that a person uses most often (Osório et al., 2018).

The psychology of overcoming stress studies psychophysiological mechanisms, emotional and rational regulation of human behavior. The goal of the person's actions in this situation is the formation of optimal behavior depending on life circumstances or their transformation based on their intentions (Richardson et al., 2020).

The approach used to study how humans create their coping mechanisms to cope with stress takes into account each individual's capacity of natural coping instincts. One of the forms of a coping strategy for overcoming stress is a search activity that ensures the subject's participation in emotional and rational strategies in various situations (Sanders et al., 2019).

The choice of ways to overcome stress is influenced by individual and psychological features, namely: temperament, level of anxiety, way of thinking, features of the locus of control (Williams & Berenbaum, 2019).

The meaningfulness of certain ways to respond in difficult life situations depends on the degree of a person's self-fulfillment. The higher the personality development level is, the more successfully a person overcomes psychological difficulties (Chen, Yang & Chiang, 2018).

Scientists pay attention to the significant role of the ability to assess the situation, which determines the correct choice of stress management strategy. The depth and correctness of assessing influences a person's confidence in controlling the situation and the ability to change it. The authors of studies on this topic introduce the term "cognitive assessment" and define it as an individual's activity, that is "...the process of recognizing the specifics of a situation, identifying its negative and positive sides, determining the content and meaning of what is happening" (Ligeza, Larson & DeBeliso, 2022). The strategies that a person will use to solve a difficult stressful situation depend on how the mechanism of cognitive evaluation works.

Cognitive assessment is an integral part of the emotional state (Nindl et al., 2018).

**Aims**

The purpose of the research is to determine the standpoint of scientists conducting studies in the sphere of stress management and practicing psychologists regarding the specifics of the individual style of overcoming stress during military aggression.

**Materials and Methods**

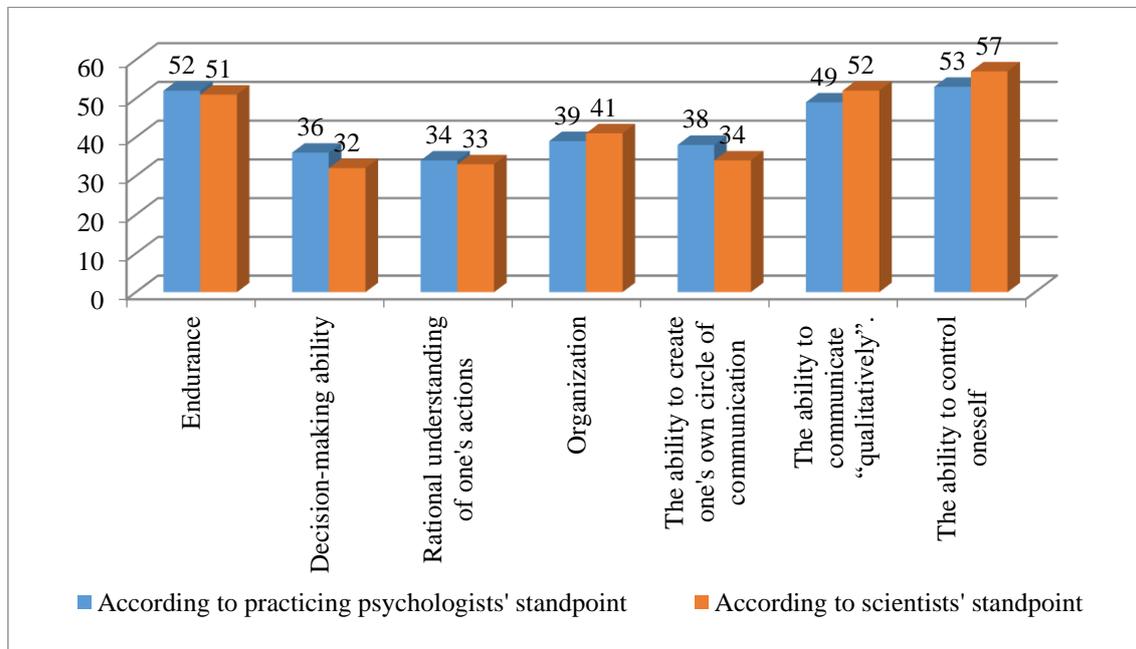
A practical study of modern tendencies in using individual psychological resources to overcome stress in conditions of military aggression was conducted by interviewing 228 practicing psychologists, as well as 204 scientists conducting studies and teaching activities in 12

higher educational institutions in Khmelnytskyi, Sumy, Poltava and Kyiv regions of Ukraine. The research was conducted using the Google Forms service.

**Results**

The survey participants believe that currently, in the conditions of economic and political instability in the world, acts of military aggression and, accordingly, an increase in stressogenic factors, the primary skills determining a person’s potential ability to overcome stress in conditions of military aggression individually are as follows (Figure 1):

- self-control;
- endurance;
- the ability to communicate “qualitatively”.

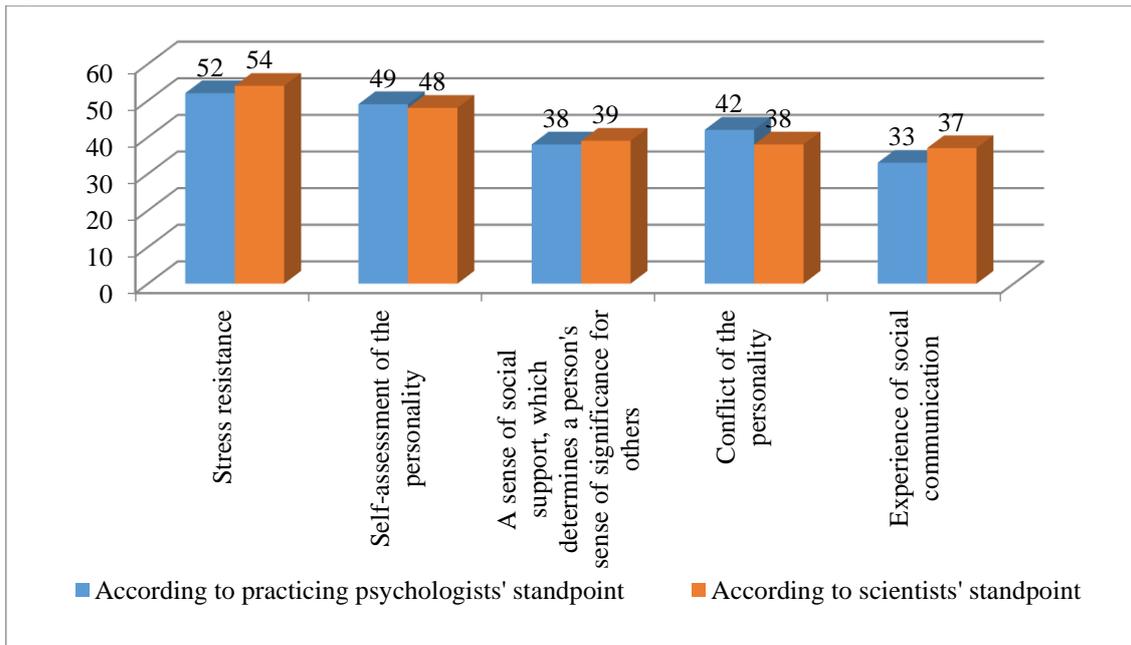


**Figure 1.** The primary skills determining a person’s potential ability to overcome stress in conditions of military aggression individually, %.

Source: compiled by the authors.

The survey respondents also identified a person’s psychological features that should be taken into consideration and that determine their individual

capacity for adaptability in terms of stress resistance (Figure 2).

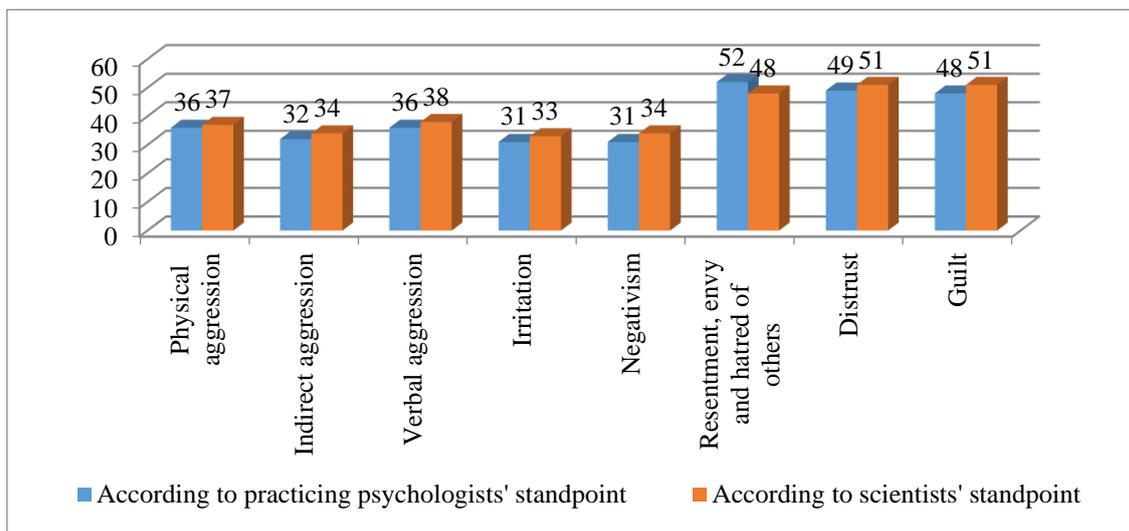


**Figure 2.** Psychological features of a person, which should be paid attention to and which form his personal adaptation potential from the perspective of stress resistance, %.

Source: compiled by the authors.

It can be observed from Figure 2, based on scientists' and practical psychologists' standpoints, that the individual's stress resistance and self-esteem are the most significant features.

An important aspect of the research was studying the survey participants' viewpoint regarding persons' negative psychological tendencies, hindering the effective formation of individual psychological resources to overcome stress and requiring additional measures (Figure 3).



**Figure 3.** Persons' negative psychological tendencies hindering the effective formation of individual psychological resources to overcome stress, %.

Source: compiled by the authors.

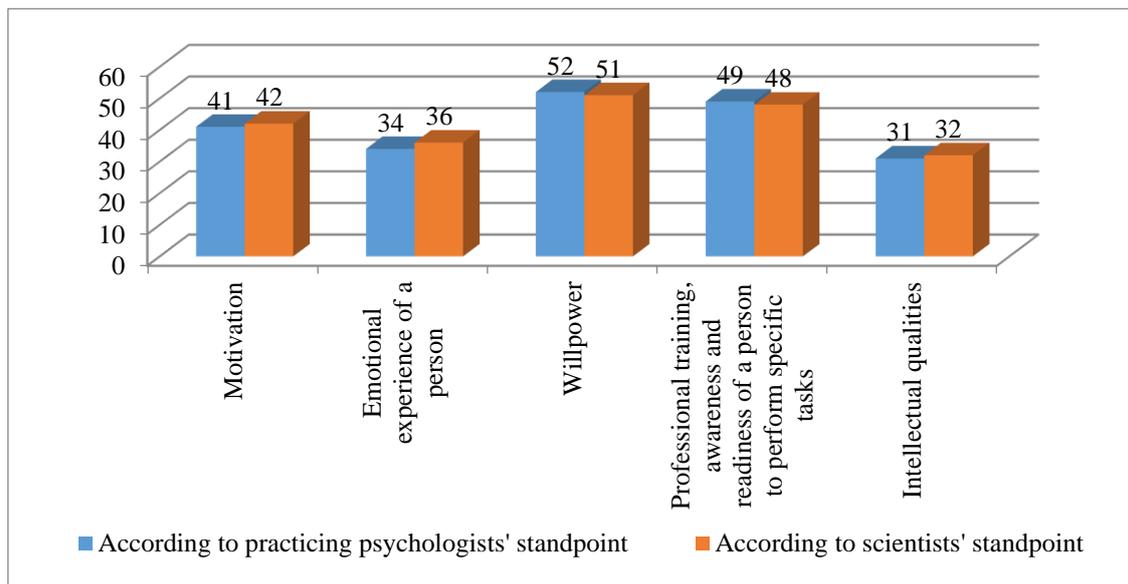
Based on the survey, there are the following tendencies:

- negativism – a form of oppositional behavior from passive resistance to active struggle with established customs and laws;
- resentment, envy and hatred of others for real and imaginary actions;
- distrust – from being wary of people to believing that other people are planning and causing harm;

- guilt, expressing the belief of the subject that he or she is a bad person, doing bad things, and also experiencing remorse.

In the course of the research, the respondents were asked to identify the components of

individual psychological resistance to stress, which form personal adaptation potential. These are a person's psychological features, requiring more thorough scientific study and development of practical recommendations for effectively overcoming stress during the war (Figure 4).



**Figure 4.** A person's psychological features, requiring more thorough scientific study and development of practical recommendations for effectively overcoming stress during the war, %.

Source: compiled by the authors.

According to the survey participants' standpoint, such features are primarily motivation (by changing motivation, one can increase (or decrease) emotional resistance), willpower, which is expressed in conscious self-regulation of actions to bring them into line with the situation's requirements, as well as professional training, awareness and readiness of a person to perform specific tasks. Along with this, both psychologists and scientists rated such features as the emotional experience of the individual, accumulated in the process of overcoming the negative impact of extreme situations, and intellectual qualities – the ability to assess the requirements of the situation, predict their

possible change, and make decisions about the methods of action.

The skills contributing to the most effective accumulation of individual psychological resources to overcome stress in conditions of military aggression are another important issue clarified during the survey (Figure 5).

The research has shown that the organization of resources, the ability to mobilize effective efforts to overcome stress, and the ability to reduce mental stress using state correction methods contribute most to the effective accumulation of individual psychological resources to overcome stress in conditions of military aggression.

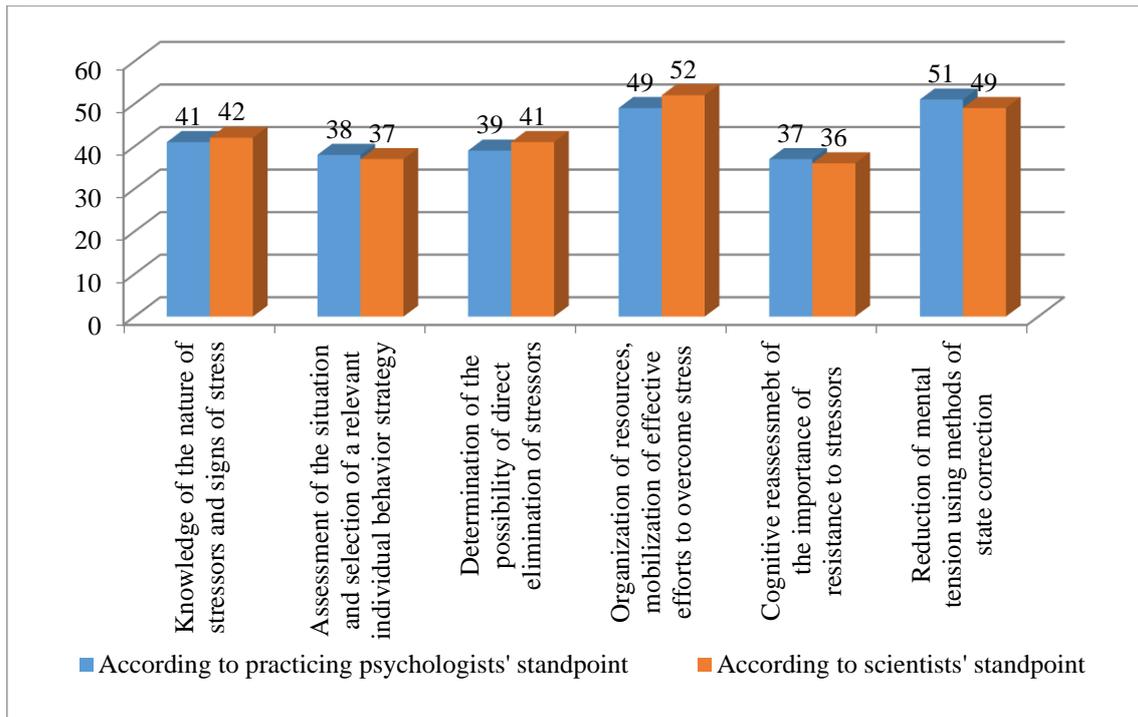


Figure 5. Skills and forms of behavior contributing to the most effective accumulation of individual psychological resources to overcome stress in conditions of military aggression, %.

Source: compiled by the authors.

### Discussion

A person's social resources in a stressful situation are determined by moral support level of others, personal values and interpersonal relationships (Gray et al., 2018).

The process of overcoming stress involves the mobilization of personal and social resources. The use of behavior's certain strategies depends on the peculiarities of the influence of such factors as the demographic and personal characteristics of a person, the environment, life crises, the situation importance, the intensity of manifesting emotional and cognitive reactions. Ways to overcome stress include the ability to show constructive activity, to experience an event without avoiding it (Shiozawa et al., 2019).

In the psychological literature, the only resource of a person is considered to be a complex of a person's personal-psychological, professional and physical resources. Personal and psychological resources are psychological attitudes significantly influencing on the regulation of behavior in difficult situations (self-control, self-esteem, a sense of self-worth, optimism, a sense of humor, stereotypes, etc.), reflecting the specifics of the course of cognitive, psychological, emotional, volitional processes (Park & Colvin, 2019).

The role of personal, psychological and social resources in coping with stress is crucial for the choice of strategies and behavior in a stressful situation. However, this choice is influenced by situational factors, the cognitive assessment of which, together with the assessment of the individual potential of a person, allows determining the necessary resources to overcome stress (Keefer & DeBeliso, 2020).

Classical science assumes that the crucial elements of the psychological stress management strategy are as follows: real (cognitive or behavioral) problem solving; search for social support; reassessment of the situation; protection and problem prevention; bypassing the solution of the problem; emotional expression (Kalka et al., 2022).

At the same time, the most adaptive coping strategies are those aimed at solving the problem situation. These include: active coping – active measures to eliminate sources of stress; planning one's actions regarding a problematic situation; search for public support; positive interpretation – assessment of the situation from the perspective of its positive aspects; acceptance – recognition of the situation's real aspects (Chen, Yang & Chiang, 2018).

The second block of coping strategies can help a person adapt in a stressful situation. However, it differs from active coping strategies. Such

coping strategies are as follows: the search for emotional public support, that is, the search for sympathy and understanding; reduced activity in relation to other things and full concentration on sources of stress; waiting for more favorable conditions to solve the problem situation (Chen, Yang & Chiang, 2018).

Stress management depends not only on the choice and application of a relevant strategy of behavior, but also on the style of coping with stress, namely, an individual-specific stereotype (method, algorithm) of actions to solve a problem. The typical manifestations of these styles are a person's behavior (Tavakolizadeh, Yazdi & Akbary, 2019).

There are proactive and reactive styles of stress management. People with a proactive style seek to prevent stress from developing, while people with a reactive style take less preventive action and react impulsively to stress (Muntean et al., 2019).

Scientists note that any behavior aimed at overcoming stress begins with assessing the environment, which can be significant, harmful, useful, life-threatening (Abdullahi et al., 2020).

Preventive coping lies in preventing a stressor's impact and includes avoiding stressful factors by regulating living conditions and activities, optimizing the level of situational requirements, and developing personal resources to overcome stress (Chen, Yang & Chiang, 2018).

At the same time, some experts suggest that overcoming stress can be considered from the standpoint of operational and preventive consequences for the situation. Operational stress management is an attempt to eliminate or reduce the response to a stressor (Shiozawa et al., 2019).

## Conclusions

Therefore, the analysis of the scientific literature on the research topic and the questionnaire results showed that the process of overcoming stress is a logical change in the stages of psychological activity from assessing a specific stressful situation and personal resources to selecting and implementing a relevant strategy, behavior styles in conditions of stress development.

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## Features of training specialists using innovative approaches

### Особливості підготовки фахівців за допомогою інноваційних підходів

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#### Abstract

The article examines the peculiarities of training specialists through the use of innovative approaches. The article shows the methodological concept of purposeful formation of competitive specialists in the process of professional training, which represents the main innovative approaches to the study of the problem of training specialists. The purpose of the research is revealed, in which the peculiarities of the training of specialists using innovative approaches are revealed. Two types of these approaches to high-quality training of specialists are identified. The innovative approach in education is considered through the use of the proposed model and through the ability to design and model the programmed educational process in a higher education institution with the mandatory application of various innovative approaches. The authors highlight the main components of educational innovation in the article. Prospective directions of educational innovation are highlighted. The necessity of applying innovative approaches in the system of education of future specialists is proven and the need for active assimilation of educational

#### Анотація

У статті розглянуто особливості підготовки фахівців шляхом застосування інноваційних підходів. У статті показано методологічну концепцію цілеспрямованого формування конкурентоспроможних спеціалістів у процесі професійної підготовки, яка репрезентує основні інноваційні підходи до дослідження проблеми підготовки фахівців. Розкрито мету дослідження в якій виявлено особливості підготовки фахівців з використанням інноваційних підходів. Означено два види цих підходів до якісної підготовки фахівців. Інноваційний підхід в освіті розглянуто через використання запропонованої моделі та через здатність проектувати і моделювати запрограмований освітній процес у закладі вищої освіти з обов'язковим застосуванням різних інноваційних підходів. Автори виділяють у статті основні складові освітньої інновації. Висвітлено перспективні напрями освітньої інновації. Доведена необхідність застосування інноваційних підходів в системі освіти майбутніх фахівців та показано необхідність активного засвоєння навчальної інформації, доведено розвиток ключових

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information is shown, the development of key competencies, professional growth and ensuring the competitiveness of future specialists on the labor market in the modern world are proven. The main innovative technologies in education, which have recently been introduced into the practice of higher education, are considered.

**Keywords:** innovations, training of specialists, innovative approaches, pedagogical technologies, pedagogical process of a higher school.

## Introduction

In the 21st century, when the rapid development of society is observed, humanity is at the stage of globalization and integration. There is a change in all methods of information dissemination, the volume of which is constantly increasing, the virtual E-environment is rapidly being modernized, and this process significantly affects the reformatting of the education space. In connection with the application of innovative approaches to the development of critical thinking, the content of education, the emotional intelligence of education seekers and, as a result, reducing their overload, facilitating socialization - conceptualizing the education of the entire global space (Nezhiva & Palamar, 2020).

Innovation in education is a process that, with the help of creative approaches to learning, implements the application and improvement of creative ideas, teaching aids, and the latest technologies, both pedagogical and managerial, in educational practice. As a result of such application of innovations in education, there is an increase in the level of all components of multi-structural education, and the transition of the education system to its qualitative state is observed. Since the definition of "innovation" is used in two forms: the actual idea and the process of practical implementation, it has many meanings (Kremen, 2008).

The innovative pedagogical activity involves professional self-determination of the person who teaches, including awareness of pedagogical norms, professional model, and the ability to qualitatively assess one's capabilities, which "constitutes the cognitive component of the teacher's readiness for such activity (Dubasenyuk, 2009).

Through the technology of innovative education, we understand a balanced model of activity (organization and conduct of the educational process), which is carried out together with

компетентностей, професійне зростання й забезпечення конкурентоспроможності майбутніх фахівців на ринку праці у сучасному світі. Розглянуто основні інноваційні технології в освіті, які останнім часом впроваджуються в практику вищої освіти.

**Ключові слова:** інновації, підготовка фахівців, інноваційні підходи, педагогічні технології, педагогічний процес вищої школи.

mandatory design in the most comfortable conditions for both the teacher and the students. The main condition for the continuous development of innovative pedagogical technologies in the modern educational process is the constant implementation of system analysis when solving practical issues related to the use of educational process equipment and technological means of learning. When carrying out a system analysis during the planning of educational resources and before their implementation in the learning process, the main criterion is the criterion of optimality. Therefore, the application of system analysis in the creation and use of teaching aids is a promising and positive thing, and the constant planning of the activities of the teacher and students of education makes the forecasting of educational results justified.

Pedagogical technology, which we understand broadly and when defining it, we mean its orderly system of actions. It is these proposed actions that lead to the desired achievement of the pedagogical goals set by us. We mean: developmental training, problem-based training, credit-module training, etc. When applying educational innovative technologies, a general strategy for the development of education takes place, and when applying pedagogical technologies, their implementation tactics are implemented. Learning technology comes from the Latin word valeo which means health; studies all approaches to improving the individual health of the individual and society as a whole. So, from here it can be stated that learning technology is a valeologically, pedagogically, and economically justified process of possible achievement of educational results and contributes to learning as a whole. For the creative professional improvement of the teacher's qualifications, his self-realization, as well as to ensure the competitiveness of the education seeker, we are interested in researching the impact on this process of teaching technology, which represents

a set of substantiated innovative techniques, methods and means for implementing the updated innovative content of education within the limits of both the subject and individual types of educational activities using innovative approaches. With the help of innovative teaching, stimulating, innovative, innovative changes in education, and therefore in culture and society, take place. Innovative changes in education are aimed at obtaining innovative changes, with the help of clear new approaches, as a result of which there is a process of individual readiness for education, dynamic changes in society in connection with the development of creative abilities, taking into account various forms of imaginative thinking and logical thinking, as well as leads to a strong ability to work in a team with other people (Bakhtiyarova et al., 2017).

The 21st century is a century characterized by a mandatory and undeniable transition from the energy to the information age. And this era is the main basis for the development of all spheres of life on our planet. Therefore, the principles related to the training of competitive specialists of all levels and areas of training must always be improved and changed. The need to improve the professional training system of competitive specialists depends on the conditions and organization of the education process itself, and the use of innovative learning technologies in this process is important. The quality of professional training of competitive specialists is achieved by increasing the amount of information, rationalizing the education process, and building a cognitive process with the help of highlighting important, essential knowledge and skills for specialized training of competitive specialists. Practice requires that the main goal of a high-quality educational process is a specific competitive education seeker. This means the personification of the process of professional training of specialists (Shestopalyuk, 2013). We see the problem of inconsistency between the requirements of competitive specialists and the educational technology of a higher education institution that provides educational services at this moment in time, taking into account changes in the social environment from the outside. We see the possibility of eliminating such inconsistency in the mandatory appropriate adjustment of the information society, in particular the information and pedagogical flows of this very society, aimed at increasing the productivity of educational technology through the use of innovative approaches, which is the relevance of our research.

**The purpose of the research** is to reveal the peculiarities of the training of specialists using innovative approaches.

### Literature Review

Modern pedagogical science is characterized by the search for innovations aimed at creating conditions for the formation and development of a whole, creative, free personality capable of socialization, adaptation and self-realization in society, as well as revealing the essence of innovative approaches in the educational process and taking into account the main components of influence on their implementation. The general nature of educational reforms in Ukraine is primarily related to innovative trends in the development of education. Pedagogical innovations, which have become widespread in education, include ideas, methods, technologies, a complex of elements that carry progressive principles; creative search; an original solution to pedagogical and educational problems.

It should be noted that the topic of innovative technologies is the subject of discussions and disputes among many scientists and teachers.

O. Podpletnya and others. (2018) highlighted the different approaches needed to implement innovative forms of learning. To improve the quality of training of competitive specialists, the functioning of distance education on the open Moodle platform, which is very popular in global practice, is shown.

In the studies of V. Tyutyunnyk (2021), ways of introducing innovative technologies and their implementation in higher educational institutions are considered. The current state of implementation of innovative activities in institutions of higher education is analyzed. Problematic points in the modern education system regarding the introduction of innovative technologies are shown.

The authors emphasize that innovative pedagogical activity is connected with the rejection of stereotypes in education, creates new norms of personal and creative, individually directed activity of the teacher, develops pedagogical technologies that are implemented in this activity.

In their research, O. Marinovska and R. Zubyak (2018) systematized and showed the importance of the information space regarding the approbation, implementation and development of innovative work technologies in general

secondary education institutions. O. Shestopalyuk (2013) considered the content of innovative educational technologies in institutions of higher education and the possibilities of their use in the education system. A comparison of the main technologies was carried out and innovative models of education were analyzed.

Research by L. Nezhiva and S. Palamar (2020) shows the need to introduce interactive technology into education, which changes the focus of lectures through dialogic interaction with students, ensuring real improvement of practical training through the use of master classes and quests.

In the studies of the authors, innovations are caused by new socio-economic transformations due to the need for fundamental changes in the organization of the education system, methodology and technology of the organization of the pedagogical process in educational institutions of various types and the need to train a new galaxy of scientific and pedagogical and pedagogical personnel; the tendency to humanize the content of education intensified, new academic disciplines appeared and there was a rapid need for teachers who could provide a creative, innovative approach to the implementation of these trends; the emergence of competition between state and non-state universities, which provided an opportunity for young people to study where there is innovative potential and quality of education.

G. Rozlutska (2011) substantiated the definitions of "pedagogical technology", "educational technology", "pedagogical innovation technology", "teaching technology" and others. The advantages of innovative technologies and the activity and possibilities of use in the educational process of the higher school are shown.

Generalizing the above, in the context of innovative education, the requirements for the teacher's personality take on a completely different meaning. Having analyzed the scientific sources, we emphasize that the innovative renewal of the pedagogical system should ensure the growth of the personal potential of both students and teachers, should contribute to their self-improvement, the expression of individuality. A teacher must know his subject, master teaching methods, have knowledge in related scientific fields, orient himself in modern social and political life. Taking into account the peculiarities of the professional training system,

the specifics of educational activity, the peculiarities of becoming a teacher as a subject of innovative activity and the content of teacher training for innovative pedagogical activity, the creation of an innovative educational environment of a higher educational institution is relevant in the training of future teachers.

### Methodology

To achieve the defined goal of the research and to solve the set tasks, a complex of research methods was applied: theoretical: a comparative analysis of philosophical, psychological and pedagogical, methodological literature, normative, and legislative documents - to clarify the state of development of the problem of training specialists using innovative approaches, clarification of conceptual -categorical apparatus of research, determination of the essence and component composition of the studied ability; synthesis, generalization - to substantiate the theoretical and methodological foundations of the research.

The leading idea of the study is based on identifying the peculiarities of training future specialists using innovative approaches in the process of professional training, which ensure effectively, targeted formation of professional competence of future specialists in the created innovative educational environment based on the modernization and modification of the components of the methodological concept of purposeful formation of competitive specialists in the process of professional training represents the main innovative approaches to the study of the specified problem:

- competence-based, which provides guidelines for the education paradigm for a creative, active, independent educational process while revealing the essential potential of each future specialist, while providing an opportunity to actively act and apply the formed competencies in various, not only professional situations but also life realities;
- systemic, which provides an opportunity to provide a comprehensive study of the methodology of the formation of eco-competence of future specialists during professional training at all stages of training; to organize systematic actions aimed at the perfect formation of a professional phenomenon;
- personally oriented, involves the creation and provision of methods, content, and environment for revealing a unique potential

- in the future specialist, forming an individual trajectory of development, self-realization, and self-development of the personality qualities that are formed based on harmonious interaction with the surrounding world;
- axiological, directs the activity of a specialist to humanistic development, substantiates value orientations, regulates moral and ethical norms of relations between society and man, establishes the moral principles of harmonizing human relations with the surrounding world, which are based on the absolute value of life;
  - activity, which substantiates the formation of professional competence of future specialists in the process of training specialists with the help of innovative approaches, interaction with the surrounding world based on sustainable development, active activity;
  - reflective, aimed at forming the ability of future specialists with the help of innovative approaches to realize their responsibility for self-monitoring the effectiveness of their professional activities, to stimulate self-improvement and consequently, develop professionally;
  - humanistic, in which we observe the personal growth of specialists with the help of innovative approaches, taking into account oriented values in the conditions of educational activities for competitiveness in their professional activities.

## Results and Discussion

Under innovative education, we understand not only a certain educational technology but the principle of conscious application of all the possibilities of the most effective elements of the system of the educational process, which are constantly being improved. Note that the innovative approach in education is manifested not only through the use of the selected, most dynamic model, but also through the mandatory ability to model and design the educational process in a higher education institution with the mandatory use of the most effective innovative approaches (Shestopalyuk, 2013).

Innovative approaches to high-quality training of specialists are divided into two types:

- 1) innovations-modernizations that modernize the education process and are programmed to achieve guaranteed results within its traditional reproductive orientation;

- 2) innovations-transformations that serve to change the educational process according to the traditional scheme and set a goal and achieve a result that is aimed at ensuring a research-innovative nature, including the mandatory organization of search educational and cognitive activity. Let's define the main difference between the two approaches, which is precisely the role of education seekers, in particular, in the implementation of educational activities. With the traditional approach, the learner is a passive recipient of the provided educational information, and when using innovative new technologies, the entire educational process is aimed at improving the active process of assimilation of knowledge and skills by the learner. It is the second type of innovative education that is necessary, promising and effective today, which makes it possible to update the education process and to teach students to independently carry out innovative activities.

Innovative processes in education, in general, and the scientific discipline "innovation", in particular, aim to use the essence of the masterful embodiment and scientific design of innovative technologies, to identify the natural connections between traditions, approaches, and innovations, to apply innovative approaches and management models of systemic innovations in institutions education (Dake & Ofosu, 2019).

Let's highlight the main components of an educational innovation:

- theoretical components of creating innovative approaches in the education system (neology);
- methodology of perception and its assessment, interpretation of novelty in sociology, psychology, didactics, and management;
- practical application of innovations in education, technology, and experience.

With the help of these interconnected components, the structuring and formation of the essence of theoretical educational innovation take place (Omonayajo et al., 2022).

Let's focus on promising areas of an educational innovation:

- definition of the content, structure, subject, functions of innovation in education, using innovation as a separate branch of scientific

- knowledge, taking into account it's one of the main places in the system of sciences;
- scientific understanding in the modern philosophy of education of innovative processes, in particular, innovative principles;
  - development of management models using innovative processes in modern education;
  - highlighting and substantiating the contradictions of innovative approaches in activities and ways of solving them;
  - determination of patterns of socio-psychological changes in the development of innovative processes;
  - consideration of the conditions for the implementation of innovative processes in education and the description of the necessary and sufficient categories of their application;
  - substantive analysis of innovative activity and development of norms, etc (Bakhtiyarova et al., 2017).

Technologies and products of computerization have a short life span and it is getting shorter and shorter, and aging is happening faster and faster. This causes more and more innovations (Kremen, 2008).

Let's consider the main innovative technologies in education, which have recently been introduced into the practice of higher education. Technologies of modular training. Let's consider the main content of the elements of the technology of modular learning and the logic of construction. The structuring of the educational process according to the modular principle is used when studying a topic or section. The study of the educational material is not conducted in parts but is presented as a generalized module in lectures as a whole. The duration of innovative lectures is adjusted by the methods of structuring and volume of theoretical material with the use of innovative methods with the help of information technologies. The founding innovative lectures highlight the problematic and complex issues of the topic, applying the latest facts and events. Activation of the thinking of education seekers in the course of innovative approaches to lectures is ensured if the lecture has a problematic innovative character. The role of the teacher in the implementation of innovative pedagogical technologies is also changing. The teacher performs the role of a consultant when applying innovative approaches (Rozlutska, 2011).

Problem-based learning technology. Professional, creative training of future

competitive specialists becomes purposeful and real when innovative problem-based learning technologies are used. The very name of this learning technology speaks of its focus and capabilities. Problem-based learning is related to a problem, problematic tasks are formed by the teacher, an innovative problem-based explanation of the educational material takes place, the content of which is presented using innovative approaches. This is the essence of problem-based learning, which forms research activity, creative thinking, critical thinking, dialectical thinking, independence of students, and solving theoretical and practical tasks with the help of innovative approaches, which are important in the formation of a future competitive specialist (Luo, 2022).

Situational modeling technology. Innovative teaching technology sets the following conditions for the presentation of material: curiosity, vividness, and emotional imagery. The purpose of situational modeling technology is to create such educational conditions when every student would study not only successfully, but with interest, revealing his talents, and abilities and being ready for creativity and self-realization.

Interactive learning technologies. Recently, interactive learning technologies are often used, the meaning of which is to activate not only cognitive activity but also to activate the labor activity of students, increasing interest in classes. Thanks to the use of interactive learning technologies, students acquire an attitude of constant search and creativity when completing a task. The business game is the main component when using interactive technologies (Diaz-Parra et al., 2022).

Business game technology. The essence of the use of business games in educational institutions is manifested in the development of the independence of the future competitive specialist, in the activation of thinking, in the formation of creativity, and in the situation of approaching the realities of life (Morze et al., 2017).

Developmental learning technology. Developmental learning technology is a didactic system. The purpose of developmental education is to focus not only on ready-made knowledge but most importantly on the principles of acquiring new knowledge. The technology of developmental education, which takes into account the peculiarities of the mental development of students of education, is based

on the concept of developmental education, ensures the personal formation of students of education, their development as subjects of education and later professional activity.

**Case technology.** Case technology ensures the use of the principles of problem-based learning. Provides an opportunity to acquire skills in solving existing problems, ensures the work of a group of education seekers on a common field by applying a specially developed problem; thus, the process of acquiring knowledge is more adequate, it imitates professional processes from real life, applying life situations. This is better than memorizing terms, and retelling them, because such an innovative approach requires not only the mechanical acquisition of knowledge, understanding of terms, but also skillful operation of these terms, which makes it possible to solve problems by building logical schemes, and makes it possible to argue one's opinion.

**The technology of collective and group methods of learning.** The basis of the technology of the collective and group method of learning is a person-oriented approach related to the interaction of the teacher and students of education. This approach is based on opportunities for all participants in the educational process of natural communication.

**Technology for the development of critical thinking.** The purpose of technology is to form positive personality traits, such as independence, creativity, and responsibility; to organize work that will make it possible to solve urgent problems and achieve the programmed result; to form communicative skills: justify thoughts, hear, discuss, listen, express; acquire the ability to control oneself, evaluate others and oneself, self-improvement throughout one's life; determine the purpose of the activity, solve problems, organize cooperation, develop responsibility, initiative for decision-making, overcome conflicts.

**The technology of programmed learning.** The positive aspects of programmed learning technology are as follows: the possibility of individualizing education; the development of independent work of education seekers and its activation, the ability to focus attention, develop observation; using feedback to ensure thorough assimilation of the material; the ability to perform work clearly and correctly; objectively determine the level of assimilation of skills, knowledge, and skills (Bakhtiyarova et al., 2017).

The introduction of ICT technology, technologies of critical thinking, project activity, augmented reality, activation of the educational process in the preparation of future specialists contributes to the innovative assimilation of the information provided, the improvement of basic professional competencies, and thus the competitive growth and ensuring the competitiveness of graduates in modern global labor market relations, which is necessary for the assimilation of educational material and increasing its volume during life (Plakhotnik et al., 2022). With this approach, when the educational process does not depend on the location of the student in time and space and a specific educational institution, the value is given to the independent study of the material during life, dialogic exchange between the teacher and the student (Kuharenko, 2002).

The main innovative approach that is increasingly necessary for education is distance education. We justify this statement. By the distance education system, we mean a form of obtaining education, when not only traditional approaches are used during training, but also innovative approaches to education, and forms of education based on telecommunication and computer technologies are a mandatory element of the application of innovative approaches (Podpletnya et al., 2018).

For the implementation of distance education and its development, platforms are used, that is, software to support distance education, without the use of which the distance education system is impossible. Today, in the distance information society, there are a large number of platforms to organize distance education. There are two categories of platforms: open source, which is distributed for free, and closed source, which is paid, commercial (Sysoeva, 2011).

Distance education is a regularity of the adaptation of education to modern educational conditions, it does not develop by chance, because its task is: fulfilling the social order of educational space for society with minimal material costs from the state and combines full-time, part-time, extramural, and evening training based on innovative information multimedia technologies and systems. Therefore, we consider distance education to be a set of innovative information technologies that provide the learner with all the necessary amount of material; interactive interaction of students and teachers during the educational process and provide an opportunity for students to independently work with literature for qualitative

learning of the material; and also provide an assessment of knowledge and skills in the education process and carry out its monitoring (Kiryakova et al., 2018).

Distance education is based on electronic textbooks, the use of personal computers, and the use of telecommunications, which constitute a qualitatively new innovative approach to education. For such an innovative approach in education, the main thing is a strong cognitive motivation, which is provided by the Internet and helps to improve the quality of training of a competitive specialist (Kravchenko et al., 2022).

This quality of distance education is an innovative technological approach to the education of the XXI century. The characteristic features of the innovative technological approach are modularity, flexibility, the coordinating role of the teacher, economic efficiency, monitoring and control of the quality of education, the use of innovative approaches of forms and means of education (Rozlutska, 2011).

The result of applying innovative, technological approaches in education depends not only on the skill of the teacher but also on the motivation and ability of the student to study independently and analyze the literature used. Innovative educational approaches lead to the effectiveness of education because they are aimed at the high-quality training of highly qualified specialists, who are needed by the modern world, who can successfully master new knowledge throughout their lives, flexibly, innovatively, and dynamically respond to modern socio-economic conditions; to possess civic and moral qualities in the innovative space of education. This is the result of the education process (Podpletnya et al., 2018).

Innovativeness in education is based on the value perception of the world by the individual, and individuality in the relationship between the teacher and the student of education. Innovative approaches in education are complex and responsible and are connected by significant human factors. We are witnessing the beginning of innovations in education: from the change of the traditional "teacher-learner" relationship model to the "person-person" model; out of respect for the individuality of the student of education (Shestopalyuk, 2013).

## Conclusions

Innovative education and innovative approaches in its development are considered as the principle

of justified use of all the possibilities of the elements of the education system. The definition of an innovative approach in education is the use of an innovative model through the possibility of modeling and designing an innovative educational process in a higher education institution using innovative approaches.

Innovative approaches to education are grouped into two types: innovation-modernization, to modernize the educational process and aim at achieving accurate results of the traditional reproductive orientation; innovations-transformations, which aim to transform traditional education into a research approach, the organization of search and cognitive activities in the educational space. A clear difference between these two approaches is singled out, which is the role of education seekers to innovatively learn and self-learn with the help of innovative approaches and creatively implement educational activities in the process of competitive work for society.

The components of educational innovation are revealed: a theoretical approach to creating innovations in the educational system; activity assessment methodology, perception of the global educational dimension; interpretations of the innovation in psychology, didactics, sociology, and management; technological approach, the experience of educational innovations in the practical dimension of society. These components are interrelated, structure and form the main approaches to theoretical educational innovation. Prospective directions of educational innovation are highlighted.

The importance of the main innovative technologies in education, which are leading in higher education today (problem-based learning technology, modular learning technology, business game technology, situational modeling technology, developmental learning technology, interactive learning technologies, case technology, collective and group learning technology, is substantiated), programmed learning technology, critical thinking development technology. It has been proven that the use of these technologies is necessary for the education system of future specialists and promotes the active learning of material that will be necessary for their professional activities and will ensure the development of key competencies and will contribute to the professional growth of specialists, ensure competitiveness specialists in the modern labor market.

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## The features of independent work for future specialists in conditions of distance learning

### Особливості самостійної роботи майбутніх фахівців в умовах дистанційного навчання

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#### Abstract

The peculiarities are clarified and the importance of independent work in the conditions of distance learning is emphasized. The definition of independent work is given, which is necessary for the formation of those qualities in the students of education, which are manifested in the ability to consciously determine the purpose of the activity at each stage of its achievement. The possibilities of the Moodle platform in organizing the independent work of education seekers in the conditions of distance learning are shown. According to the method of distribution of educational content, educational modes are proposed. The positive features of distance education that reveal its essence are indicated. Distance learning modes are analyzed: synchronous (all participants of the educational process are in the web environment at the same time); asynchronous (the educational process is carried out according to a convenient schedule for teachers and students), and mixed. Different types of distance learning for education seekers

#### Анотація

З'ясовано особливості та підкреслено важливість самостійної роботи в умовах дистанційного навчання. Дано визначення самостійної роботи, що є необхідною при формуванні у здобувачів освіти тих якостей, які проявляються в здатності свідомо визначати мету діяльності на кожному етапі її досягнення. Показано можливості платформи Moodle при організації самостійної роботи здобувачів освіти в умовах дистанційного навчання. За способом поширення навчального контенту запропоновано навчальні режими. Зазначено позитивні особливості дистанційної освіти, що розкривають її сутність. Проаналізовано режими дистанційного навчання: синхронний (усі учасники освітнього процесу перебувають у вебсередовищі одночасно); асинхронний (освітній процес здійснюється за зручним для педагогів та здобувачів освіти розкладом), змішаний. Подано різні типи дистанційного навчання здобувачів освіти, які відрізняються за ступенем дистанційності, індивідуалізації і

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are presented, which differ in the degree of remoteness, individualization, and productivity. The principles of organizing students' independent work in the conditions of distance learning in institutions of higher education are formulated.

**Keywords:** distance learning, independent work, information technologies, educational environment, modernization of education.

### Introduction

The most essential task of increasing the efficiency of the educational process is the formation of the skills of independent work of the students of education. It is possible to achieve high results in education under the condition of using various methods, techniques, and forms of organization of educational activities of education seekers during the educational process, taking into account the individual qualities of education seekers as a necessary condition for the success of education.

Today, the new methodology of the educational process, which is based on the constant use of information and communication technologies, without which the educational process is impossible, is confidently included in the practical activities of all educational institutions of the education system.

Nowadays, the educational process with the use of distance technologies in education (from the English "distant" means "distant, remote") is becoming more and more relevant. There are disputes among participants in the education process. This is the difficulty of adapting to distance learning – for some, and for others who gladly accepted such an approach, distance education is an effective alternative to the traditional format (Pavlovska, 2022).

In the article, we would like to emphasize that in the process of distance learning, students acquire not only self-education, but also the ability to organize independent acquisition of knowledge and its practical implementation. Students have the opportunity to determine for themselves the place, schedule, sets of learning aids and methods of contact with teachers. An important element of this type of education is the ability to choose a form of education. The main advantages for students of education are dynamic presentation of materials, freedom of choice of equipment and methods of its application, differentiated process of distribution of materials, individual style of teaching, flexible learning paths, freedom of time

продуктивності. Сформульовано принципи організації самостійної роботи студентів в умовах дистанційного навчання у закладах вищої освіти.

**Ключові слова:** дистанційне навчання, самостійна робота, інформаційні технології, навчальне середовище, модернізація освіти.

and place. Along with this, there are also advantages for people conducting classes: great freedom in choosing the place and time for teaching, easier tracking and storage of information about individual progress in learning, no restrictions on equipment and used programs.

Distance learning is a method of conducting didactic processes in conditions when the teacher and students are separated from each other (sometimes significantly) and are not in the same place during the transfer of information, therefore, in addition to traditional means of communication, modern telecommunication technologies are used, which are used to send voice, video, computer data and printed materials. The latest technologies largely provide direct contact in real time between a teacher and a student using audio or video conferences, regardless of their distance. This emphasizes the special role and importance of innovative technologies and forms a new perspective on distance education.

This article reveals the purpose of independent work of future specialists in distance learning conditions. Forms of distance education are described. The main communication mechanisms are implemented in the Moodle system. The main modes of education are considered according to the method of distribution of the content of education. The positive features of distance education, which reveal its essence, are noted. Distance education is considered as a factor of the global process of informatization of education or an educational subject.

Various types of distance learning of education seekers, which differ in the degree of remoteness, individualization and productivity, are highlighted.

The factors that ensure the organization of independent work of education seekers in the conditions of distance learning are determined.

**Purpose:** to find out the specifics and emphasize the importance of independent work in the conditions of distance learning.

### Literature Review

S. Dotsenko (2021) shows the content and reveals the significance of independent work, which is considered one of the main components of the professional training of specialists in the higher education system. The advantages of independent work of education seekers during distance learning are substantiated. Approaches to the organization of independent work when using the possibilities of Moodle – a remote platform are revealed.

O. Osaulchik, (2020) the main positions of distance education of education seekers as a modern basis for their independent work were clarified. The advantages of distance education, its significant opportunities, and its further promising directions of development are highlighted; the disadvantages of distance education are listed (lack of live communication, the poor activity of students, lack of emotional contact, insufficient control in student self-organization, reduced variability of options and choices, etc.) and the possibilities of their reduction during the organization of independent work of education seekers are shown.

O. Tamarkina (2020) considers distance education as the extra-curricular independent work of students, substantiates the meaning, and defines the extra-curricular independent work of students (a form of education that solves educational tasks under specific conditions in a specific educational situation, produces in the student a psychological orientation to replenish knowledge independently, provides skills in the process of solving set tasks, contributes to the formation of students of education in a sufficient amount of knowledge, skills, abilities, which is necessary for the improvement of mental activity, is the main basis for self-organization, self-discipline of the student of education, provides professional support for independent educational and scientific activities of the student of education in the process of learning.

N. Dyka, & O. Glazova (2021) considered the features, prospects, and advantages of using distance technologies in the educational process, substantiated the research and showed ways to

eliminate problems that may arise during the introduction of distance education into the educational process of secondary general education.

Yu. Bogachkov et al., (2012) developed, substantiated, and proposed methodological recommendations for the use of educational multimedia; showed the positive and negative aspects of its use; submitted recommendations for the development of components: graphics, educational text, video, audio; developed recommendations on the organization of independent work of education seekers during distance learning; singled out the most essential and effective Internet resources for distance education.

O. Tsis (2018) collected and analyzed the best experience of educational and methodical work of teachers of higher education institutions to improve the organization of independent educational activities of education seekers, the introduction of information and communication technologies into the education process; the main directions of the content, essence, and assessment of the quality of the independent work of students of technological and pedagogical specialties are revealed; developed and substantiated methods of electronic educational content; models of blended learning and combined learning are presented; the most essential forms, methods, technologies, organization of independent educational activities of education seekers with the use of information and communication technologies are disclosed.

### Methodology

Following the tasks of scientific research, a complex of interconnected and complementary research methods was used, including:

- theoretical: analysis, synthesis and generalization of the main provisions of scientific works and normative state documents, reports on issues related to the problem of independent work and distance learning, and prospects for improvement; reforming higher education and improving the professional training of future specialists; induction and deduction – to establish cause-and-effect relationships between pedagogical, political, social and cultural phenomena from the problem of independent work and distance learning; application of the system approach as a complex phenomenon, schematization of the

structure of research elements, with the aim of theoretical substantiation of the problem; terminological analysis – to determine the main basic concepts of the study; logical and epistemological analysis of empirical data and individual theoretical propositions, the method of scientific identification – for the analysis of scientific sources in order to ensure the reliability of the obtained results; component-structural, system-structural, system-functional methods – with the aim of highlighting the main components of the system of independent work in the conditions of distance learning, substantiating regularities and identifying features of its development;

- empirical: diagnostic (conversations, interviews), observational (pedagogical observation), prognostic (expert assessments, modeling) methods – to identify the state of development of the problem in pedagogical theory and practice and establish the possibility of using independent work in distance learning conditions.

The methodological basis of the research is the historical and system-complex principles of scientific and pedagogical research, the position of the theory of knowledge (in particular, the interdependence and mutual influence of the phenomena of objective reality), the principles of scientificity, integrity, continuity, social conditioning, objectivity, cultural conformity, unity of national and universal, as well as provisions regarding the goals of the development of the system of independent work in the conditions of distance learning.

## Results and Discussion

Any educational activity cannot be without the work of education seekers, which is carried out independently, but the organizer of this work is the teacher. The educational process will not be perfect if the cognitive activity of the student is not ensured, his education is not made creative, and active work is not offered at all stages of the educational process. With such an approach, the desire of the student to learn the essence of the phenomena presented and substantiated by the teacher during teaching is of great importance.

Independent educational work is an active position of education seekers organized by the teacher, which is aimed at the realization of the set goal: the search for meaningful knowledge, its consolidation, the formation and constant improvement of skills and abilities, the constant

systematization of knowledge and their improvement in the education process. If we approach independent work as a didactic unit, then: on the one hand, it is an educational task (what the student of education must accomplish), on the other hand, it is a form that manifests itself by the activity of thinking, memory, creative expression when performing the learner of the educational task (the result is the acquisition of new, previously unknown knowledge, expansion of the acquired knowledge).

Concerning the educational activities of students, the term "independent work" has a conditional character. We propose such reasoning because the cognitive activity of education seekers is organized with the help of special tasks and is based on their skills, acquired knowledge, and acquired experience.

To increase the efficiency of the educational process of education seekers, one of the most important levers is the permanent organization of independent work of education seekers, which is used to form education seekers such qualities that would be expressed in their ability to determine the purpose of educational activity during a specific stage of education and skillful application of a set of measures regarding the achievement of the programmed goal, a responsible attitude to activities, the ability to be proactive by the conditions that have developed in the educational process.

When students are provided with innovative methods and methods of independent work, the share of the teacher's direct influence on the process of learning in the educational field is reduced. But at the same time, the amount of influence of the teacher on the independent work of the students of education increases (Biletska et al., 2021).

Let's write the purpose of independent work:

- acquisition of new knowledge, abilities, and skills by education seekers;
- updating the knowledge of education seekers;
- monitoring and assessment of knowledge and skills of education seekers;
- repetition, and thus consolidation of knowledge and skills of education seekers (Pavlovska, 2022).

When conducting independent work, distance learning is one of the main areas of modernization of higher education. By distance learning we mean an innovative form of

organization of the education process, during which all classes or part of them are carried out with the condition of using modern telecommunication technologies, information technologies and with the remoteness of the teacher and the student of education (territorial remoteness), which is important in independent work (Yakubov, 2015). That is, the student learns information, understands, remembers, reproduces.

We will write out forms of distance education:

- online webinars and their recordings;
- use of an interactive platform for classes;
- correspondence by e-mail;
- video conferences;
- audio conferences;
- social networks.

In the conditions of distance education, the organization of independent work of students is of great importance. It acts as an essential type of educational activity, in which the teacher is the guiding principal and all this work is carried out under his supervision. Today's realities provide an opportunity to organize the educational process in a higher education institution in a digital environment. With such an approach in the educational field, the main issue is the quality of the organization of independent work using digital technologies. In the conditions of distance learning, the capabilities of the Moodle platform are important when organizing the independent work of students (Kuchai et al., 2021).

Independent work can be offered using the "Task" element. The teacher offers students tasks for independent work, which can be found on the educational portal in the form of the "File" resource. On the site, the teacher can post not only the main tasks, but also methodological recommendations for completing independent work tasks, dictionaries, additional material in the form of regulatory documents, study guides, and textbooks for each topic of discipline. These suggested additional materials for education seekers are also placed on the platform as a "Folder" or "Book" resource.

We will reveal the advantages of the "Book" resource, which allows us to place minimal methodological developments on the site, materials that are large in volume (it is possible to flip through the developments as a book), a list of mandatory and additional literature, which is appropriate to use when performing independent tasks. The advantage of this portal is that it

enables interaction between the learner and the teacher in offline mode.

It is appropriate to use the "Lecture" resource for organizing independent work. The teacher can organize an interactive lecture precisely with the help of this resource. The learner is allowed to study the lecture in separate fragments, and this is the main advantage of this form of organizing independent work. Answers to the proposed questions are possible when the theoretical foundations of a separate question of the lecture have already been considered. What is valuable and significant in this position is that until the learner gives the correct answers to all the proposed questions and achieves a positive result, he will not proceed to the next part of the lecture. This approach to education allows not only to control the process of completing the task but also to monitor the level of assimilation of the material by the student. This form can be considered a system of self-control.

Let's consider another effective form of organizing independent work on the educational portal. This is the "Forum" element. Applying this element, it is possible to organize a class-discussion, a class-discussion. Such work should be carried out in an offline or online system. The teacher is given the right to organize a forum on a selected topic of current issues, which is programmed. Education seekers need to independently master selected aspects of the given problem and at a certain time "go" to the forum and take part in the discussion. This form makes it possible to organize contact independent work with students.

Let's note the importance of the "Test" element, which is used in the organization of checking the independent work of education seekers. Using the "Test" element, the teacher offers tests and a bank of questions. The Moodle system provides an opportunity to create questions of various types. A significant positive unit of this element is quick monitoring, evaluation, and issuing of results to students of education. The Moodle system implements the main communication mechanisms:

- perceptive (responsibility for each other's perception);
- interactive (responsibility for organizing interaction);
- communicative (responsibility for information exchange) (Dotsenko, 2021).

Let's consider the main educational modes by the method of distribution of educational content (Skabelko, 2021; Order No. 1115, 2020):

- synchronous (ensure synchronous participation in the training of the teacher and students);
- asynchronous (in real-time mode, they do not provide simultaneous training of all participants in the educational process);
- mixed (an educational path that provides for the use of both systems of synchronous elements and systems of asynchronous elements).

Synchronous mode enables educational cooperation for students in real time. The advantage of this regime is the involvement of any participant in the educational process at any time.

The asynchronous mode is used more when using forms and methods of online learning. An example of such a mode is the recording of video lessons (fragments of lessons: instructions for the comprehensibility of self-explanatory work) or tasks for self-fulfillment by students of education. The advantages of this mode are the possibility of viewing such material at a time convenient for the students of education, if necessary, repeatedly, processing the application at a pace convenient for the student of education (educational videos, slide shows). The proposed materials can be sent to the student by e-mail, posted on social networks, and Viber can be used. Synchronous mode is suitable for educational consultations. Synchronous and asynchronous modes of education, depending on the material offered, and the use of types and forms when performing independent work, may coincide in time and take place in a certain sequence.

When combining modes: synchronous and asynchronous, a hybrid, mixed mode is formed. This regime, depending on the level of preparation and the pace of work of the students, is easily changed by increasing or decreasing the offline or online components.

The main advantage of distance education is clear monitoring of the success of all students. In the future, distance education will provide an opportunity for the development of an individual trajectory for the acquisition of knowledge for each student of education. And such an approach to education will make it possible to create a basis for creating a personal program for the student of education, which will depend on what

classes are desirable and interesting for him. This approach is mainstream in world education systems. It is distance learning that has such significant technical capabilities for the process of applying this approach to the educational process (Shunkov et al., 2022).

Online tests with automatic feedback are promising and effective tools for monitoring education and assessing the knowledge of education seekers, which are adapted for self-monitoring of education seekers and are indispensable for individual classes (Dyka & Glazova, 2021).

Let us note the positive features of distance education that reveal its essence:

- flexibility: working in the distance education system, students do not attend regular classes, which are presented in the form of lectures, and seminars, but study at a time that is convenient for them, in a place that suits them, which has a significant advantage for those who work and studies.
- modularity: the modular principle is used in distance education programs. At the same time, distance courses create a complete picture of the subject field. This approach makes it possible to form an educational program from a set of individual courses (modules) that will satisfy individual or group needs;
- parallelism: the educational process can be carried out simultaneously in several specialties in addition to the main one;
- long-distance: the distance from the location of the student to the educational institution, which does not interfere with the effective educational process, provided there is a quality connection;
- synchronicity: in the process of education, the teacher and the student use educational technology and the learning process regardless of time according to such a schedule and pace for each person involved that it is convenient for everyone;
- coverage: this property is called "massiveness". The number of students has access to many sources of information in the distance education system and this is not a critical parameter. For example, the following sources of information in the distance education system are offered: electronic libraries, databases, etc. Students can communicate with the teacher or each other without any restrictions through communication networks, information technology means;

- profitability: economic efficiency of distance education. It has been proven that foreign and domestic educational systems are approximately 10-50% cheaper than traditional ones (Zastelo, 2012).

With the help of distance education, young people can get an education while working and studying at the same time, combining study with work. This type of training is suitable for students who live in remote areas of cities; managers; military personnel; students; businessmen who want to get an education in parallel with work. Distance education is suitable for everyone, makes it possible to combine education and everyday life, and makes it possible to get an education abroad with minimal financial costs (Yasulaitis, 2005).

Distance education increases the efficiency of independent work, provides an opportunity for students of higher education to easily use non-traditional sources of information, provides opportunities for acquiring and consolidating various professional skills, creative self-expression, and allows teachers to implement innovative forms and methods of the educational process, using mathematical, conceptual modeling of processes and phenomenon (Tamarkina, 2020).

Distance learning involves the delivery of educational material via the Internet, in which all participants in the educational process are in interaction, which is ensured by the use of software, administrative, and technical means of the Internet network (Kuchai et al., 2022).

Distance education, as a factor of the global process of informatization of education or an educational subject, can be considered as:

- system unit;
- educational environment;
- technology that ensures the creation of specific methodical methods of teaching disciplines, which includes the rethinking of traditional methods;
- the communicative field, in which the effectiveness of pedagogical interaction is carried out, in particular, operational and regular interaction between a network teacher and a student of education, as well as between students of education; ensures an active position of all participants (students of education, teachers, parents of students of education) in the educational environment;
- a means of educational self-realization of the learner: distance education creates all the conditions for building an individual trajectory of the educational space (on the one hand), provides conditions during which the learner takes responsibility for progress in education (on the other hand);
- a means of forming ICT competence, the ability to work independently, and the development of cognitive activity in students;
- means of professional improvement of the teacher: development of ICT competences, and methodical competences.

At each level of education, distance learning should be carried out taking into account the characteristics of qualitative and personal formations that are formed at any age stages of personality development. The distance education system cannot replace face-to-face education. Its best use is to use it as an additional position. Distance learning technologies are used in external and correspondence education (Kotiash et al. 2022).

Let's consider different types of distance learning for education seekers, which differ in the degree of remoteness, individualization, and productivity.

1. Students of education, together with the teacher, use remote Internet resources during full-time studies at the educational institution. There is interaction with students of other educational institutions and specialists in fields related to the educational programs. Here there are parameters of the communicative space: communicative distance, and indirectness, which are variable in nature. This type of distance learning technology is the most popular. The problem when using it can only be the limitation of the capabilities of the educational server and the lack of appropriate technical means in educational institutions.
2. Training takes place in the form of distance educational projects. Representatives are students and teachers of various educational institutions in the same country and different countries. Any educational institution can be the organizer of such a project. Participation in such a project is a means of additional education in which communication between teachers and students of education is not systematic, but there is a dense information exchange, an information resource is involved, but the goals of the event are not necessarily the goals of the educational process.

3. The educational process is carried out with participation in web seminars and counseling, with the help of distance courses. Distance learning is used as a supplement to face-to-face learning. the teacher works with the student remotely, episodically, or permanently. Such pedagogical interaction is carried out with the help of dense communication using communicative distance. In this case, distance learning can partially replace face-to-face learning and provides corrections to face-to-face learning. Training can perform the function of a tutor if it is built according to the scheme: the student of education – the Internet – the teacher and reduces the problem of the shortage of qualified educational personnel.
4. The distance learning resource center assumes the role of organizer and coordinator of learning. This type of distance learning technology provides complete distance learning (without face-to-face) for learners with psychophysical disabilities who spend long periods in hospitals or correctional facilities. This type of education is valuable for gifted children.
5. Distributed distance learning is learning when a curriculum is developed for an individual student and is created in such a way that different subjects are studied by the student in different educational institutions, the education process is provided by different teachers, taking into account the individual characteristics of the goal of the student. The coordinator is the educational institution (full-time or distance learning), the parents of the student (Bogachkov et al., 2012).

We will describe the principles of organizing the independent work of education seekers in the conditions of distance learning in institutions of higher education, which affect the quality of training of a competitive specialist:

1. The principle of close interaction of independent work with the course of study. To increase the perceived motivation of education seekers, independent work of students in the conditions of distance learning should be included in the process of assimilation of professional material consistently and promptly.
2. With different degrees of preparedness of students, the individual abilities of a person are taken into account, and in the conditions of the formation of such different level educational groups, the principle of

differentiation becomes extremely relevant. Differentiation provides an opportunity to acquire knowledge for each student in a meaningful and effective way according to the level of complexity of tasks and exercises, the speed and means of completing tasks, according to the degree and level of support provided, according to the nature of the cognitive activity. As noted by V. Zhukovsky and K. Simak, "the principle of differentiation and personal approach allows taking into account the motivational sphere of students and their psychological features when working with educational materials" (Zhukovsky & Simak, 2016).

3. Choosing optimal methods to achieve the goal, which do not contribute to machine learning of the material, but stimulate the conscious perception of the material. In the framework of distance education, the role of stimulating cognitive processes is assigned to the independent work of the students of education, in the application of which a necessary approach is an inductive approach to mastering the material, which ensures a sequence from partial to general. Induction, which is based on analysis, increases the quality of the cognitive process, like analogy and deduction. Such an approach provides the efficiency of independent work of education seekers who, upon mastering the fundamental disciplines in the higher education system, aim for independent research activities in the future.
4. Carrying out of the classroom work reproductive exercises for successful learning of the material, tests, written exercises, exercises for the development of receptive types of activities, etc.
5. Provision for all students of education to study the course material as successfully as possible. The distance course provides students with a system of self-control. Tasks are formed according to a scheme that provides an opportunity to receive a hint for activation, analogy, and independent analysis. Attempts in training exercises and tasks are unlimited for the possibility of choosing an individual amount of training by the learner.

Let's list the factors that, in conditions of distance learning, ensure the organization of independent work of education seekers:

- modernization of the content of educational courses;
- application of modern educational

technologies;

- creation of conditions for the formation of self-education abilities and skills (Kuzminskyi et al., 2018).

Individualization of the independent work of education seekers makes scientific and research activities successful and creates conditions for self-realization, and self-determination.

With the help of distance educational technologies, pedagogical support for the independent work of education seekers is created, electronic educational resources of a game nature are developed, Internet testing is implemented, and independent work with Internet resources is offered.

Therefore, in the conditions of distance learning, the effective organization of independent work of students of education is designed to stimulate the cognitive processes of students of education, to motivate them to study the material (Tsvyd-Grom et al., 2021).

### Conclusions

The peculiarities of independent work in the conditions of distance learning are considered. The definition of independent work is given, and the purpose of independent work is written out.

One of the priority areas of modernization of higher education is distance learning. Distance learning is defined as a form of organization of the educational process. Distance education forms have been written out. The possibilities of the Moodle platform in organizing the independent work of education seekers in the conditions of distance learning are shown. According to the method of distribution of educational content, educational modes are proposed. The positive features of distance education that reveal its essence are indicated. Distance learning modes have been analyzed. The types of distance learning of education seekers are presented, which differ in the degree of remoteness, individualization, and productivity. The principles of organizing students' independent work in the conditions of distance learning in institutions of higher education are formulated.

The issue of consideration of electronic educational resources, and the need to create and provide resources for the information and educational space of higher education institutions require further research.

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## Enhancing vocabulary learning through understanding the human memory system: Episodic memory

(العرضية الذاكرة :البشرية الذاكرة نظام فهم خلال من المفردات تعلم تعزيز)

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### Abstract

مخلص

Vocabulary acquisition in learning languages is a crucial aspect of language learning, and effective teaching theories are essential for the retention and application of new vocabulary. However, understanding the memory system is important for educators to design and implement effective vocabulary teaching strategies that support student learning and retention. This article provides a comprehensive overview of the human memory system, including sensory, short-term, and long-term memory, with a focus on the differences between semantic and episodic memory. It explains the impact of episodic memory on vocabulary recall. In addition, it puts forward two teaching theories that enhance the utilization of episodic memories. Experiential Learning and Elaboration Theory focus on connecting vocabulary with personal experience for episodic memory and using previous knowledge to help students remember new vocabulary.

نظريات التدريس الفعالة ضرورية للاحتفاظ بالمفردات الجديدة وتطبيقها. ومع ذلك، فإن فهم نظام الذاكرة مهم للمعلمين لتصميم وتنفيذ استراتيجيات تدريس المفردات الفعالة التي تدعم تعلم الطلاب والاحتفاظ بهم. تقدم هذه المقالة نظرة عامة شاملة على نظام الذاكرة البشرية، بما في ذلك الذاكرة الحسية وقصيرة المدى والذاكرة طويلة المدى، مع التركيز على الاختلافات بين الذاكرة الدلالية والذاكرة العرضية. يشرح تأثير الذاكرة العرضية على استدعاء المفردات. بالإضافة إلى ذلك، فإنه يطرح نظريتين تعليميتين تعززان استخدام الذكريات العرضية. يركز التعلم التجريبي ونظرية التفصيل على ربط المفردات بالخبرة الشخصية للذاكرة العرضية واستخدام المعرفة السابقة لمساعدة الطلاب على تذكر المفردات الجديدة.

كلمة السليبية: نظام الذاكرة للاحتفاظ بالمفردات والذاكرة طويلة المدى والذاكرة العرضية.

**Keywords:** Memory system, vocabulary learning, episodic memory, long-term memory.

### Introduction

Vocabulary learning is an essential part of learning a language because it is the basic building block of any language, and it is vital for understanding and communicating. Remembering vocabulary is one of the challenging tasks students face while learning a language, and teaching them to remember can be even more rigorous. Every teacher must understand the memory system because it helps them to design and implement effective teaching strategies that support student learning and retention. The human memory system is a

complex and multi-faceted process that involves the encoding, storage, and retrieval of information. The three main types of memory are sensory, short-term, and long-term memory. Sensory memory is a brief, immediate record of sensory information such as visual and auditory stimuli. Short-term memory, also known as working memory, allows for the temporary storage and manipulation of information. Long-term memory is responsible for the permanent storage of information and can be further broken down into declarative and non-declarative

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memory (Atkinson & Shiffrin, 1968). The non-declarative memory includes skills and habits that are performed automatically while declarative memory includes memories that can be consciously recalled, such as semantic memory and episodic memory. Semantic memory refers to our general knowledge about the world, including concepts, meanings, and facts that are not tied to a specific time or place. For example, knowing the capital of France (Paris), the meaning of the word "book" or the fact that dogs are mammals are all examples of semantic memory.

Episodic memory is the ability to remember unique past events (Tulving, 1983). This type of memory receives and stores information about the context in which an event occurred including what happened, where, and when. In humans, episodic memory develops around the age of 4 (Riggins, 2016) and declines with advancing age (Gaesser et.al, 2015). For example, remembering your first day of school, your wedding day, or a vacation you took are all examples of episodic memory. Episodic memory is intricately linked to our sense of self and allows us to remember our personal past experiences. Nikolaev et al., (2023) divided memory into two large contrasting systems where knowledge is captured by semantics and experience is captured by episodic. If the intensity of the experience is high, then it is likely that the corresponding knowledge or information will be more easily retained in memory. Although he conceded that while some processes, such as selective information intake and retention from perceptual systems and information transmission to other systems, are likely shared between episodic and semantic memory, there are enough differences to consider them as separate entities. Tulving believed that the information and representation format of the systems were fundamentally different; he saw episodic memories as dependent on spatial and temporal relationships, while semantic memory was based on concept-based, meaning-associated relationships (Brigard et al., 2022).

The purpose of this study is to conduct an extensive review of the memory system in humans, focusing on both semantic and episodic memory. Additionally, the study aims to investigate how episodic memory can be utilized to improve vocabulary retention in a classroom setting. Two theoretical frameworks are presented that proposes the connection of new vocabulary with personal experiences to enhance episodic memory. By exploring the potential benefits of these theories, this study aims to

provide insights into effective methods for improving vocabulary learning and retention in educational contexts. Finally, we discuss the potential implications of this literature review for broader topics related to the application of methods that help students remember vocabulary easily through theories that support episodic remembering.

## Methodology

A narrative synthesis is an approach used systematically to collect and combine data from multiple studies. First, the relevant studies about the topic are summarized and interpreted individually. The studies are assessed for their quality, and the relationships between the studies are explained. The information from the studies is synthesized to develop an overall understanding of the topic. One way to present the information gathered during a narrative synthesis was to use a diagrammatic representation, which can help to summarize the study overview of the memory system. In addition to the narrative synthesis, based on the review of the literature and the researcher's understanding of the memory system, two theories were formulated. These theories aimed to provide a more comprehensive understanding of how the memory system works and how it can be studied in different contexts. These theories may provide a useful framework for future research in this area.

## Theoretical Framework

### The Memory System: Semantic and Episodic

Episodic and semantic memory are two processing systems that receive information from the perceptual system. The nature of storing information is a cognitive and autobiographical reference. Endel Tulving first founded episodic memory to refer to the ability to remember things based on personal experience (Tulving, 2001). Since then, the concept has developed considerably. It is called autographic memory. This type of memory is necessary to remember important events in human life that emotion affects. We can remember the date, how we felt, and the word we expressed. Such first day of school, the moment you fall in love, or what you had for dinner yesterday (Tulving, 1983).

In his recent work, Tulving argued that activating episodic memory is retrieving information from a person's experience and perspective. For example, episodic memory does not mean remembering your first day of class but also

remembering the experience in the class for the first time (Tulving, 2002). Retrieving information in episodic memory results in people remembering what they experienced, which can be recognized as self-awareness. Episodic memory also can be knowledge and skill and the same time. For example, swimming is a personal experience and a skill simultaneously. The degree of accuracy in remembering an event in episodic memory relies on access to the context in which the event happened. The context is the physical surrounding in which the event happened (Nikolaev et al., 2023).

Two critical factors of context that affect episodic memory are the time and the location of an experience (Gershman & Daw, 2017). Episodic memory has a set of unique operations to organize, store and retrieve information. It is temporarily organized; in another way, it is like a movie, and the person is in it. One of the characteristics of episodic memory is to recall information from the experience of the event. They often report as "I remember the accident" Tulving considers this kind of experience self-knowing awareness (Tulving, 2002). Episodic memory is not only capable of recalling past experiences, but also it can time travel to the future. This feature is exclusive only to episodic memory. It is not possible for other kinds of. Emotion is another important factor that affects episodic memory; they are part of an episodic memory system. One's emotion can act as a retrieval cue to access knowledge. However, the stronger the emotion when the event is experienced, the better the retrieval. Emotional events are generally easier to remember than non-emotional events. People reported that the extremely emotional experiences that are a part of trauma are often difficult to forget.

Conway et al., (1992), and Debra and Herbert (2001) have extended Tulving's memory awareness constructs to real-world learning

situations and investigated how information processed during specific learning episodes, such as university lectures, can become conceptual knowledge over time. Initially, knowledge is retained in episodic form, which students can remember specifically. However, as learning progresses, these memory representations shift from being primarily episodic to being more conceptual, generalized knowledge that students simply know.

On the other hand, semantic memory refers to the general knowledge that we know, whether it is about concepts, facts, or beliefs (Martin & Chao, 2001). Semantic knowledge is independent; it does not refer to any circumstances which were originally acquired. For example, the knowledge the ball is round is a semantic memory, whereas the time and place you played with a ball are considered an episodic memory. According to Jones et al., (2014), model I semantic memory stores information like computers. In his model, each word is stored with links to another word. For example, if what is stored for canary in our brain is the yellow bird that can sing, then the two words that are linked to it are yellow and singer. General information about the bird which is flying feathers are not stored separately for each kind of bird. Instead, the fact is canny is a bird so that all birds can fly. This mode is called a hierarchical model of semantic memory (Collins, & Quillian, 1967). The links in this model formed a hierarchical tree structure, with a top-down classification of animals into subcategories (e.g. birds, fish). This structure enabled the model to explain both general concepts and specific information in a single framework. Accessing knowledge required navigating the tree to the relevant branch, and the model was effective in explaining human performance in early sentence verification tasks (such as quickly confirming "a canary can sing").

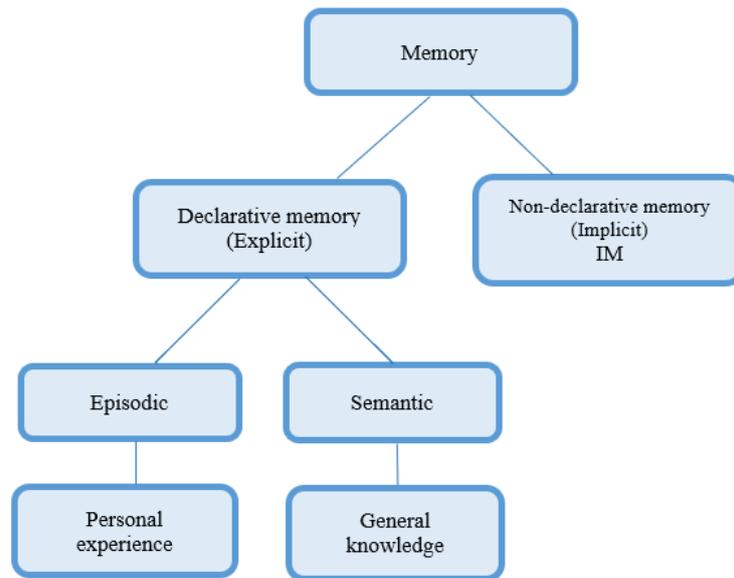


Figure 1. Schematic descriptions of the system of memory

### Neuroscience of Semantic and Episodic Memory

Studying the affected brain area of a patient is the most efficient way to determine the function of specific activities in the brain (Debra. Herbert, 2001). The damage to the areas surrounding the hippocampus including the hippocampus and surrounding regions, including the para hippocampal gyrus, the entorhinal cortex and the temporal lobe can result in episodic memory loss as it has been observed in a patient with alzheimer's disease who cannot recall a personal experience of an event. As semantics requires the representation and recollection of spatial locations, the left prefrontal cortex is likely to be involved in remembering information (García-Lázaro et al., 2012).

On the other hand, semantic memory involves the identification of the objective. Neuroscientists have not yet proposed a consensus analysis. However, patients with damage to the temporal lobes often have difficulty naming objects and retrieving information about object-specific characteristics (Gershman & Daw, 2017). This suggests that object-specific information may be stored, at least in part, in the temporal lobes. Recognizing this location has been done through patients with a semantic impairment which they called semantic dementia. The term semantic dementia is used to describe patients with semantic impairment. They lose the ability to recognize familiar objects and people so what they say is

characteristically empty. They are fluent in graphology and syntactic structure (Martin & Chao, 2001).

Tulving demonstrates a model of memory for remembering or recalling information. He said our cogitative memory system consists of 4 types: perceptual presentation, working, semantic, and episodic memory. He argued that information is stored in the cogitative system serially. However, information can be stored in different memory systems separately and can be retrieved interdependently without the effect of retrieval information (Tulving, 2002). That is why patients with episodic memory deficits might still remember semantic information. Patients with semantic dementia have difficulty performing any task that requires semantic knowledge. For example, picture naming, matching, describing words, and selecting living or non-living creatures. On the other hand, other cogitative systems were noneffective, such as working memory and episodic memory (Graham, et al 2000).

### Influence of Episodic Memory on Vocabulary Recall

There is a consensus among researchers that acquiring vocabulary is crucial for effective communication in an English as a Foreign Language (EFL) setting. It has been stated that without a strong vocabulary, no information can be conveyed or communicated (Wilkins, 1972; Folse, 2004). Folse (2004) also highlights the

frustration of not being able to express oneself because of a lack of vocabulary. Several researchers including Laufer and Nationa (2016), Nation (1991), and Rodríguez and Sadowki (2008) have recognized the importance of acquiring vocabulary for the effective use of a second language and for producing complete spoken and written texts. In both English as a second language (ESL) and English as a foreign language (EFL), vocabulary acquisition is considered crucial for all language skills, including listening, speaking, reading, and writing. Laufer and Nationa (2016) argued that an adequate vocabulary is essential for successful second language use because, without it, learners may not be able to use the structures and functions they have learned to communicate effectively. Therefore, it is important for students to continuously improve their vocabulary skills and expand their word knowledge. For vocabulary to be recalled easily, it has gone to long-term memory (Cowan, 2008).

Vocabulary recall is a process of retrieving words and their meaning. The process of vocabulary recall involves encoding new information about a word in the brain and storing it in memory. In the storing stage, episodic and semantic memory are involved; when one of them stores personal information, another one which is semantic stores general information. Later to retrieve vocabulary, the cues are used to trigger recall, searching the memory for the stored information, decoding the retrieved information, and rehearsing the word to consolidate the memory (Laufer & Nationa, 2016). Different parts of the brain are involved in each step, including the auditory and visual cortex, the hippocampus, and the neocortex. Rehearsal helps to strengthen the connections between the brain regions involved in vocabulary recall, improving future recall.

Fansury, & Januarty (2018) mentioned that semantic and episodic memory have an effective role in recalling vocabulary. Episodic memories are associated with specific contextual information. The sensory experiences and emotions a student experiences during a lesson become a part of the memory. These sensory and emotional cues can be triggered when attempting to recall the memory, but sometimes the context is remembered more easily than the actual information learned. Through context and emotional cues, the actual information can be recalled easily. However, to recall vocabulary easily teachers must incorporate the sensory and emotional experiences of students to remember them easily. According to Um et al. (2012), positive emotions can facilitate learning and

contribute to academic achievement. When students experience positive emotions, such as interest, enjoyment, and satisfaction, while engaging with learning materials, they are more likely to be motivated to learn and remember the material.

## **The Theories That Support Students' Episodic Memory to Recall Vocabulary**

### **1. Experiential Learning Theory**

Experiential Learning Theory (ELT) emphasizes the central role that experience plays in the learning process. It provides a holistic model of the learning process and a multilinear model of adult development and is based on the works of Dewey, Lewin, and Piaget. Experiential learning is the process whereby knowledge is created through the transformation of experience (Kolb, 1984). ELT differentiates itself from other learning theories by emphasizing the importance of subjective experience in the learning process and by providing a hands-on, participatory approach to learning that helps students connect new information to their own experiences. Affective factors could affect language learners. For example, motivation and learner autonomy are two important factors that could affect the process of learning a language. In language education, it's important to help students become independent learners (Yildiz & Yucedal, 2020). By incorporating students' real-life experiences into the classroom, ELT can lead to a more meaningful and relevant learning experience, improve engagement and motivation, and the development of important skills such as problem-solving, critical thinking, and collaboration (Roberts, 2006). This theory involves four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Concrete experience is the direct engagement or experience in an event or activity such as a field trip, or hand on project. Reflective observation students will reflect and observe the event. Abstract generalization is students analyze the information that got from their experience. The last step is active experimentation. Students apply the experiment and the theories that they have learned throughout the direct experience (Kolb, 1984).

According to Herbet and Burt (2004), episodic learning is in every sense experiential learning due to capturing and storing memories in the form of complete episodes, which include a connected set of sensory information. This type of learning is truly experiential, as it has a greater impact on the student. In addition, the

Experiential Learning Theory (ELT) has been shown to enhance episodic memory, particularly in the recall of vocabulary. This is because ELT emphasizes the role of personal experience in the learning process (Simon, et al., 2000). When students learn vocabulary within a specific time and context, it has been demonstrated that the information is more likely to be encoded in long-term memory and then subsequently retrieved from episodic memory. By connecting new vocabulary words to personal experiences and actively engaging in the learning process through hands-on and participatory experiences, students are more likely to remember the information in the future. ELT's four-stage process, which includes concrete experience, reflective observation, abstract conceptualization, and active experimentation, provides a comprehensive approach to learning that can aid in the formation of strong episodic memories (Gershman & Daw, 2017).

## 2. Elaboration Theory

Elaboration Theory is a cognitive learning theory that suggests learners are more likely to remember and recall new information when they engage in elaborative encoding processes. Elaborative encoding refers to the process of creating meaningful associations between new information and existing knowledge or experiences. Elaboration theory was first introduced by Charles Reigeluth, an educational psychologist, in the 1970s. Reigeluth was interested in understanding how learners can create meaningful connections between new information and their existing knowledge and experiences, and how this process can enhance learning and memory. According to Reigeluth, elaboration involves learners actively engaging with new information and transforming it in some way to make it more meaningful and memorable. This can involve a variety of strategies, such as creating associations with other concepts, asking questions to clarify understanding, and organizing information into meaningful categories or hierarchies (Reigeluth & Stiein, 1983).

Reigeluth's work on elaboration theory was influenced by earlier theories of learning, such as Ausubel's theory of meaningful learning and Bruner's theory of scaffolding. However, Reigeluth expanded on these theories by emphasizing the importance of active engagement and transformation of information, rather than simply acquiring it passively. Elaboration theory has been applied in a variety of educational contexts, including classroom

teaching, instructional design, and educational technology. Researchers and practitioners have developed a range of strategies for promoting elaboration in learners, such as concept mapping, reflective writing, and project-based learning (Wilson & Cole, 1992).

However, elaboration theory suggests that memory is enhanced when learners actively engage with the material they are trying to remember. In the case of vocabulary, this means that students are more likely to remember a word if they can connect it to their own experiences or knowledge, or if they can create associations with other words or concepts (Taylor & Hamdy, 2013). This connection between new information and prior knowledge can be achieved through hypermedia. Hypermedia can include text, graphics, audio, video, and other interactive elements, and is commonly used in educational settings. People's professional approach to solving problems can be arranged into information. Professional supervision and progress have made this feasible. Guidance activities are individual-focused (Bilgin et al., 2022). Teachers' biggest challenge is keeping students' attention therefore to connect new information with prior knowledge, teachers can use several strategies (Kapukaya & Yildiz, 2023). Language teachers can improve awareness, engage language knowledge, relax, and motivate pupils by using extracurricular activities as warm-ups. Warm-ups can be done at the beginning, middle, and end of a language lesson to assist pupils focus (Tosun & Yildiz, 2015). First, they can ask students to recall what they already know about the topic before introducing new information. Second, teachers can relate the new information to real-life experiences to help students understand how it applies to their lives. Third, teachers can use analogies and metaphors to explain new concepts in terms of something familiar to students. Fourth, teachers can break down new information into smaller, more manageable pieces that build on students' prior knowledge. Finally, teachers can provide opportunities for students to reflect on what they have learned and how it connects to their prior knowledge, which can help to reinforce the connections and make the information more memorable (Hoffman, 1997).

## Discussion

Theories of experiential learning and elaboration theory both support the idea that students' episodic memory can be enhanced when learning vocabulary. Experiential learning theory (ELT)

emphasizes the importance of connecting new information to personal experience and provides a hands-on approach to learning. ELT suggests that by engaging in a four-stage process that includes concrete experience, reflective observation, abstract conceptualization, and active experimentation, students are more likely to remember the information. ELT has been shown to enhance episodic memory, particularly in the recall of vocabulary.

Elaboration theory suggests that memory is enhanced when learners actively engage with the material they are trying to remember. For vocabulary, this means that students are more likely to remember a word if they can connect it to their own experiences or knowledge, or if they can create associations with other words or concepts. This connection between new information and prior knowledge can be achieved through strategies such as concept mapping, reflective writing, and project-based learning. Hence, prior knowledge aids learning. Teaching new concepts using students' prior knowledge improves engagement and critical thinking. Learning requires building on prior knowledge (Yildiz & Celik, 2020).

Both theories suggest that students need to be actively engaged in the learning process to enhance their episodic memory of vocabulary. This can be achieved by incorporating real-life experiences into the classroom, using interactive multimedia tools, and creating associations with prior knowledge. By enhancing episodic memory, students are more likely to remember vocabulary in the long term, which can improve their communication skills and academic performance.

In conclusion, experiential learning theory and elaboration theory both offer valuable insights into how students' episodic memory can be enhanced to recall vocabulary. These theories emphasize the importance of active engagement, personal experience, and meaningful connections between new information and prior knowledge. By incorporating these principles into teaching practices, educators can enhance students' episodic memory and improve their ability to recall vocabulary.

## Conclusions

The neuroscience of semantic and episodic memory and the theories of experiential learning and elaboration provide valuable insights into how to enhance students' episodic memory for vocabulary recall. Episodic and semantic

memory play a crucial role in learning and vocabulary acquisition, which in turn impacts effective communication and academic performance of students. Both theories emphasize the importance of active engagement, personal experience, and meaningful connections between new information and prior knowledge in the learning process.

To improve students' episodic memory for vocabulary recall, educators can incorporate pedagogical practices based on experiential learning theory and elaboration theory. These practices may include connecting new words and concepts to personal experiences, using interactive multimedia tools, and encouraging the creation of associations with prior knowledge. By doing so, educators can help students consolidate information into their episodic memories, which facilitates long-term retention and retrieval of vocabulary.

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## Organizational and legal provision of the control function of the local self-government body in conditions of sustainable development

### Організаційно-правове забезпечення контрольної функції органу місцевого самоврядування в умовах сталого розвитку

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#### Abstract

The article discusses the issue of organizational and legal support of the control function of the local self-government body in the conditions of sustainable development in Ukraine. The functions of local self-government in Ukraine were outlined. The essence of the control function of local self-government bodies has been studied. The authors performed an analysis of the legislation defining the control powers of local self-government bodies and carried out its relationship with the goals of sustainable development. The purpose of this article is to define and characterize the control function of the local self-government body and its relationship with the goals of sustainable development. Various methods were used in the article, namely: historical method, method of documentary analysis, formal-legal, system-structural. Thus, with the help of the system-structural method, information on the relationship between the legally defined functions of local self-government bodies and the goals of sustainable development was systematized, which contributed to increasing the complexity, systematicity and completeness of

#### Анотація

В статті розкривається питання організаційно-правового забезпечення контрольної функції органу місцевого самоврядування в умовах сталого розвитку в Україні. Були окреслені функції місцевого самоврядування в Україні. Досліджено сутність контрольної функції органів місцевого самоврядування. Авторами був здійснений аналіз законодавства що визначає контрольні повноваження органів місцевого самоврядування, та проведений його взаємозв'язок з цілями сталого розвитку. Метою даної статті є визначення та характеристика контрольної функції органу місцевого самоврядування та її взаємозв'язок з цілями сталого розвитку. У статті використано різні методи, а саме: історичний метод, метод документального аналізу, формально-юридичний та системно-структурний методи. Так, за допомогою системно-структурного методу систематизовано інформацію про взаємозв'язок законодавчо визначених функцій органів місцевого самоврядування з цілями сталого розвитку, що сприяло підвищенню комплексності, системності та повноти дослідження. Завдяки цьому, було можливим

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the research. Thanks to this, it was possible to conclude that after the reform of the local self-government institute, which consisted in decentralization, the local self-government bodies gained additional control powers, which, as a result, strengthened sustainable development in the localities.

**Keywords:** local self-government bodies, sustainable development, functions of the local self-government body, financial control.

## Introduction

Local self-government is the basis of modern democracy, the initial link of self-organization of the population, on which the power of the rule of law rests. Any modern democratic, legal state has a well-developed institution of local self-government, from which people's rule begins.

Local self-government always was one of the main institutions of civil society. Most of the democratic states of the world have a developed system of local self-government, which is delegated a number of state functions (Perezhniak et al., 2021).

The right of local self-government is an integral component of the legal systems of many states of the world. The term "self-government" is of English origin and has been in use since the end of the 18th century. It is used in English constitutional law to denote the organization of the English social order, when the people exercise their right to self-government through their elected parliament and local representative bodies of self-government, whose activities are devoid of any external administrative assessment (Utvenko, 2017).

In Ukraine, local self-government is called the right of a territorial community - residents of a village or a voluntary association of residents of several villages, towns and cities into a rural community - to independently resolve issues of local importance within the limits of the Constitution and laws of Ukraine.

Local self-government is carried out by the territorial community in accordance with the procedure established by law, both directly and through local self-government bodies: village, settlement, city councils and their executive bodies. (International Center for Advanced Studies, 2015).

Article 140 of the Constitution provides: "Local self-government is the right of a territorial

community - residents of a village or a voluntary association of residents of several villages, towns and cities into a rural community - to independently resolve issues of local importance within the limits of the Constitution and laws of Ukraine." (Law of Ukraine 254k/96-VR, 1996).

**Ключові слова:** органи місцевого самоврядування, сталий розвиток, функції органу місцевого самоврядування, фінансовий контроль.

In addition, the same article defines the form of exercising such a right to power: "Local self-government is carried out by a territorial community in the manner established by law, both directly and through local self-government bodies: village, settlement, city councils and their executive bodies." (Law of Ukraine 254k/96-VR, 1996).

The purpose of this article is to define and characterize the control function of the local self-government body and its relationship with the goals of sustainable development.

The object of the study is social relations in the sphere of ensuring the control function of the local self-government body.

The subject of the study is the organizational and legal provision of the control function of the local self-government body in the conditions of sustainable development in Ukraine.

Ukraine, as a civilized, legal state with European integration aspirations, and as a UN member country, participates in the global process of ensuring sustainable development. Sustainable development should permeate the entire administrative hierarchy and start at the local level. In Ukraine, as a modern democracy, the system of local self-government has been reorganized through the decentralization reform. Thanks to this, significant progress has been achieved, but the organizational and legal support of local self-government still needs improvement, especially in the aspect of developing the control function of the local self-

government body in the conditions of sustainable development.

### Theoretical framework

In order to reveal the topic and the main idea of the article, the historical retrospective of the formation of the local self-government institute on the territory of Ukraine was first investigated.

The historical background of the establishment of the local self-government institute was studied by Klimova. Thanks to her, we know that the first mentions of self-organizing bodies of people's government were in Ukraine even before our era.

In addition, Zablotskyi, studying the historical formation of the local self-government system of Ukraine, came to the conclusion that the original representative of this institution was the people's body "viche", even during the times of Kyivan Rus. Establishing this fact gives the reader an idea of the historical background and development of the research topic.

In turn, Zhalilo, Shevchenko, and Romanova studied the issue of decentralization in their writings, and concluded that the redistribution of power by central bodies and local authorities makes it possible to update the entire hierarchy of administrative relations between branches of government by improving the level of checks and balances. The analysis of the above-mentioned literature formed an idea of the evolution and reform background of the institution of local self-government in Ukraine.

The next stage of the research was an analysis of scientific literature on the functions of local self-government and the impact of decentralization on them. Thus, the financial aspect of the consequences of decentralization, on the evolution of the state economy through the improvement of its efficiency and accountability, were studied by such Natskovians as Gryshchenko, Bondar, Serohina, Bodrova, Stokhova. They agreed that the proposed decentralization policy should provide an impetus to unlock new opportunities on the ground.

Marysyuk, Komnatny, Grigor' Eva, Prystay, Mital have a similar opinion, namely, in the context of the fact that decentralization, due to the improvement of public-private partnership at the local level, is positively correlated with key areas of social relations. Based on this, at the end of the study, conclusions are made about the positive impact of the decentralization reform on

the development of the local self-government institute in Ukraine.

Since this article reveals the control function of local self-government, it was expedient to analyze the categorical and conceptual apparatus of defining the "function of local self-government". Regarding the issue of the functions of local self-government bodies, it should be noted that a number of scientists have studied them. For example, Harmatyuk and Filyk drew a parallel between the functions of local self-government and the implementation of democratic rights of the territorial community.

Hlyvka highlights the main powers of the territorial community as a subject of administrative relations, and also notes the presence of cultural and social content in the functions of local self-government bodies, and their exceptional influence on the development of a democratic system in society (Hlyvka, 2016).

Ros, in turn, defines the function as a direction that is determined by the social goal of local self-government bodies to implement the tasks defined and assigned to them by the legislation of Ukraine.

V. Chushenko and V. Kuybida studied the functions of local self-government bodies and made their own classification. (Kuybida & Chushenko, 1998).

The analysis of N. Skrypchenko and Bosov singles out the specific functions of local self-government bodies, the main part of which is the control function (Skrypchenko, Bosov, 2009).

V. Bordenyuk also dealt with the issue of classification of local self-government functions in Ukraine, emphasizing their uniqueness and specificity. (Bordenyuk, 1998).

A full understanding of the research topic could not take place without revealing the concept of "sustainable development" and its concept. Therefore, it is important to note that the concept of "sustainable development" was first proposed in the monograph "Beyond Growth: The Economics of Sustainable Development", authored by Herman Daly (Daly, 1996).

It is necessary to note the following authors who studied issues related to the problems of sustainable development. Klarin studied the concept of sustainable development and its

integration in various spheres of human activity (Klarin, 2018).

The essence of the theory of sustainable development was defined by Kravchenko and Antoshchenko (Kravchenko & Antoshchenkova, 2019).

Lazorenko characterized the category of "sustainable development" and highlighted its main features (Lazorenko, 2021).

Ruggerio K. studied the criteria that the concept of sustainable development must meet (Ruggerio, 2021).

The very essence of the researched topic, namely, the correlation of the control function of local self-government bodies with the goals of sustainable development is revealed through the publications of the following authors.

Kaminska investigated control measures of local self-government bodies through the implementation of plans and reporting (Kaminska, 2010).

Redkin also separately distinguished between control and self-governing powers of local self-government bodies delegated control authority (Redkin, 2014).

In turn, Fugelo studied the implementation of the control function of local finances (Fugelo, 2015).

With the help of a comprehensive analysis of the mentioned literature, it became possible to reach the conclusions presented in this article.

### Methodology

To achieve the goal of the article, a set of research methods was used. Using the historical method, the authors investigated the history of the establishment of the local self-government institute in Ukraine, namely its formation and development. Using the method of documentary analysis, the article identifies the main provisions of normative legal acts of Ukraine (the Constitution and the Law of Ukraine "On Local Self-Government Bodies"), which establish the main control functions of local self-government bodies. Using the formal-legal method, the legal principles of ensuring the control function of local self-government bodies were outlined and the articles of the current legislation regulating their application were highlighted. Thanks to the system-structural method, information on the relationship between the legally defined functions of local self-government bodies

and the goals of sustainable development were systematized and presented in the form of a table. Other general scientific and unique legal methods were used in the research, which contributed to increasing the complexity, systematicity and completeness of the research.

The article contains references to 36 sources, including articles indexed on the scientometric basis of Web of Science, including seven normative sources.

### Results and discussion

#### *Local self-government in Ukraine: history and reform of decentralization*

The history of the development of local self-government in Ukraine dates back many centuries. and quite strong traditions. The first state entities built on the principles of self-government were founded by the Greeks on the territory of modern Ukraine (in the Northern Black Sea region) in the 7th - 6th centuries B.C. (Klimova, 2004).

Speaking of the historical retrospective of the development of local self-government in the Ukrainian statehood itself, it begins with a representative body called "Viche". During the times of Kyivan Rus, the subjects of self-government were, on the one hand, urban communities that enjoyed administrative, economic, and judicial autonomy, and on the other hand, rural (neighboring) communities-vervi. The viche had significantly wider (compared to European analogues of self-government systems) own powers, because the viche had the competence not only to hire a prince (in the modern sense: a manager-manager), but also to demand a report from him, expel and even execute him, announce a military campaign, establish international relations, etc. At the same time, institutionally, the century was inferior to European practices, since it did not have any permanent institutions of its own in the "interval" period, but relied on the princely administration (Zablotskyi, 2013).

Despite such a rich history, the institution of self-government is undergoing reformation and further development even today. It is important to note that in modern Ukraine, the institution of local self-government experienced a significant decentralization reform in 2014. To understand the content of this reform, first of all, it is necessary to define the conceptual and categorical apparatus, namely from the concept of "decentralization".

Decentralization is the process of transferring powers and budget revenues from state bodies to local self-government bodies. The primary goal of local self-government reform is to ensure its ability to independently, at the expense of its own resources, solve issues of local importance. For this, territorial communities are given greater resources and their own internal reserves are mobilized (International Center for Advanced Studies, 2015).

Decentralization of power as a component of the state policy of regional development is one of the defining reforms on the agenda in Ukraine. It created the basis for rooting radical institutional transformations, improving the quality of life of citizens and is of great importance for the continuation of sectoral reforms. Thanks to the creation of a new system of distribution of power between central and local authorities in Ukraine today, a new system of relations between different branches of government and a new balance of checks and balances is actually being formed. Moreover, strengthening the ability of the community to effectively influence the essential characteristics of the quality of its life is the basis of the sustainable development of the community on the basis of inclusiveness (Zhalilo, Shevchenko & Romanova, 2019).

This policy is based on the provisions of the European Charter of Local Self-Government (Ministry of Education and Science of Ukraine, 2002) and the best global standards of public relations in this area.

As of now, the decentralization of power in Ukraine can be divided into two stages:

The first stage - 2014-2019:

For this, the main package of updated legislation was formed and implemented:

- Laws on amendments to the Budget (Law of Ukraine № 79-VIII, 2015) and the Tax (Law of Ukraine №71-VIII, 2015) codes of Ukraine. Thanks to these changes, financial decentralization took place (local budgets increased by UAH 206.4 billion : from UAH 68.6 billion in 2014 to UAH 275 billion in 2019).
- Law "On Voluntary Association of Territorial Communities" (Law of Ukraine №562-IX, 2015). Made it possible to start forming a capable basic level of local self-government. In 2015-2019, 982 United Territorial Communities were voluntarily created in Ukraine. About 4,500 former local

councils (out of almost 12,000) were included in these united territorial communities. Such rates of intermunicipal consolidation have been called very high by international experts.

The law also introduced the institute of elders in the united territorial communities, which represent the interests of the villagers in the community council.

In 2018, the united communities received communal ownership of almost 1.5 million hectares of agricultural lands outside settlements.

- Law "On Cooperation of Territorial Communities"(Law of Ukraine № 1508-VII, 2014). Created a mechanism for solving common community problems: waste disposal and processing, development of common infrastructure, etc. Hundreds of communities have already used this mechanism.
- Law "On the principles of state regional policy" (Law of Ukraine № 156-VIII, 2015). During the reform, state support for regional development and community infrastructure development increased 41.5 times: from UAH 0.5 billion in 2014 to UAH 20.75 billion in 2019. Thanks to this support, more than 12,000 projects were implemented in the regions and communities in 2015-2019.
- Legislation was passed to increase the authority of local self-government bodies and streamline the delivery of administrative services. This allowed for the delegation of appropriate levels of authority to these bodies, enabling them to provide essential administrative services such as registering residences, issuing passport documents, registering legal entities and individuals, resolving civil status and property rights issues, addressing land disputes, and more.

The second stage of decentralization in Ukraine - 2020-2021:

2020 became a key year in the issue of the formation of the basic level of local self-government: on June 12, 2020, the Government approved a new administrative-territorial system of the basic level. According to the orders of the Cabinet of Ministers, 1,469 territorial communities have been formed in Ukraine, which will cover the entire territory of the country (Decentralization, 2023).

As we can see from the results of the reform, decentralization is a common element of public

finance development and reform strategies through efficiency, better governance and accountability. By using the given powers, such a policy can help to develop local potential and reveal it to its fullest extent (Gryshchenko et al., 2022).

In addition, the public-private partnership, which has grown at the local levels after the decentralization mechanisms obtained, has an impact on innovation, health care, the environment, the rule of law, and unemployment rates (Marysyuk et al., 2021).

So, the advantages of a strong, properly functioning institution of local self-government are obvious. Orientation towards European values led to a new round of evolution of local self-government in Ukraine - decentralization, which in turn strengthened the control function of local self-government bodies.

#### *The concept and essence of the control function of local self-government bodies*

Each body of state power, in accordance with the purpose of its existence and the task of its creation, has functions assigned to it. Local self-government bodies are no exception.

The functions of local self-government bodies contain a wide cultural and social content, because they contribute to the development of democracy in society and ensure the realization of the rights of the territorial community (Harmatyuk & Filyk, 2020)

It is worth noting that the Law of Ukraine "On Local Self-Government in Ukraine" lacks a clear list of functions of local self-government, the presence of relevant functions can be interpreted based on the powers of local self-government bodies. A. Hlyvka believes that such a position of the legislator is not justified, since the concepts of "powers" and "functions" have different content. The powers of relevant local self-government bodies are formed based on their functions and directions for their implementation. The main powers of a territorial community as a subject of local self-government include: economic development, development of infrastructure, formation of a strategy for the development of the respective territorial community, issues of urban planning, social and cultural powers, provision of housing and communal services, provision of transport services for the population, guarantee and provision of public security, issues of education, health care, provision of improvement of the

relevant territory. However, in our opinion, an important issue in terms of the development of local self-government is the consolidation of the system of its functions at the legislative level. The consolidation of functions as real legal instruments is a legal guarantor of their implementation. The functions of local self-government bodies contain a wide cultural and social content, because they contribute to the development of democracy in society and ensure the realization of the rights of the territorial community (Hlyvka, 2016).

Therefore, the legislative gap is filled by the opinions and hypotheses of domestic scientists. At the same time, scientific and theoretical research emphasizes the difficulty in classifying the functions of local self-government.

O. Ros defines the functions as the main directions or types determined by the social purpose of the representative bodies of local self-government in Ukraine activities of the councils for the implementation of tasks defined by the Constitution of Ukraine, the Law on Local Self-Government, other laws and regulatory acts. The functions of representative bodies of local self-government are a set of legal methods and organizational, material and financial means that will allow local councils to exercise their powers granted by law. The complexity of the classification of functions is related to the diversity of their content, and the specifics of each of them. Therefore, it is quite difficult to find an acceptable criterion for the classification of functions, since they must cover together all aspects and areas of activity of representative bodies of local municipalities (Ros, 2020).

Despite the indicated difficulty of classification, Ukrainian legal science does not stop trying to classify the functions of local self-government bodies.

V. Chushenko and V. Kuybida name the following functions of local self-government bodies: ensuring optimal socio-economic and cultural development of the respective territorial communities; ensuring the real participation of residents of territorial communities in solving public and state affairs; formation and final expression of the will and interests of the territorial community; control function (Kuybida & Chushenko, 1998).

N. Skrypchenko, based on the analysis of powers defined by law, single out the following functions inherent in representative bodies of local self-government, "normative, human rights

protection, establishment, control" (Skrypchenko & Bosov, 2009).

V. Bordenyuk singles out three main functions of local self-government bodies: 1) support of democracy; 2) ensuring the right of citizens to participate in the management of state affairs at the local level; 3) provision of services to the local population (Bordenyuk, 1998).

Having developed his academic opinion in his dissertation research, V. Bordenyuk says that "representative bodies of local self-government have unique socio-political functions (representative, rule-making, establishing, control, budgetary), as they are system-forming factors of the subsystem of representative bodies and reflect their specific role in the mechanism state" (Bordenyuk, 2009).

That is, regardless of the relative differences in the classification of functions of local self-government bodies, we can undoubtedly see unanimity in the selection of the control function. Therefore, we can conclude that the control function is one of the main functions of local self-government bodies and a necessary constituent element of the relevant institution, which comes from the very essence of power, as a social regulator.

Regarding the essence of the control function, it includes the implementation by local self-government bodies of numerous control measures to check the activities of officials (Krush, 2007).

### *The idea of sustainable development and Sustainable Development Goals*

The author of the innovative economic theory of sustainable development, systematically covered in the monograph "Beyond Growth: The Economics of Sustainable Development", is a leading researcher of the economic aspects of environmental pollution, former World Bank economist Herman Daly (Daly, 1996).

Quoting Mr. Ban Ki-moon (UN Secretary General) "The Seventeen Sustainable Development Goals (SDGs) are our shared vision for humanity and a social contract between world leaders and people." It should be noted that the 2030 Sustainable Development Agenda was unanimously supported by 193 countries (UN News, 2015).

The proposed 17 goals are directly related to the actual needs of people without reference to the GDP of the country in which they live. In essence, this document is interdisciplinary and large-scale, as it covers three levels of sustainable development: social, economic, and environmental. In addition, it contains ambitious challenges for the achievement of peace, justice and the promotion of effective institutions.

The 2030 Agenda for Sustainable Development intends to achieve its goals through mechanisms that involve the prudent management of financial resources, active progress and exchange of technology and capacity building, and the enhancement of mutually beneficial partnerships.



**Figure 1.** Sustainable Development Goals kick off with the start of the new year. Source: (UN News, 2015).

The goal of sustainable development is to meet the basic needs of people, while simultaneously

promoting development and environmental protection, achieving equality, ensuring social

self-determination and cultural diversity, as well as preserving ecological integrity. Although the concept of sustainable development has evolved over time, its core principles and goals have contributed to a greater awareness of the limitations of our environment and the need for more responsible behavior. As a result, this concept has been adopted in a wide range of human endeavors (Klarin, 2018).

The essence of the theory of sustainable development is to ensure the harmonious development of the national economy, which contributes to economic and social growth; the center of attention is a person who focuses his activities as much as possible on achieving harmony with nature; incompatibility and inadmissibility of revolutionary catastrophic changes (Kravchenko & Antoshchenkova, 2019).

In general, the category of "sustainable development" can be described as an anti-crisis, unceasing, stable process, which aims to increase the economic efficiency of the company's activities with a simultaneous increase in the level of responsibility towards partners and customers, as well as established measures to preserve the environment and improve the quality of life of the current and future generation. The main characteristic of sustainable development is the ability to control all processes based on the use of a system approach and modern information technologies (Lazorenko, 2021).

In general, Ruggiero, C. after analyzing the concepts of Sustainability and sustainable development concluded that the definition or conceptual model of sustainability, designed to define sustainability, should meet the following criteria: a) take into account the complexity of socio-ecological systems by covering economic, ecological, social and political factors; b) take into account intergenerational and intragenerational justice; and c) refer to the hierarchical organization of nature, that is, recognize the feedback between social-ecological systems and their environment (Ruggiero, 2021).

Based on the results of national consultations, it can be concluded that the society in Ukraine is ready to participate in the development of a strategic document that would define new long-term goals. The new goals should ensure the integration of efforts for economic growth, the pursuit of social justice and rational use of nature, which requires deep socio-economic

transformations in Ukraine and a new global partnership.

When defining the goals of sustainable development in Ukraine, it is necessary to develop a new system for monitoring social progress. It is important not only to measure the overall development of the country, but also to ensure the possibility of comparing the success of individual groups of the population according to the following divisions: age, gender, ethnicity, education, income, place of residence. It is necessary to create an open platform to ensure broad participation of all those interested in national monitoring of the achievement of goals (Sustainable development GOALS, 2016).

#### *The correlation between the control function of local self-government bodies and the goals of sustainable development*

The control function of local self-government bodies provides for the implementation by representative local self-government bodies of control measures to check the activities of officials, executive bodies of local self-government and deputies of the relevant councils. These measures are carried out in the form of listening to reports, messages, consideration of deputy requests, making decisions on the early termination of the powers of local self-government officials, the activities of temporary commissions of local councils. The control function is also implemented through mutual control by councils, officials and executive bodies of local self-government in compliance with legal acts of local self-government bodies, control over compliance with legislation on the territory of the community (on the use of land and other natural resources, the state of work regarding the consideration of citizens' appeals at enterprises, institutions and organizations regardless of the form of ownership, the state of improvement of industrial territories, the organization of landscaping, the protection of green spaces, reservoirs, etc.).

The consequences of these measures may be an appeal to the court to recognize as illegal the acts of executive authorities, other local self-government bodies, enterprises, institutions and organizations that limit the rights of the community, the powers of local self-government bodies and officials, submissions to the relevant authorities to prosecute officials persons, if they ignore the legal requirements and decisions of the councils and their executive bodies, adopted within their powers.

Quarterly control over the results of the implementation of the budget, socio-economic and cultural development programs takes place through the review by the councils of the corresponding quarterly written reports prepared by the executive bodies of local self-government and state administrations. Important means in the implementation of control measures by self-governing bodies over the activities of enterprises and organizations that belong to the communal property of the respective territorial communities are control over the implementation of plans, over the use of profits, as well as listening to reports on the work of the managers of these enterprises (Kaminska, 2010).

In addition to the control self-governing powers of local self-government bodies, it is possible to single out delegated powers of a controlling nature, which are exercised by the executive bodies of local self-government:

- carrying out, in accordance with the legislation, control over the proper operation and organization of public services by enterprises of housing and communal services, trade and public catering, household services, transport, communication, technical condition, use and maintenance of other real estate objects of all forms of ownership; making decisions on cancellation of the permission given by them for the operation of objects in case of violation of environmental, sanitary rules, other requirements of legislation;
- implementation of control over compliance with legislation on the protection of consumer rights;
- control over the state of apartment registration and compliance with housing legislation at enterprises, institutions and organizations located in the relevant territory, regardless of the forms of ownership;
- monitoring the provision of social protection for employees employed in jobs with harmful working conditions at enterprises, institutions and organizations, as well as the quality of certification of workplaces, working conditions and providing employees with benefits and compensation for working in harmful conditions in accordance with the law ;
- implementation of control over compliance with land and nature protection legislation, use and protection of land, natural resources of national and local importance, reproduction of forests;

- carrying out in the prescribed manner state control over compliance with legislation, approved town planning documentation in the planning and development of the relevant territories; stopping, in cases provided for by law, construction that is carried out in violation of urban planning documentation and projects of individual objects, and may also cause damage to the surrounding natural environment;
- monitoring of ensuring the reliability and safety of buildings and structures, regardless of ownership, in areas affected by dangerous natural and man-made phenomena and processes (Redkin, 2014).

In addition, based on the analysis of legislation and scientific sources, we can also come to the conclusion that the bodies of state power and local self-government have acquired certain anti-corruption powers (Bondarenko, Utkina, Dumchikov, Prokofieva-Yanchylenko, Yanishevskaya, 2021). That is, with the development of anti-corruption powers, the control of anti-corruption activities is entrusted to local self-government bodies.

This is confirmed by the fact that it is quite obvious that in the conditions of decentralization and the transfer of significant material resources to localities, the requirements for transparency and accountability of the local government, the integrity of the relevant officials reach a higher level. This, in turn, requires a qualitatively new level of organization of anti-corruption work and integrity system at the regional level (USAID, 2022).

The control function over local finances is implemented, in particular, in the activities of local self-government bodies when drafting local budgets, their consideration and approval, as well as the implementation and preparation of a report on the implementation of local budgets, in the process of control over the formation and use of budget funds. The scope of the control function is not limited to local budgets, but includes other cash funds and, in general, all financial resources at the disposal of local self-government. The control system should be aimed at correcting violations and preventing them in the future. Strengthening local public control over the use of budget funds will be effective (Fugelo, 2015).

In which areas exactly does it match, which reports exactly, and what does the control function consist of:

**Table 1.**

Reflection the goals of sustainable development and the legislative framework of local self-government of Ukraine (Maletov D., Pankratova V., own authorship)

The goal of development	How is it implemented? (by which body)	Article of the Law of Ukraine "On Local Self-Government in Ukraine"	Content of the article (powers)
Goal 1: No poverty	Department of social protection of the population under local self-government bodies	Article 30	3) promoting the expansion of housing construction, providing citizens in need of housing with assistance in housing construction, in obtaining loans, including preferential ones, and subsidies for housing construction or purchase; providing assistance to owners of apartments (houses) in their maintenance and repair; assistance in the creation of associations of co-owners of apartment buildings;
Goal 2: Zero hunger (No hunger)	Directly by local self-government bodies	Article 32	6) organization of medical care and <i>nutrition</i> in educational, cultural, physical education and sports institutions, health facilities that belong to territorial communities or are transferred to them; a) own (self-governing) powers: 6) organization of <i>medical care</i> and nutrition in educational, cultural, physical education and sports institutions, health facilities that belong to territorial communities or are transferred to them; b) delegated powers: 1) ensuring, within the limits of the granted powers, the availability and free of charge of education and medical care in the relevant territory, the possibility of receiving education in the state language; 2) ensuring, in accordance with the law, the development of all types of education and medical care, the development and improvement of the network of educational and medical institutions of all forms of ownership, physical culture and sports, determining the need and forming orders for personnel for these institutions, concluding contracts for the training of specialists, organizing work regarding the improvement of the qualifications of personnel, the involvement of employers in the provision of places for industrial practice for students of vocational and technical educational institutions;
Goal 3: Good health and well-being	Local self-government bodies and communal medical institutions	Article 32	3) providing, in accordance with the legislation, privileged categories of the population with medicines and medical products;

Goal 4: Quality education	The corresponding Department of Education, which is an executive body accountable and controlled by the city council, the executive committee of the city council, the mayor	Article 32	1) management of educational, health care, cultural, physical education and sports institutions, health facilities, youth centers that belong to territorial communities or transferred to them, youth and adolescent institutions at the place of residence, organization of their material, technical and financial support; 2) provision of full general secondary, professional (vocational-technical), professional pre-university and higher education in state and communal educational institutions, creation of necessary conditions for education of children and youth, development of their abilities, work training, professional orientation, productive work of students, promoting the activities of preschool and extra-curricular educational institutions, children's, youth and scientific and educational public associations, youth centers; 3) creation of a compulsory education fund at municipally owned general education institutions at the expense of local budget funds, attracted for this purpose on a contractual basis, funds of enterprises, institutions and organizations, regardless of the forms of ownership, as well as funds of the population, other sources; control over the use of the funds of this fund as intended;
Goal 5: Gender equality	-	-	There are none in the current law;
Goal 6: Clean water and sanitation	Directly by local self- government bodies	Article 30, Article 43	<i>Article 30.</i> 5) provision of social and cultural institutions that belong to the communal property of the respective territorial communities, as well as the population with fuel, electricity, gas and other energy carriers; solving issues of water supply, drainage and wastewater treatment; monitoring the quality of drinking water; <i>Article 43.</i> 23) establishment of rules for the use of water intake structures designed to meet the drinking, household and other needs of the population, sanitary protection zones of water supply sources, restrictions or bans on the use of drinking water by enterprises for industrial purposes;
Goal 7: Affordable and clean energy	Directly by local self- government bodies	Article 28	2) establishment of tariffs for thermal energy (including its production, transportation and supply), tariffs for centralized water supply and centralized drainage, for other communal services (except tariffs for thermal energy, its production, transportation) and supply, tariffs for communal services, which are established by the National Commission, which carries out state regulation in the spheres of energy and communal services), household, transport and other services;

Goal 8: Decent work and economic growth	Directly by local self-government bodies	Article 27, Article 35	<p><i>Article 27.</i></p> <p>1) preparation of programs for socio-economic and cultural development of villages, towns, cities, target programs on other issues of self-government, submitting them for council approval, organization of their implementation; submission of reports to the council on the progress and results of the implementation of these programs;</p> <p>2) ensuring balanced economic and social development of the relevant territory, effective use of natural, labor and financial resources;</p> <p><i>Article 35.</i></p> <p>1) concluding and ensuring the execution of contracts with foreign partners for the purchase and sale of products, performance of works and provision of services in accordance with the procedure established by law;</p> <p>2) promotion of foreign economic relations of enterprises, institutions and organizations located in the relevant territory, regardless of the forms of ownership;</p> <p>3) assistance in creating, on the basis of legislation, joint enterprises with foreign partners, industrial and social infrastructure and other facilities; attraction of foreign investments to create jobs;</p> <p>4) involvement of enterprises, institutions and organizations, regardless of the form of ownership, on a contractual basis, to participate in the development of the capacities of the construction industry and the construction materials industry, in the creation, development and reconstruction of facilities for engineering support and transport services;</p> <p>3) promoting the expansion of housing construction, providing citizens in need of housing with assistance in housing construction, in obtaining loans, including preferential ones, and subsidies for housing construction or purchase; providing assistance to owners of apartments (houses) in their maintenance and repair; assistance in the creation of associations of co-owners of apartment buildings;</p> <p>1. The territorial community has the right to hold public hearings - to meet with the deputies of the relevant council and officials of local self-government, during which members of the territorial community can listen to them, raise questions and make proposals on issues of local importance that belong to the jurisdiction of local self-government.</p> <p>21) establishment of standards (norms) for the consumption of communal services in accordance with the procedure prescribed by the Cabinet of Ministers of Ukraine</p> <p>a) own (self-governing) powers:</p> <p>1) creating and ensuring the functioning of local ecological automated information and analytical systems, which are a component of the network of the national ecological automated information and analytical system for providing access to environmental information;</p> <p>b) delegated powers:</p> <p>1) implementation of control over compliance with environmental legislation, use and</p>
Goal 9: Industry, Innovation and Infrastructure	Directly by local self-government bodies	Article 31	
Goal 10: Reduced inequality	Department of social protection of the population under local self-government bodies	Article 30	
Goal 11: Sustainable cities and communities	Directly by local self-government bodies	Article 13 and indirectly all others	
Goal 12: Responsible consumption and production	Directly by local self-government bodies	Article 30	
Goal 13: Climate action	Directly by local self-government bodies	Article 33	

Goal 14: Life below water	-	-	protection of natural resources of national and local importance, reproduction of forests;  There are none in the current law;
Goal 15: Life on land	Directly by local self-government bodies	Article 43	24-2 )making decisions on approving the list of animal species that are not listed in the Red Book of Ukraine, but are rare or have special scientific, environmental and other value, or are endangered and subject to special protection on the territory of the relevant councils; A local self-government body can be a plaintiff and a defendant in courts of general jurisdiction, in particular, apply to the court if it is necessary to exercise its powers and ensure the performance of local self-government functions.
Goal 16: Peace, justice and strong institutions	Directly by local self-government bodies	Article 18 <sup>-1</sup>	5) provision of social and cultural institutions that belong to the communal property of the respective territorial communities, as well as the population with fuel, electricity, gas and other energy carriers; solving issues of water supply, drainage and wastewater treatment; monitoring the quality of drinking water;
Goal 17: Partnership for the goals	Directly by local self-government bodies	Article 30	

The proposed table makes it possible to clearly see the presence of correspondence between each goal of global development and the norm of the profile law of Ukraine, which regulates the activities of local self-government bodies and provides it with the appropriate control functions. Based on the conducted analysis and systematization, we note that only two functions do not have their normative relationship in the national profile law. One function (Goal 14: Life below water) is missing, indirectly due to geographical features of Ukraine - lack of direct access to the oceans. And the other (Goal 5: Gender equality) is enshrined in other normative legal acts and legislative initiatives that have not entered into force at the time of writing the article. On the one hand, this indicates a fairly high, although not directly defined, correlation between the provision of control functions to local self-government bodies at the level of national legislation and the goals of sustainable development. And on the other hand - about the need to develop, specify and finalize these norms.

### Conclusions

Summarizing the above, after conducting a detailed analysis, it was possible to establish that the first signs of local self-government in Ukraine were recorded as early as the 7th century. to n. Since then, the institution of local self-government has evolved, and its last change in Ukraine was the decentralization reform, which significantly expanded the organizational and legal provision of local self-government bodies. Normative regulation begins with the Constitution of Ukraine (Chapter XI, Articles

140-141), which contains the definition and basic principles of local self-government in Ukraine, and is fully ensured by the profile Law of Ukraine "On Local Self-Government Bodies". Organizational - is provided thanks to departments, departments, managements that are authorized to create local self-government bodies, within their competence, as well as delegated powers. Thanks to the presence of the control function, which comes from the content of the local self-government institute, and the organizational legal support of local self-government bodies, it was possible to establish and analyze its relationship with the goals of sustainable development. Of course, some of them (Goal No. 5 of Gender Equality) need to be improved, by enshrining it at the legislative level in the relevant law and related to it (laws on local elections, etc.). But in general, it is possible to single out the positive impact of the granted powers as a result of the decentralization reform on the organizational and legal foundations of ensuring the control function of local self-government bodies. In addition, we suggest enshrining changes in the legislation and directly specifying the powers of local self-government bodies regarding the development of sustainable development. This will make it easier to assess the effectiveness of local self-government organizations in this direction, and will strengthen the institution of local self-government as a whole.

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## Training of child welfare social workers: American, British, and Ukrainian approaches

### Підготовка соціальних працівників до роботи з дітьми: підходи Великої Британії, США та України

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#### Abstract

The article considers the training of child social workers in the UK, the USA, and Ukraine. The study aim relates the structure, content, and forms of training. Theoretical, and comparative methods allowed to generalize the available data on the issue current state of professional training of social workers. The results of the study allow concluding that the common features of American, British, and Ukrainian system of social workers training for the work with children are: (i) the use of a variety of teaching forms, methods, and technologies; (ii) the curriculum orientation on the unity of theoretical and practical components; courses addressing direct work with children and families, social policy, social services for children and families with much attention to the aspects of adoption, foster care, juvenile justice, child abuse, child neglect, etc. The research outcomes testify that the principal difference between models of social workers training is the accent of curriculum in the UK and the USA on the issues of preventive

#### Анотація

У статті розглядається питання підготовки соціальних працівників до роботи з дітьми у Великій Британії, США та Україні. Мета дослідження – розглянути структуру, зміст та форми підготовки. Теоретичний та порівняльний методи дозволили узагальнити наявні дані щодо проблеми сучасного стану професійної підготовки соціальних працівників. Результати дослідження дозволяють зробити висновок, що спільними рисами проаналізованих систем підготовки соціальних працівників до роботи з дітьми є: (i) використання різноманітних форм, методів і технологій навчання; (ii) орієнтація навчального плану на єдність теоретичної та практичної складових; дисципліни, що стосуються безпосередньої роботи з дітьми, соціальної політики, соціальних служб для дітей з великою увагою до аспектів усиновлення, прийомної сім'ї, ювенальної юстиції, жорстокого поводження з дітьми, бездоглядності тощо. Результати дослідження:

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care, social and legal protection of children, and in Ukraine – on the deviation's correction, on the therapeutic assistance.

**Keywords:** children at risk, courses, curriculum, social work with children, training of social workers.

## Introduction

Social, economic and political crisis of modern society has common features in different (socially, culturally, historically, and politically) countries, namely: the strengthening of social exclusion among the children and youth, the proliferation of deviant displays (theft, drug addiction, begging, prostitution, etc.). Family is becoming less capable to both care for children and fulfil parental responsibilities, often creating conditions dangerous to the child's life and development. As a result, many of children experience physical, mental, and social problems. They find themselves at risk due to potential danger of the further deepening of social deformation of an individual. Social-legal protection and support of at-risk children (neglected, difficult to up-bring, with mental dissabilities, etc.) is to become the priority direction of modern social state policy. Thus, it actualizes the issue of professional training of social workers for the work with children. The object of the current study is the professional training of social workers for the work with children in the UK, the USA, and Ukraine. The study aim relates the courses content and knowledge, skills and attitude they develop.

## Theoretical Framework

There has been a number of researches conducted in the area of social work, child welfare, and general issues of social workers training in the UK (Bartosh et al., 2007; Bartosh et al., 2021; Boyko, 2017; Connolly & Morris, 2011; Davey & Bigmore, 2009; Davies, 2012; Pichkar, 2002; Rogowski, 2013), in the USA (Apgar, 2017; Cournoyer, 2013; Ensher et al., 2009; Hepworth et al, 2013; Lane et al., 2002; Maluccio et al., 2002; Morales et al., 2009; Nichols, 2011; Sobchak, 2004; Webb, 2011), and in Ukraine (Kozubovska & Shandor, 2016; Lukashevych & Semygina, 2009; Panok & Levchenko, 2014; Petrochko, 2011; Ren', 2011; Tyuptya & Ivanova, 2008; Zvyryeva & Laktionova, 2004), which we base our further scientific findings on.

що принципова відмінність між моделями підготовки соціальних працівників є акцент навчальних програм у Великій Британії та США на питаннях профілактики, соціального та правового захисту дітей, а в Україні – на корекції відхилень, на терапевтичній допомозі.

**Ключові слова:** діти групи ризику, дисципліни, навчальний план, соціальна робота з дітьми, підготовка соціальних працівників.

Professional training of social workers for the work with at risk children in the UK, the USA, and Ukraine has become the object of scientific interest of Kozubovska et al., (2016), Shpenyk (2016), Tsybul'ko (2014), and Vinnikova (2003). In our research we also rely on the data gathered personally while implementing international joint projects on mastering of social workers' training in Ukraine (International Renaissance Foundation: Publication of e-journal "Social Work in Ukraine and Abroad"; Tempus-Tacis project JEP-10243-96: Establishing the Social Work Department at Uzhhorod University; Tempus EU project NP-21007-2000: National Network of Educational Institutions in Social Work; Tempus EU project 144562-TEMPUS-2008-UK-JCPR: Advancing the Three Cycle System in Social Work Education in Six Countries; Projects of Cooperating Netherlands Foundations for Central and Eastern Europe: Adaptation and Integration of Children and Youth with Limited Abilities into Society.

## Methodology

The following research **methods** have been applied:

- Theoretical – the secondary analysis of philosophical, psychological, and pedagogical sources on the issue under consideration has given the possibility to systematize and generalize the available data;
- Comparative – has allowed finding a new angle in the issue of social workers training, to identify the peculiarities of professional training of social workers in higher educational institutions of the UK, the USA and Ukraine. We have narrowed our interest to the content of social workers training for the work with at risk children;
- Empirical – observations, questionnaires, and interviews with scholars and practical social workers within previously

implemented international projects have given an opportunity to analyze comprehensively the experience of professional training of social workers for the work with children.

## Results and Discussion

Social work is a profession requiring: in-depth professional knowledge, practical abilities and skills; demonstration of professional and personal qualities and high level of psychological readiness. It is also viewed as a practice-based, whereas social work students are expected to apply the theories and concepts while addressing problems at individual, group and community levels.

It is for this reason Dhengle (2016) puts forward the view that social work education consists primarily of two main components, theory-based knowledge and social skills development through field work. We also support the argument of Mallick (2007) that the fieldwork practicum constitutes as an essential and unique component of its curriculum and has its central meaning and importance.

Social work practice includes a wide range of activities such as individual counselling, generating awareness about social issues, mobilizing resources to meet the community needs, and participation in social movements. While speaking of countries under consideration the wide-ranging social work activities can be classified by three levels:

- (1) Micro-level social work practice is individualistic in orientation and therapeutic in nature. At this level, a social worker deals with individuals or groups, comprising of individuals, facing similar problems. At the same time, individualistic practice highlights causative economic, political, and social factors that give rise to problems at the micro-level.
- (2) Meso-level social work practice is either therapeutic or critical in nature or both, is focused on community. A social worker applies community organization, as method of social work practice, to address the concerns raised by people in the community. A social worker also develops knowledge on the rights of people and deliberates on the macro-interventions to exercise these rights.
- (3) Macro-level social work practice is critical in nature and involves the application of social action and social work research as methods of social work practice. A social

worker is engaged in a process of organizing people to alter the oppressive structures in the society, brings about a social change by empowering people.

Social work with children, aimed at keeping children safe, promoting relationships with parents and careers, and supporting the developmental needs of children at all ages, is carried out in the UK, the USA, and Ukraine at the following levels:

- Individual work (e.g., with children who have either suffered from/are at risk of violence; with parents or people inclined to violence directed against children);
- Group work (e.g., with families providing counselling and/or assistance on issues of upbringing and educating of children, establishing relationships in the family, etc.);
- Community work (e.g., provision of high-quality foster care, provision of adequate social services for the population, organization of community groups for self-assistance, etc.).

A social worker is trained to grasp both the problem symptoms and causes, to find ways to overcome them. Further research in this area (Shaparenko, & Sopivnyk, 2014; Tymenko, 2003; Yakovlev, & Kabachenko, 2011) shows that there are fundamental and common principles educational institutions rely upon in the training of social workers:

1. Knowledge of national standards of social work. One of the central issues in the quality assurance of standards of social services is the nature of relationship between social workers and their clients, which should be based on partnership, mutual respect and trust.
2. Diversity of social groups, communities, and lifestyles requires in-depth knowledge of social work theory and models with all social groups and age categories as well as knowledge of law to provide legislatively the social services.
3. Learning process is the fundamental basis for the further professionalism, which is considered by scholars as a set of personality characteristics of an individual, necessary for the successful performing of professional tasks. Social worker's professionalism, the idea of social worker's activity as an orientation towards a person as the highest value is central.

4. The principle of professional and personal development is the basis for the training of social workers. A social worker is to acquire a significant amount of knowledge, skills and abilities in combination with relevant personal qualities and ability to find non-standard solutions to the client's problems.
5. The success of professional activity of a social worker-to-be depends on the strict implementation of ethical norms and principles.

The training programs for social workers in the UK, the USA, and Ukraine offer courses on social work practice with various categories of clients at all levels (micro, meso, and macro practice). They also provide courses that ensure knowledge on the social context of social work practice, the dynamics of its changes, values and ethics of social work, and the formation of awareness of the need for further professional development. The social worker training in the countries under consideration is characterized by its multilevel approach, high-quality curriculum, focus on field practice, and supervision provided. The comparative analysis indicates that significant attention is paid to extracurricular activities, individual self-study, and research and development of students. All of these focus on instilling knowledge for practical application rather than knowledge for its own sake. The peculiarities of individual training include: 1) no strict time periods allocated for studying the course, allowing students to learn at a pace that suits their abilities; 2) a strict requirement to complete the material thoroughly, with the transition to new topics possible only after mastering the previous ones; 3) development of a personal study program by the student under guidance; 4) lectures used only as a form of directing the learning process, not the primary source of information; 5) the need for self-study, critical thinking, and a creative approach to the educational process; and 6) an increased role of essay writing, among other activities.

The most popular practice in training social workers is the case method, which involves studying specific situations. This method allows for collective creative discussion based on a concrete, truthful situation that contains original practical experience, helping to develop specific practical skills. Students analyze and discuss situations with real clients of social agencies, learning approaches to solving problems from different perspectives based on their knowledge, experience, and observations.

The branch standard of higher education for training social workers in Ukraine was approved by the Ministry of Education and Science in 2019. Accordingly, the list of courses in the normative curriculum is clearly defined and is designed to prepare general social workers, that is, specialists in the common practice of social work. Selective courses are provided depending on the possibilities of specific educational establishments. Thus, bachelors are taught general courses (such as Social Welfare, Social Work Methods, Social Policy, and System of Social Services) as well as specialized courses that focus on working with children and families, domestic violence, teamwork, and community development (such as Social Work with Children and Families, Social Work with Individuals Inclined to Deviant Behavior, Social Work with People with Special Needs, etc.). The issue of social work with children is addressed within each of the courses.

The available evidence, based on surveys conducted by Best Accredited Colleges (2021), The Council of Social Work Education (2023), and U.S. News on Education (2022), suggests that in the USA, to obtain a Bachelor of Social Work degree, students need to complete a training program in a college or school of social work accredited by the Council of Social Work Education. In the UK, social work education is provided in colleges or universities accredited by the Care Council for Wales, Northern Ireland Social Care Council, Scottish Social Services Council, or Health and Care Professions Council in England (The Complete University Guide, 2023). After receiving their Bachelor of Social Work degree, graduates in these countries can begin their careers as general social workers. Accredited programs offer specialized courses for aspiring social workers, including:

- *Child Development (psychological, mental and physical)*. Knowledge of behavior and peculiarities of development helps a social worker to assess whether a child develops «normally» or needs specialist's attention. In such cases, a social worker needs knowledge and skills that guarantee the provision of such help. Thus, a child welfare social worker-to-be is to acquire KNOWLEDGE on: 1) "normal" physical, mental, and emotional child development; heredity; impact of environment; adaptation; attachment theory; individual characteristics and identity development (ethnic, cultural and sexual differences with particular attention to the problems of socialization and practice of child's up-brining); 2) deviations

in the child's development; 3) influence of social and emotional difficulties on the child's development; traumatic events and their consequences (divorce, loss, physical or mental illness, racial discrimination); psychosomatic disorders (e.g. anorexia nervosa, self-harm); alcohol, drug misuse; inability to adapt to the surrounding circumstances; SKILLS to: 1) observe; 2) evaluate "non-normal" behavior and physical development; 3) develop a child care plan; 4) collaborate with parents and other caregivers, professionals; ATTITUDE that: 1) while considering the needs of a child, age, gender, health conditions, race, religion, language, culture, and life experience are to be taken into account; 2) assessment of a child's development is to be placed in the center of appropriate attention. At practice, a student is to: observe a child; evaluate the physical behavior of a child and its development by the norms; evaluate the quality of caregiver's care towards a child; discuss with a specialist the possibility for healthcare worker to visit a child in a hospital; present the results of assessing the health of a child in the form of diagrams, charts, etc.; prepare a care plan for parents having a child with special needs.

- *Child Welfare Services:* This course establishes the connection between child welfare policy, services, and social work practice. It builds upon the course in social welfare policy, and enables students to use an action-based advocacy approach to provide policy-informed services and to participate in policy implementation and change. The course provides the historical view of the treatment of vulnerable children and the subsequent development of child welfare services, continuous with evolution and enactment of early child welfare policies through to the emergence of modern child welfare policies and their impact on child welfare systems in a multicultural society.
- *Communication with Children and Young People:* Child welfare social workers-to-be learn how to work with children as with their clients, they are to develop the fundamental ability to communicate directly with children, youth and adults, which is the ability to observe, to be sensitive, to be aware of reaction and emotional interaction. Students also develop the ability to listen to children, maintain a conversation with them, enter their world and understand their perspective. Thus, a child welfare social worker-to-be is to acquire KNOWLEDGE on: 1) the legal right of children to speak for

themselves and decide for themselves at any age, the duty of local authorities to take into account the religion, race, language of each child; 2) the variety of communication methods (language, game, drawing, drama, joint activity), which determine the level of child's development and are the basis for the effective work; 3) the importance of available resources (time, place, equipment, funding); 4) the consequences of loss, separation, poor health on the ability of children to communicate; 5) the role and possibility to involve other professionals in working with children; SKILLS to: 1) listen and talk with children and young people attentively, at the same time allowing relationships to evolve at such a pace as a child chooses; 2) use a language appropriate to the child's age, take into account the child's linguistic capabilities, gender and culture; 3) use different skills to play, recommend appropriate toys and games, demonstrate understanding of non-stereotyping by gender/ culture/ religion; 4) recognize the child's need for communication in the language child chooses; 5) tell unpleasant news and not to cause aggression; 6) maintain a positive self-image of a child; ATTITUDE that: 1) every child has to tell about his/her life something special, thus the decision on the child's future is to be also unique; 2) clients have the right to know about the purpose of communicating with them, and how it is going to be used; 3) they are to respect the origin of the child with whom they work. At practice a student can: organize visits to a group in a kindergarten, discuss with educator's children's abilities and skills, study the existing multi-race books and toys; comment on factors that hinder the communication with parents, children and young people. Activities aimed at communication involve observation, interview with a child.

- *Child Abuse:* The basic understanding of «injustice» phenomenon, of the role of social work and social agencies in protecting children together with basic skills on recognition and identifying of general signs and symptoms are necessary for all social workers and social welfare agencies. a child welfare social worker-to-be is to acquire KNOWLEDGE on: 1) partnership with parents and the wider family as the first step in protecting a child as a requirement of justice; 2) forms of child abuse, basic theories and researches on child abuse, its nature and quantitative indicators; 3) the

right to a private life, which may also result in the hiding of the facts of abuse; 4) the ways of assistance provision to families (of different ethnic/ cultural/ racial background); 5) cooperation between the central government and local authorities in administration of child protection; criminal and civil liability, rules of witnessing, administrative system (circulation of documentation); rules, procedure and professional practice in solving a case; 6) methods of intervention, their pros and cons in specific cases, results and consequences of intervention; 7) influence of abuse in childhood on the development of self-determination and self-esteem; 8) doubts and hesitation regarding the intervention in child abuse cases and the responsibility of social workers for this; 9) policy, procedures for institutional care of a child and consequences of their violation; SKILLS to: 1) use knowledge on appropriate child protection system in the region; 2) support individuals or families, where a conflict of interest may exist; 3) participate in the process of joint discussion of the case; 4) submit documents on the case to appropriate authorities, to the court; ATTITUDE that: 1) all children (regardless of race, culture, class) as a result of their dependence (social, emotional and physical) need protection from potential injustice; 2) the form and means of protection should be flexible, depending on the needs of particular child; 3) separation, as a form of child protection, can strengthen the view that injustice (sexual or emotional) is a consequence of child's fault. At practice, a student is: to discuss with a practice teacher the possible solutions to the situation with child protection; to attend a criminal trial; to discuss with parents of the offended child their attitude to the particular service; to discuss with parents the child protection; to take part in the conference on the child protection.

- *Planning and Process of Care* (the care for children and youth, foster care and adoption, post-institutional care, etc.): Students are taught how to determine the potential of the child's family (especially when it is planned to move the child to another family); possible harm to a child. Thus, a child welfare social worker-to-be is to acquire KNOWLEDGE on: 1) the role of a social worker, other professionals and agencies in supporting children and families; 2) the diversity of resources within and outside the care system: centers of day-care; family

centers; foster placement; boarding schools for children; foster families; staying at home "for the accusations under control"; services for children with special needs; 3) the consequences of poverty, unstable marital relationships, family crises, divorce on parental possibilities in the upbringing of children; 4) various racial and cultural types of family life and upbringing of children; 5) legal conditions for a child taken out of care; 6) practical and emotional needs of a child after being taken out of care; 7) problems of return to a family; 8) pros and cons of the system of post-institutional care; 9) factors of motivating to fostering; 10) the legal aspects of adoption, its procedure, and peculiarities of the work of social services in adoption; SKILLS to: 1) consider the circumstances of an individual family, a child in the broader context from the point of view of needs and rights of a child and parents; 2) find the best options and opportunities for children and parents; 3) foresee possible conflicts of interest and act in the interests of a child; 4) carry out a detailed analysis and assessment of a child in the family environment; 5) assess pros and cons of staying under the care; 6) learn about the child's preferences, health status, educational opportunities, special needs, especially in relation to religion and culture; also transfer this knowledge to the new career of a child; 7) organize meetings or contacts between children, parents and new careers; 8) explain to children, parents and careers their rights and responsibilities; 9) conduct a situation re-assessment and prepare a care plan; 10) regularly visit a child in placement; monitor the health of a child, educational / social / emotional progress; 11) plan the conditions for taking a child out of care; 12) visits a child after the child is taken out of care; ATTITUDE that: 1) every child has the right to protection from possible harm and injustice; 2) children have the right to develop identity within a culture or an ethnic group; 3) parents must be aware of their responsibility and role in the upbringing of children; 4) parental rights and duties should be respected; 5) parents should actively participate in the situation assessment and decision-making; 5) the placement of a child should be well-planned, taking into account the child's desire and feelings; 6) a child has the right to have ties with past relationships; 7) authorities are to ensure and maintain child's well-being; 8) careers should be considered as partners

in the process of fostering; 9) a child, taken out of care, deserves help and the authorities are responsible for its provision. At practice, a student can: accompany a social worker in the process of placing a child under the foster care; analyses the reaction of a child and discuss it; ask foster careers about their fostering experience; try to choose foster careers for a child; attend meetings on the selection of foster careers and participate in the discussion of documents.

- *Social Work with Children, Youth and Families*. The course focuses on the professional knowledge and skills required to work effectively with vulnerable children and families and aims to convey to students an understanding of the realities and complexities of practice in the child protection field. It includes the following aspects:

- (i) *Principles of Social Work with Children and Families*. After completing the session students are able to explain: the potential and limits of social work with children and families; historical context of child's welfare; anti-oppressive social work with children and families; partnership with family members and other agencies; focusing on people's abilities and resources, client impoverishment, listening to children. Thus, in practice, a student can: consider a specific case of a family with children and comment on potential and limits of social practice interference; consider a specific case and comment on how a school, social services, and a social worker might oppress a client; consider a specific case and determine the possibilities for cooperation and partnership with family members in solving the problem, as well as the consequences of possible non-cooperation of family members; list agencies (health/education/social services, community resources, voluntary organizations, other) children in need may be in contact with; provide ideas on what can ensure a social worker to listen properly to a child.
- (ii) *The Process of Social Work with Children and Families*. After completing the session students are able to explain the meaning of process in the context of social work practice; outline the process of social work with children and families (ASSESSMENT (make an assessment of needs and difficulties) → PLANNING (agree a plan of work in relation to your assessment) → IMPLEMENTATION (carry out your plan

of work) → EVALUATION (evaluate your work)); explain the impact of values on this process. At practice, a student can: define the term «process», «the process of social work»; work out the process, procedure of working with a family who have addressed the social agency.

- (iii) *Direct Work with Children in the Family*. After completing the session students are able to: outline different ways of direct work with children; give examples of wide range of needs of children, which social workers come into contact with; indicate opportunities and constraints placed upon social workers in responding to children's needs; assess personal skills in communicating with children; explain the meaning and use, the strengths and limitations of child observation in social work practice; identify reasons for involving children in decision-making. Thus, in practice, a student can: name professionals from different spheres (medicine, education, leisure) who have direct contact with children; comment on what is essential (physical, emotional and social needs) for the child's development; identify specific knowledge and skills for appropriate communication with children; prepare a plan of work with a child who is harassed at home, who uses only a foreign language of communication (establishing an initial contact with a child; using simple words, gestures, correct tone of voice, toys, involving parents in communication at the initial stage, etc.).
- (iv) *The social and political context of social work with children and families*. After completing the session students are able to apply knowledge of social sciences, law and social work practice theory.

Assessment of students' knowledge is checked through observation of a student in practice placement, feedback on the student's practice; analysis of student's records during case management; assessment of student's written works or projects with the analysis of knowledge and skills applied.

## Conclusions

The curriculum on training of social workers in the UK, the USA, and Ukraine includes courses on: social work practice with various categories of clients at all levels (micro-, meso-, and macro practice) as well as courses that contain knowledge the social context of social work practice, (the dynamics of) its changes; values

and ethics of social work; formation of awareness of the need for further professional development and improvement. Students are taught: to perform direct work with children and families; to cooperate with various social services; to carry out assessment, planning, and monitoring. The principal difference between models of social workers training is the accent of curriculum in the UK and the USA on the issues of preventive care, social and legal protection of children, and in Ukraine – on the deviation's correction, on the therapeutic assistance. Field practice – is an obligatory component of curriculum to obtain the qualification, which is aimed to develop the students' skills and abilities, and attitude. The practical experience, is gained in specialized institutions and/or volunteer practice with children. Much attention is paid to extracurricular work, individual, self-study and research and development of students.

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## Public official as a victim of criminal assault: comparative approach

### Державний службовець як потерпілий від злочинного нападу: порівняльний підхід

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#### Abstract

This research paper aims to analyze criminal liability for assaulting law enforcement agents in different jurisdictions. A comparative approach is used to examine relevant criminal law provisions of several countries, including the United States, England, Germany, Canada, and Ukraine. The methodology combines statistical methods and comparative research to provide a detailed and comprehensive analysis. The most important findings indicate that some countries protect both public officials and law enforcement agents from illegal attacks, while others have a special liability regime for assaulting or threatening police officers only. In particular, it is argued that the Ukrainian approach is more balanced compared to other jurisdictions. Overall, the document provides a complete and detailed insight into criminal liability for assaulting law enforcement agents in various parts of the world.

#### Анотація

Це дослідження спрямоване на аналіз кримінальної відповідальності за напад на співробітників правоохоронних органів у різних юрисдикціях. Порівняльний підхід використовується для вивчення відповідних положень кримінального законодавства декількох країн, зокрема США, Англії, Німеччини, Канади та України. Методологія поєднує статистичні методи та порівняльні дослідження для забезпечення детального й всебічного аналізу. Найважливіші висновки свідчать про те, що деякі країни захищають як державних службовців, так і співробітників правоохоронних органів від незаконних нападів, тоді як інші мають спеціальний режим відповідальності лише за напад або погрози поліцейським. Зокрема стверджується, що український підхід є більш збалансованим порівняно з іншими юрисдикціями. Загалом документ дає повне та детальне уявлення про кримінальну відповідальність за напад на співробітників правоохоронних органів у різних юрисдикціях.

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**Key words:** criminal offense, criminal liability, authority of government bodies, assault, compensation for damage caused by criminal offense, victim.

## Introduction

Law enforcement officials are the embodiment of the state itself; they perform crucial functions for the wellbeing of the whole population at different levels of governance. Law enforcement agents are usually at the frontline of any criminal justice system. They are first to respond to a crime and are charged with the duty of keeping the public safe. Police officers and other law enforcement agents are usually the first ones to respond to acts of violence, such as murders, burglaries and other illegal acts – thus, it is reasonable to expect that their life and personal safety should be protected by the state as a priority.

This general rule applies virtually to any world jurisdiction with an established law enforcement system. Thus, assaults against peace officers (policemen) are taken extremely seriously by the state and society at large. The likely rationale here is that attacking a public servant is an attack against the state itself. Some might perceive attacking a police officer as an attack on the safety of any given community.

Since officials have to routinely make important policy decisions as part of their duty, it means some of their decisions can become very unpopular. It also means that they could find themselves a primary target for threats of violence and even physical attacks. In response, various lawmakers around the world have acknowledged this unique type of danger and passed a separate statute to address assault on a public official.

Under the current law, sentences reflect the seriousness of crime in order to have a deterrent effect in the future. Thus, jail terms are often imposed for these crimes.

A public official becomes offense victim in those cases, when there is an encroachment on his life, health, property, other legally protected rights, the authority of the agency he represents, in connection with the fact that he can issue orders to citizens. Also, public official receives the so-called “common victim” status without any special protection (California Legislature, 2022a).

However, there is a strict distinction between a public official and a police officer and, to a less

**Ключові слова:** злочин, напад, погроза, потерпілий, службова особа, поліцейський, насильство, Кримінальний кодекс.

degree, distinction between a police officer and a peace officer. The national crime statistics demonstrate that there are far less assaults and threats against public officials (both appointed and elected), when compared to law enforcement agents. Thus, our research will primarily focus on the legal status of a law enforcement agent (police officer) as a victim of certain violent crimes in the following sections of the paper.

*The goal* of this research is to reveal and compare criminal law provisions in several jurisdictions concerning protection of law enforcement officials from criminal assaults and threats.

## Methodology

The following research methods have been used extensively while working on the paper.

The *comparative law method*, which has become the key one for the purposes of this paper, enabled the authors to research criminal liability regime for assaulting a public official (law enforcement agent) in various jurisdictions and also to compare various liability models. Overall, the comparative method has been used actively in criminal law scholarship recently (Minchenko et al., 2021; Vozniuk et al., 2021).

The *system-structural method* has been used to describe applicable criminal statutes and their structural interactions within national legal systems. Rulings by various national courts also helped to elaborate on the system of national criminal law with regard to protecting police officials from criminal assaults.

The *observation method* allowed to identify legislative trends throughout the world with regard to decriminalization of the offenses discussed and strengthening of the freedom of speech guarantees. The observation method has also revealed several blank areas in assault-related statutory framework required for future academic research.

Finally, the *statistical method* of collecting and summarizing legally relevant information was also used in the text of the paper with the purpose of illustrating how laws against criminal assaults

are formulated and practically operate in various jurisdictions.

Overall, the chosen combination of research methods has proved to be effective since it has allowed to conduct an in-depth comparative analysis, while also allowing the formulation of the author's conclusive remarks and observations.

### Literature Review

Scholars from various legal systems have actively researched issues of criminal liability for attacking or threatening a public official. Such approach makes good sense, since public authorities sometimes make unpopular decisions and thus officials can become victims of illegal actions at any moment.

Several authors of this research paper have also published on the issue (Tkachenko, 2022a; Borovyk, 2022b). In particular, in one of the papers it has been argued that the legal status of victims in the Criminal Code of Ukraine is significantly different from their status in the Criminal Procedure Code of Ukraine. However, the provisions of the Criminal Code and the Criminal Procedure Code of Ukraine should be unified in matters of the category of persons who are recognized as victims, as well as the infliction of harm on them or the threat of such harm. Also, as the authors stated, in both Codes, only natural and legal persons should be recognized as crime victims (Tkachenko, 2022b).

In his PhD in law degree thesis “Understanding Assaults against Police Officers: A Study of Conflict Escalation in Police Encounters with the Public” L. Johnson focuses “on the impact of the police role and the informal rules of the ‘occupational police culture’ on the risk of conflict escalation”. The study explores the importance of cultural talk as a way of demonstrating the police role. It also reveals the means and tools in which officers approach future similar incidents. (Johnson, 2019). Thus, this study provides some empirical foundations for criminal liability framework with respect to protecting law enforcement officials from assaults.

American commentators J. Shjarback & E. Maguire have conducted a detailed study of violence against American police by examining nonfatal assaults against officers. Using monthly data from the Federal Bureau of Investigation’s (FBI) Law Enforcement Officers Killed and Assaulted (LEOKA) reports for the years 2010 to 2016, the authors have used extensive data and in-depth analysis to compare trends in the number of injurious and noninjurious assaults on police officers in the United States (Shjarback & Maguire 2021).

Overall, examining relevant academic sources, we have reached a conclusion that in most cases legal commentators concentrate their analyses either on assaults committed by or against national police officers, while paying far less research attention to the protection of elected and appointed public officials by means of criminal law.

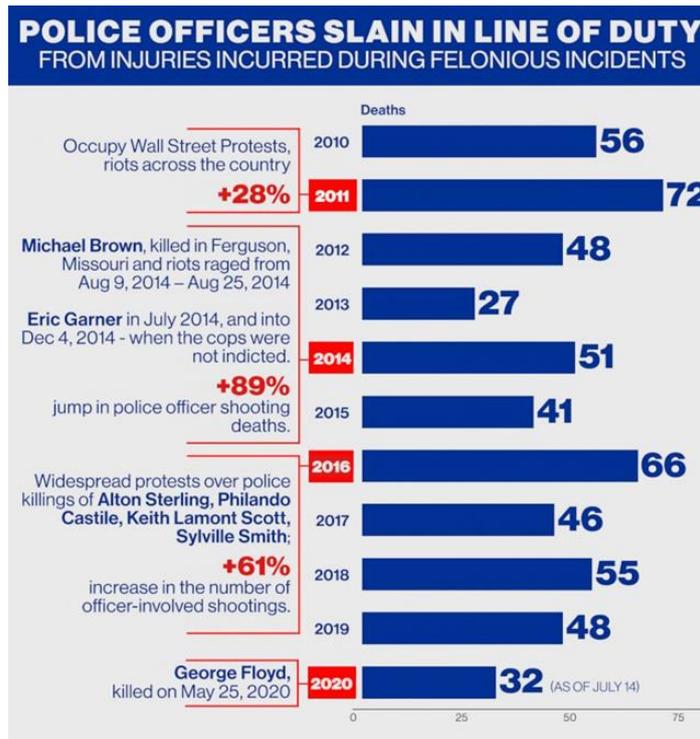
As a side remark, literature review is an important integrated element of any legal research (Vozniuk et al., 2022). Without understanding previous groundwork, foundations of any given issue it is impossible to elaborate on novel conclusions, recommendations and effective changes to current legislation.

### Results and Discussion

In the following paragraphs of the paper, we will explore criminal law provisions in several world jurisdictions, which detail the criminal law status of public officials in general, and law enforcement agents in particular, as potential victims of assaults. We will start with the U.S. federal and state criminal law provisions.

#### A. United States of America

Assaulting a public official and, even more so, a police officer is, unfortunately, hardly an extraordinary act of violence in the United States. Unfortunately. With aggressive clashes between various demonstrators and police forces, including the recent George Floyd mass protests, there have been assaults and killings on both sides. Here are some statistical numbers.



**Figure 1.** Police officers killed in the line of duty in the United States of America. Source: Hutchinson, B. (2020). Police officers killed surge 28% this year and some point to civil unrest and those looking to exploit it. ABC News. URL: <https://abcnews.go.com/US/police-officers-killed-surge-28-year-point-civil/story?id=71773405>.

Being a federal state, the United States recognize assault and other illegal actions against public officials as a crime both on a federal and state levels. We will start with the federal legislative approach.

Under 18 U.S. Code § 1114 “Protection of officers and employees of the United States”, whoever kills or attempts to kill any officer or employee of the United States or of any agency in any branch of the United States Government (including any member of the uniformed services) while such officer or employee is engaged in or on account of the performance of official duties, or any person assisting such an officer or employee in the performance of such duties or on account of that assistance, shall be punished accordingly.

Secondly, 18 U.S. Code § 111 “Assaulting, resisting, or impeding certain officers or employees” provides that whoever (1) forcibly assaults, resists, opposes, impedes, intimidates, or interferes with any person designated in section 1114 of this title while engaged in or on account of the performance of official duties; or (2) forcibly assaults or intimidates any person who formerly served as a person designated in section 1114 on account of the performance of official duties during such person’s term of

service, shall, where the acts in violation of this section constitute only simple assault, be fined under this title or imprisoned not more than one year, or both, and where such acts involve physical contact with the victim of that assault or the intent to commit another felony, be fined under this title or imprisoned not more than 8 years, or both. This statute also provides for enhanced penalty in in the commission of any acts described in subsection (a), *uses a deadly or dangerous weapon* or inflicts bodily injury – such person shall be fined under this title or imprisoned not more than 20 years, or both.

Thirdly, 18 U.S. Code § 112 “Protection of foreign officials, official guests, and internationally protected persons” provides for special liability regime for attacking an official representative of a foreign state: whoever assaults, strikes, wounds, imprisons, or offers violence to a foreign official, official guest, or internationally protected person or makes any other violent attack upon the person or liberty of such person, or, if likely to endanger his person or liberty, makes a violent attack upon his official premises, private accommodation, or means of transport or attempts to commit any of the foregoing shall be fined under this title or imprisoned not more than three years, or both. Whoever during the commission of any such act

uses a deadly or dangerous weapon, or inflicts bodily injury, shall be fined under this title or imprisoned not more than ten years, or both (Legal Information Institute. (n.d.)).

As one might see from these three criminal statutes, the United States take attacking both national and foreign public officials seriously – the severe sanctions speak for themselves. Moreover, there is extraterritorial jurisdiction over the conduct prohibited by such provisions. The conclusion: protecting public officials in the U.S. is a positive practice while it is yet another indicator of the long-established overcriminalization policy, which heavily relies on severe sanctions even for minor offenses.

Now to the state level, with California Penal Code serving as a role model for the purposes of state level research.

The crime of “assault on a public official” is described under California Penal Code 217.1(a), which imposes more serious penalties compared to a simple assault as a routine misdemeanor. California Penal Code 217.1(a) provides a definition for assault on a public official: “Anyone who commits any assault upon the President or Vice President of the United States, the Governor of any state, judge, commissioner, judicial officer, or any state holding elective office, mayor, city council member, county supervisor, sheriff, district attorney, prosecutor, public defender, chief of police, peace officer, any juror in any local, state, or federal court, or their immediate family in retaliation for, or to prevent the performance of their duties” (Legislative Counsel of California, 2019). As one might see from this definition, the term “public official” is quite broad and includes official representatives at three levels of government – federal, state and local. The term “public official” includes a wide range of people who are employed by the federal or state government, but the most common victims in California include: current or former prosecutors or public defenders; judges, commissioners, or other bench officers; city council members; county supervisors; sheriff or peace officers (State and Federal Criminal Defense, 2022). It should be noted that a public official under PC 217.1(a) includes not only California government officials, but also officials of the United States government – thus an “all-inclusive” approach with respect to victims.

Under the New York Penal Code, Sections 120.08 through 120.18 provide for various types and threats (menaces) against public officials,

judges and police officers in particular. For example, Section 120.08 of the Code provides: a person is guilty of assault on a peace officer, police officer, fireman or emergency medical services professional when, with intent to prevent a peace officer, police officer, a fireman, including a fireman acting as a paramedic or emergency medical technician administering first aid in the course of performance of duty as such fireman, or an emergency medical service paramedic or emergency medical service technician, from performing a lawful duty, he causes serious physical injury to such peace officer, police officer, fireman, paramedic or technician.

Furthermore, Section 120.09 states that a person is guilty of assault on a judge when, with intent to cause serious physical injury and prevent a judge from performing official judicial duties, he or she causes serious physical injury to such judge (New York Penal Law, 1965).

As one might see, there are similar approaches to protecting public officials both in the states of California and New York, with some minor differences.

## B. Canada

As in most other world jurisdictions, in Canada assaulting a Peace Officer has always been a serious crime – such offense can result in a prison sentence of up to 14 years. Assaulting a peace officer often involves using violence, sometimes in aggravated forms, against a public servant or public official. Thus, the prosecution might seek a jail sentence if convicted.

The charge of assaulting a peace officer, provided by s.270 (1) of the Criminal Code, is not limited to police officers only. The law also protects “prison guards, sheriffs, duty sheriffs, sheriff’s officers, fish and game officers, bylaw officers, justices of the peace, court bailiffs, members of the Canadian Forces, customs agents, pilots in command of aircraft and public officials such as mayors, wardens and reeves” (Government of Canada, n/d).

Current Canadian criminal law recognizes three major types of assaulting a peace officer.

1. Assault in the line of duty. If a person assaults a peace officer in the performance of their job or if one assaults a person who is helping that officer to carry out their duties, such person could face criminal charges. The Crown must prove the offender was

aware of the fact that the victim was not only a peace officer but that they were acting in an official capacity.

2. Resisting arrest. Criminal charges can also be brought if a person uses force to resist arrest or if such person assaults a person in an attempt to prevent a peace officer from making a lawful arrest or detaining someone else. An arrest can be made by both a peace officer or a private citizen.
3. Preventing the execution of duty. This criminal law provision protects those who enforce a civil law matter, such as an eviction. If a person assaults someone engaged in the lawful execution of a seizure of lands or goods, he or she could face assaulting a peace officer charges. A person can also be criminally charged if an assault occurs when trying to reclaim something that has been seized (Criminal Code Help, 2022)

Unlike in the United States, Canadian legislator does not specifically provide for criminal liability for assaulting public officials, other than peace officers. Thus, public officials do not constitute a distinct group of victims of assault, intimidation or threats. Instead, criminal assault in Canada is divided into four different categories: simple assault, assault with a weapon, assault causing bodily harm and aggravated assault (SainiLaw (n/d)). Sexual assault, including its aggravated form, constitutes a distinctive type of assault.

Once again, with reference to the above discussed material, we would like to stress on the importance of comparative method in modern legal research (Movchan et al., 2022).

### C. England

Assaulting a constable in the execution of his duty is a statutory offence of aggravated assault in England and Wales, Scotland, Northern Ireland, and Hong Kong (a former British colony).

Since Great Britain does not have codified criminal legislation, like in continental European jurisdictions, assault crimes have to be located in various specific Acts passed by the Parliament.

As in many other world jurisdictions, in England the statutes on assaulting a police officer (constable) have evolved from the general assault

provisions. Also, we could not identify a separate provision on assaulting or menacing a public official, which means that they are probably protected at the same level as ordinary citizens.

**Common assault occurs** when a person inflicts violence on someone else or makes them think they are going to be attacked. It does not have to involve physical violence. For example, threatening words or a raised fist is enough for the crime to have been committed provided the victim thinks that they are about to be attacked. Contemptuous spitting at someone is yet another example.

**Actual bodily harm (ABH)** means the assault has caused some hurt or injury to the victim. "Physical injury does not need to be serious or permanent but must be more than "trifling" or "transient", which means it must at least cause minor injuries or pain or discomfort. Psychological harm can also be covered by this offence, but this must be more than just fear or anxiety".

**Grievous bodily harm (GBH)** means the assault has caused serious physical harm. It does not have to be permanent or dangerous. For example, "a broken bone would amount to GBH – in some cases a broken bone might lead to permanent disability but, in others, it might heal without leaving any long-term effects. GBH can also include psychiatric injury or someone passing on an infection, for example through sexual activity" (Sentencing Council (n/d)).

The offense becomes much more serious, if the victim of the assault is an emergency worker. This includes police, prison officers, custody officers, fire service personnel, search and rescue services and paramedics (The Crown Prosecution Service, 2018). One might see legal similarities here between the Canadian and British approaches.

Some relevant statistics behind this Act. In 2019, there has been a lower proportion of males in the affected group of Assault of an Emergency Worker offenders relative to the comparison group of all Common Assault and Battery offenders. Of the 11,091 offenders proceeded against for Assault of an Emergency Worker, 70.7% were male and 29.3% female, compared to 84.8% male and 15.2% female in the comparison group of Common Assault and Battery offenders.

**Table 1.**  
*Assaults on Emergency Workers in England in 2019.*

		<b>Assault of an Emergency Worker</b>	<b>Common Assault and Battery</b>
Total	Number	11,091	44,733
Males	Number	7,839	37,946
Males	%	70,7	84,8
Females	Number	3,252	6,787
Females	%	29,3	15,2

**Source:** HM Government. (2021).

In particular, in England and Wales Section 89(1) of the Police Act 1996 provides: “any person who assaults a constable in the execution of his duty, or a person assisting a constable in the execution of his duty, shall be guilty of an offence and liable on summary conviction to imprisonment for a term not exceeding six months or to a fine not exceeding level 5 on the standard scale, or to both” (The National Archives, 1996).

The constable must be acting “in the execution of his duty” for the purposes of charging this offense. If one exceeds the limits of his duty (e.g., acts unlawfully in assaulting the Defendant), the elements of this offence are absent. As a practical matter, the Defendant does not actually have to be aware that the person, who has been assaulted, was a constable.

#### **D. Germany**

The following example demonstrates that assaulting a public official (police officer in particular) is a serious offense in Germany.

According to the news reports, in February of 2022 “German police arrested two suspects for the murder of two officers shot dead during a traffic stop after launching a massive manhunt. The two officers, a man and a woman, were shot dead during a routine traffic check on a road near Kusel, a town not far from Kaiserslautern in the German state of Rhineland-Palatinate”. Upon arrival, reinforcements were unable to help the officers. The shooters had been apprehended some time later. As the interior minister Nancy Faeser stated with reference to that shocking crime of violence, “regardless of the motive, this crime is reminiscent of an execution and shows that the police risk their lives for our security every day” (Euronews, 2022).

One more example. The German government had previously condemned illegal incidents on 2023 New Year’s Eve in which emergency response teams were attacked, mostly with previously

banned fireworks. “In Berlin, the fire service counted at least 38 such attacks and said 15 officers were injured. Police said they had 18 injured officers” (Voanews, 2022).

Two sections of the German Penal Code deal directly with assault offenses against law enforcement agents and officials of similar duties.

Section 114 “Assault of enforcement officers” of the German Penal Code further provides that “whoever assaults a public official or a soldier in the Federal Armed Forces charged with enforcing laws, statutory instruments, judgments, judicial decisions or directions in the performance of an official act incurs a penalty of imprisonment for a term of between three months and five years”.

Furthermore, Section 115 “Resistance to or assault of persons equal to enforcement officers” provides as follows: “1) Sections 113 and 114 apply accordingly to protect persons who are vested with the powers and duties of police officers or who are investigators of the public prosecution service without being public officials; 2) Sections 113 and 114 apply accordingly to protect persons who are called upon to assist in the performance of the official act; 3) Section 113 also applies to persons who, in the case of accidents, a common danger or an emergency, use force or the threat of force to hinder the members of the fire brigade, the civil protection service, one of the rescue services or emergency medical services or a hospital emergency department who are rendering assistance. Persons who assault those who are rendering assistance in such situations incur a penalty pursuant to section 114” (German Federal Ministry of Justice and Consumer Protection, 1998).

As a brief conclusive remark, the German legislator, in its typical precise manner, has construed statutory assault offenses against

public officials and military officials while performing their duties.

### E. Poland

Yet another example from law enforcement practice. In April of 2021, a Polish court acquitted a prominent senior citizen activist of charges that she insulted and assaulted a police officer who tried to detain her during an anti-government protest. The activist, Katarzyna Augustynek, “has participated in many street demonstrations against the right-wing government, and has had several run-ins with police. According to Polish media reports, the judge at the District Court in Warsaw said evidence indicated that Augustynek had been protesting peacefully. *Gazeta Wyborcza* daily said on its website the judge stressed that the constitution guarantees the right to protest. The judge also argued that there was no justification for the way police had treated Augustynek, who resisted detention during the protest” (AP News, 2021).

Similar to American legal approach and in contrast to European models, Polish legislator recognizes a crime of assaulting the President or foreign public official.

In particular, Article 135 provides: “1) whoever commits an active assault on the President of the Republic of Poland shall be subject to the penalty of the deprivation of liberty for a term of between 3 months and 5 years (§ 1); 2) whoever insults the President of the Republic of Poland in public shall be subject to the penalty of the deprivation of liberty for up to 3 years (§ 2)”.

According to article 136: “§1. Whoever on the territory of the Republic of Poland, commits an active assault upon the head of a foreign State, upon the head of the diplomatic representation of a foreign State, who is accredited to the Republic of Poland, or upon a person enjoying similar protection by virtue of law, treaty or generally accepted international custom, shall be subject to the penalty of deprivation of liberty for a term of between 3 months and 5 years; § 2. Whoever on the territory of the Republic of Poland, commits an active assault upon a person belonging to the diplomatic personnel of a mission of a foreign country to Poland, or on a consular official of a foreign country in connection with the performance of their official duties” (Parliament of Poland, 1997).

Thus, apart from special protection regime for police officers, the Criminal Code of Poland

directly recognizes the need to protect those in public office from assaults and insults.

As Polish commentators Julia Kuczur and Tomasz Kuczur write, crimes related to the attack on a public official in the 1997 Criminal Act were included in Chapter XXIX of the Penal Code. They add: “Criminalization of acts directed against the state is dictated by the legislator’s intention that the penal law of 1997 is to safeguard the values presented in the Constitution, such as the rule of law, and also aims to protect the constitutional bodies of the Republic of Poland. The key element for their separation is the conjunctive fulfilment of two conditions, that is, they must at the same time be constitutional bodies, i.e. at least those mentioned in the constitution and government bodies of the Republic of Poland” (Kuczur & Kuczur, 2019).

### F. Ukraine

Finally, we will turn to the status of public official as a victim of criminal assault and physical threat in Ukraine. We will start with the official legislative provisions.

Article 346 of the 2001 Criminal Code of Ukraine “Threats or violence against a statesman or a public figure” provides (official text of the law): “threats of murder, impairment of health, destruction or impairment of property, kidnapping or confinement made in respect of the President of Ukraine, the Chairman of the Verkhovna Rada (Parliament) of Ukraine, a National Deputy (Member of Parliament) of Ukraine, the Prime Minister of Ukraine, a member of Cabinet of Ministers of Ukraine, the Chairman or a judge of the Constitutional Court of Ukraine or the Supreme Court of Ukraine or High Specialized Courts of Ukraine, the Procurator General of Ukraine, the Human Rights Commissioner of the Verkhovna Rada of Ukraine, the Head of the Accounting Chamber, the Chairman of the National Bank of Ukraine, or a leader of a political party, committed in relation to their government or public activity, - shall be punishable by imprisonment for a term up to five years”.

As construed by the national legislator, the crime provided for in Art. 346, consists in: threat (part 1); beatings; committing other violent acts (Part 2); causing bodily harm – nonessential, moderate (part 2) or severe (part 3).

Liability under part 1 of Art. 346 comes for the threat of murder, causing harm to health,

destruction or damage to property, kidnapping or deprivation of liberty the public officials specified in it. The threat of harm to health occurs when the victim is threatened with beatings, causing bodily harm of any degree of severity, including through the use of narcotics, psychotropic, poisonous, potent substances, electric current, etc. (Melnyk & Havronyuk, 2018).

Furthermore, Art. 347 of the Criminal Code of Ukraine provides liability for “willful destruction or impairment of the property owned by a law enforcement officer or his/her close relatives, in connection with his/her official duties”. Such illegal actions “shall be punishable by a fine of 50 to 100 tax-free minimum incomes, or arrest for a term up to six months, or imprisonment for a term up to five years”.

Art. 348 further provides, in its part, “that murder or attempted murder of a law enforcement officer or his/her close relatives in connection with his/her official duties, and also of a member of a community formation for the protection of public order, or a military servant in connection with their activities related to the protection of public order, – shall be punishable by imprisonment for a term of nine to fifteen years, or life imprisonment”.

Art. 349 provides that “taking or holding of a representative of public authorities, or a law enforcement officer, or their close relatives as hostages for the purpose of making a public or any other institution, business or organization, or any official to take or refrain from any actions as a condition for release of the hostage, - shall be punishable by imprisonment for a term of eight to fifteen years”.

Finally, Art. 350 forbids “threats of murder, grave bodily injury or destruction or impairment of property by a generally dangerous method, made in respect of an official or his close relatives or a citizen who performs his/her public duty, where these acts are committed to preclude the activities of the official or the citizen who performs his/her public duty, or to change their nature in the interests of the persons who makes such threats” (Verkhovna Rada of Ukraine, 2010).

Comparing these legislative provisions with those of other countries reveals that Ukrainian criminal regulatory mode has a balanced approach to protecting both public officials and law enforcement agents from assault offenses. Both life, liberty, health and property of a public

officials are protected by the Criminal Code provisions.

The country’s Supreme Court has made several precedential rulings addressing the elements of such crimes. First, the Court has ruled, that fact that a person is unaware of the performance of specific official duties by a police officer does not exclude the possible presence of the elements of crime under Art. 348 of the Criminal Code of Ukraine in the actions of the accused person (Court of Appeal of Ukraine. (n.d.)). Second, attack on the life of a law enforcement officer (Art. 348 of the Criminal Code) is considered completed from the moment of the attempt on the victim’s life, regardless of the occurrence of any consequences. When distinguishing between encroachment on the life of a law enforcement officer (Art. 348 of the Criminal Code) and a threat to kill a law enforcement officer in connection with the performance of official duties (Art. 345 of the Criminal Code), it should be taken into account that the threat is not characterized by actions, which are directly aimed at the intentional killing of the victim. A shot from a rifle in the direction of a law enforcement officer indicates that the accused has begun to implement the intention to kill police officers, and his actions are subject to criminal liability under Art. 348 of the Criminal Code (Post de Advokat, 2022).

The national criminal law doctrine also analyses various legal aspects of assault-related offenses at length. In particular, V. Chaika has extensively explored a wide spectrum of such issues while working on his PhD thesis (Chaika, 2012). It is worth adding that Ukrainian legal scholars have been actively studying foreign experience to criminal law regulation in their treatises (Movchan et al., 2021).

Other Ukrainian commentators mention that assault offenses against public officials are aimed at harming social relations that provide authority and normal operation of the entire system of law enforcement agencies. As a justification for the specified provisions, they note that when an offense is committed against an individual law enforcement officer or his close relative, the guilty person does not encroach on an individual person (employee), but rather on the existing system of government bodies called to ensure law and order in the state (Gladkov, 2016). This makes good sense since law enforcement function does not belong to any single official but rather to the state (or government) itself.

## Conclusions

Our study has been based on multijurisdictional approach to understanding the elements of assault and threat crimes against public officials in general and law enforcement agents in particular in several world jurisdictions. The active employment of comparative research method has allowed to analyze relevant criminal law provisions of several jurisdictions (United States, England, Germany, Canada, Poland, Ukraine etc.). In particular, it has been demonstrated that while some states protect both public officials (like Presidents and other top officials) and law enforcement agents from illegal attacks, other countries provide special liability regime for assaulting or threatening police officers only. It is argued that legislative approaches similar to the Ukrainian one are more balanced, when compared to other jurisdictions.

Reference to several cases of assaults and threats against public officials allowed to demonstrate that this is not a theoretical but rather a practically significant issue. Also, further research in the discussed direction is both theoretically and practically significant – it will allow to elaborate on new improved models of criminal liability for offenses against public officials and law enforcement agents, in particular.

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## Transformation of the state regulatory policy in the agricultural sector of Ukraine

### Трансформація державної регуляторної політики в аграрному секторі України

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#### Abstract

Ukraine is taking appropriate measures to achieve an important national priority - to become a rightful and active participant in global economic processes. This is evidenced by the adoption of the Association Agreement between Ukraine and the European Union, where cooperation in the agricultural sector is given an important place, in particular in economic development and increasing the number of livestock. The article aims to identify current problems and justify priority measures for the effective development of integration processes in the agricultural sector of Ukraine with the European Union. The methods used to write this article are analysis, synthesis, generalization, explanation, and qualification of data. The analytical method was applied to objectively assess the socioeconomic processes in the agricultural sector of Ukraine, and comparative analysis was used to study the institutional environment in the European Union and Ukraine. The state regulatory policy in the agricultural sector will ensure: proper regulation of the use of pesticides and other chemicals; development and implementation of financial support mechanisms for agricultural enterprises; development of an electronic system of monitoring and control of product quality. The importance of

#### Анотація

Україна вживає відповідних заходів для досягнення важливого національного пріоритету – стати повноправним і активним учасником світових економічних процесів. Про це свідчить ухвалення Угоди про асоціацію між Україною та Європейським Союзом, де важливе місце відводиться співпраці в аграрному секторі, зокрема в економічному розвитку та збільшенні поголів'я худоби. Стаття має на меті визначити актуальні проблеми та обґрунтувати першочергові заходи для ефективного розвитку інтеграційних процесів аграрного сектору України з Європейським Союзом. Методи, використані для написання цієї статті: аналіз, синтез, узагальнення, пояснення та кваліфікація даних. Аналітичний метод застосовано для об'єктивної оцінки соціально-економічних процесів в аграрному секторі України, а порівняльний аналіз – для вивчення інституційного середовища в Європейському Союзі та Україні. Державна регуляторна політика в аграрному секторі забезпечить: належне регулювання використання пестицидів та інших хімічних речовин; розроблення та впровадження механізмів фінансової підтримки сільськогосподарських підприємств; розробка електронної системи моніторингу та контролю

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improving the system of state management of the agricultural sector of Ukraine has been proven.

**Keywords:** integration, European Association, state agricultural policy, institutions, rural areas, free trade area, agricultural sector, exports, imports.

## Introduction

The adaptation of Ukraine to the terms of cooperation with the European Union in the agricultural sector set out in the Agreement is considered a complex and long-term process. However, it will be an important factor for further modernization of the domestic agricultural sector under the generally accepted principles of global development, strengthening of integration processes, and based on common interests and values.

An important prerequisite for Ukraine's effective participation in global integration processes is that the subjects of transnational profitable relations achieve a collective understanding of government programs, under the laws that support them, an appropriate level of knowledge and compliance with the rules set by the World Trade Organization (WTO), other transnational unions and relevant intergovernmental agreements. It should be borne in mind that transnational agreements ratified by the Verkhovna Rada of Ukraine under the Constitution of Ukraine have a higher legal force than domestic legislation. However, the applicability of their provisions depends on the proper legal strength and compliance with Ukrainian legislation.

Organizing the fulfillment of transnational obligations is an important and responsible function of state institutions. It requires not only applied knowledge but also well-grounded statements and the search for effective mechanisms in the matters of state regulation of foreign profitable activities, which should primarily ensure the protection of the public interest. Currently, the state is in the process of fulfilling numerous transnational obligations, including the measures set out in the Association Agreement. Failure to fulfill, withhold or ineptly fulfill these obligations will hinder the development of beneficial cooperation with the EU countries and reduce the effectiveness of Ukraine's participation in other global integration processes.

Following the Association Agreement, along with general measures of cooperation in the field

якості продукції. Доведено важливість удосконалення системи державного управління аграрним сектором України.

**Ключові слова:** інтеграція, Європейська асоціація, державна аграрна політика, установи, сільські райони, зона вільної торгівлі, аграрний сектор, експорт, імпорт

of profitability, the directions of gradual approximation of Ukrainian agricultural legislation and bringing the institutional structure and system of state control over food quality in line with the supervisory and executive policies and practices of the European Union are defined. First of all, this concerns the legal support for the regulation of supervisory mechanisms, taking into account almost 60 applicable regulations, directives, opinions, recommendations, and announcements of the European Union.

Among the points of the Association Agreement, some issues require attention. These include finalizing the adjustment of agricultural product quality standards, and regulating the cultivation of organic products and genetically modified crops. Equally important is compliance with the rules of seed trade, preservation of geographical values, origin, and styles of agricultural and food products, as well as the development of biodiversity, etc. Despite the rather long term of the Association Agreement, there are still many problems in these areas that need to be freshly worked out and agreed upon. The measures envisaged by the Agreement are insufficient in the areas of fisheries and forestry. They require improvement of the system of functioning for the development of pasture areas and strengthening of environmental protection. This includes climate change, the development of the agricultural wisdom and education system, the establishment of mechanisms for the protection of intellectual property, and other issues related to the agricultural sector.

Thus, in the agricultural sector of Ukraine, the fulfillment of the indicators set out in the Association Agreement and other transnational agreements in terms of ensuring effective integration into global European and world profit processes can currently be assessed as insufficient and not entirely balanced. This is evidenced by the slow pace of expansion of long-term cooperative relations between the subjects of agricultural demand. This applies to the introduction of a unified agrarian system and the lack of foreign investment in the domestic agricultural sector of Ukraine. Moreover, there is

a backwardness and low efficiency of raw material equipment for exporting Ukrainian agricultural products, the spread of social and environmental problems in pastoral areas that do not meet European trends, etc. (Food and Agriculture Organization of the United Nations, 2021).

Thus, this situation indicates an incorrect association in terms of approximation to European analogs of institutional support for foreign profitable vectors of agro-industrial tension and the development of the state's pastoral areas. This shows the need to strengthen transnational cooperation and adapt the behavior of relevant transnational and public institutions. Regulation of these and other trends requires intensification of the scientific search for reasonable proposals to improve the state policy in the association of foreign profitable activities. It is necessary to strengthen scientific support for the implementation of the Association Agreement between Ukraine and the European Union in agricultural matters.

The article aims to identify current problems and substantiate priority measures for the effective development of integration processes in the agricultural sector of Ukraine with the European Union.

### Literature Review

The problems of European integration of Ukraine related to the agrarian sector of the economy are considered in the scientific works of many well-known scientists and economists, namely O. M. Borodina (studied the agrarian sector of Ukraine in the context of European integration); V. I. Vlasov (studied the key areas of adaptation

of the development of the agricultural sector of Ukraine in the context of the Common Agricultural Policy of the EU); I. G. Kirylenko (2000-2002 Minister of Agrarian Policy of Ukraine; in 2000 he was a member of the Government Committee on Reforming the Agrarian Sector and Environmental Issues); P. T. Sabluk (studied the problems of regional integration as a component of economic globalization). These and other authors pay considerable attention to both theoretical aspects and scientific support for the organization of practical implementation of relevant measures on European integration.

### Results

The agricultural sector is one of the key sectors of Ukraine's economy, contributing a significant portion of the country's GDP and playing a significant role in ensuring food security. However, it is also one of the most heavily regulated sectors in Ukraine, which creates a challenge for businesses operating in the sector. The problems of the agrarian sphere were aggravated by the war with Russia. This was clearly manifested in the export sector. The export of grain from Ukraine through the ports was practically blocked. However, they were partially unblocked with the help of the world community and UN representatives. The created grain corridor from Ukraine operates with fairly constant interruptions. It was not possible to fully reorient the logistics of grain export from Ukraine through other chains. Therefore, the total losses from the export of grain and other goods amounted to 61.2 billion dollars, and the losses on agricultural products alone amounted to 18 billion dollars. Table 1 presents changes in grain exports in Ukraine.

**Table 1.**  
*Changes in the export of cereals during 2022-2023 in Ukraine*

Agriculture products	Total as of 03/27/2022	Total as of 27.03.2023	Deviation	Change %
Cereals and legumes, total, thousand tons	44849	36922	-7927	-17,67
Including, thousand tons				
Wheat, thousand tons	18399	12623	-5776	-31,39
Barley, thousand tons	5641	2267	-3374	-59,81
Rye, thousand tons	161,9	16,9	-145	-89,56
Corn, thousand tons	20348	21714	1366	6,71
Wheat flour, thousand tons	66,9	108,9	42	62,78
Other flour, thousand tons	1,5	4,3	2,8	186,67
Flour together, thousand tons	68,4	113,2	44,8	65,50
In terms of grain, thousand tons	91,2	150,9	59,7	65,46
Export together (grain + flour), thousand tons	44940	37073	-7867	-17,51

Source: calculated by the authors based on (Ministry of Agrarian Policy and Food of Ukraine, 2023).

Thus, Ukraine's total grain export opportunities were lost by 17.5%. The largest export losses are observed for rye and barley (89.5% and 59.8%) (Figure 1). Wheat grain losses amounted to 31.4%. With such positions of losses, Ukrainian agrarians began to increase the export of corn and

flour. Flour from crops other than wheat was exported the most, and the tact increase was 187%. The export of wheat flour increased by 62.8% and the least - corn - only 6.7%. So, despite serious difficulties in export, Ukrainian farmers are gradually increasing export losses.

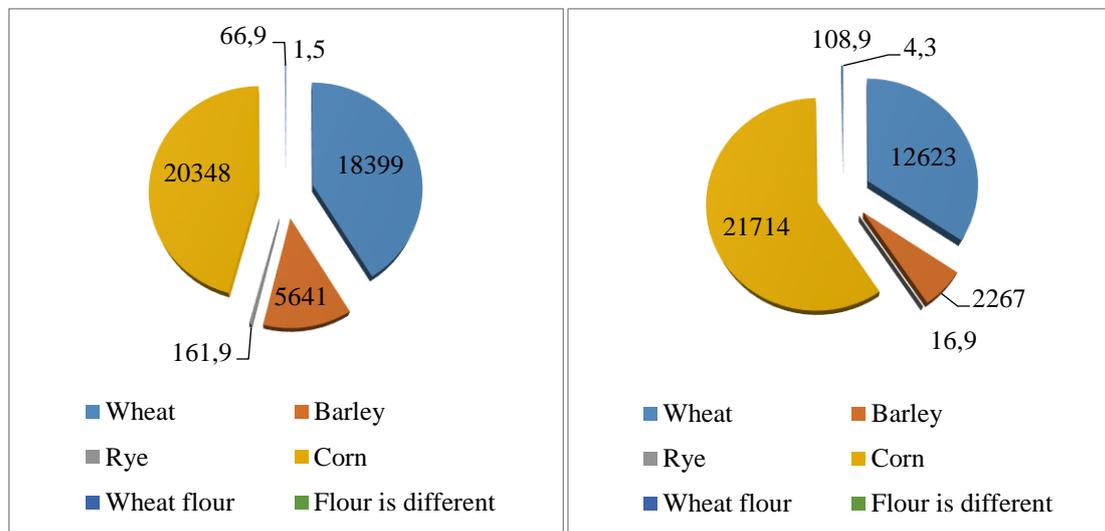


Figure 1. Ratio of grain exports in Ukraine in 2022 and 2023

It is necessary to modernize the state regulatory policy to improve the situation and increase the efficiency of the agricultural sector in Ukraine. The state regulatory policy in the agricultural sector aims to ensure the efficient functioning of the industry and support the development of agriculture in the country. However, many of the existing regulations do not meet the current realities and market requirements, which leads to negative consequences for the industry and society as a whole. For instance, the lack of appropriate regulation may lead to the widespread use of pesticides and other chemicals that may be harmful to health, while insufficiently effective regulation may lead to unequal terms of trade and unfair competition (Ministry of Agrarian Policy and Food of Ukraine, 2021).

One of the main directions of transformation of the state regulatory policy in the agricultural sector is to introduce the principles of "simplicity and clarity" in the creation and implementation of regulations. This means that the acts should be written in a clear and accessible manner for all stakeholders, including farms and other enterprises operating in the agricultural sector. It also implies reducing the number of administrative procedures and documents to be submitted, which simplifies the life of the business and reduces the costs of their implementation.

Another important aspect is the establishment of clear and stable rules for the industry, which will allow agricultural enterprises to plan their actions for the future more easily. Appropriate mechanisms can be used to achieve this goal. These could include legislative changes, defining and securing property rights to land and other resources, developing infrastructure, and supporting access to markets.

Other possible directions for modernizing the state regulatory policy in the agricultural sector include the following:

- Ensure appropriate regulation of the use of pesticides and other chemicals that can harm human health and the environment;
- Development and implementation of financial support mechanisms for small and medium-sized agricultural enterprises;
- Introduction of an electronic system for monitoring and controlling product quality, which will ensure food safety and increase consumer confidence in Ukrainian products.

To summarize, the transformation of the state regulatory policy in the agricultural sector of Ukraine has great potential to improve the efficiency and competitiveness of the industry. This can help attract more investment, increase production, and ensure sustainable economic development of the regions.

To succeed in this endeavor, it is important to establish a dialog between government agencies and business representatives, including agricultural enterprises, to ensure that the real needs and capabilities of the industry are taken into account. It is also important to ensure effective monitoring and evaluation of the results of the implementation of new regulatory mechanisms. This will allow for the timely identification of possible problems and adjustments to maximize the effectiveness of state regulatory policy.

Thus, modernization of the state regulatory policy in the agricultural sector of Ukraine's economy can become an essential tool to ensure sustainable development of the industry and increase its competitiveness in the international market.

Furthermore, modernization of the regulatory policy could help to reduce corruption and unfair competition in the agricultural sector. If government agencies effectively monitor and regulate the sector, this could help prevent illegal practices in the market.

One of the important directions for modernizing the regulatory policy in the agricultural sector is to simplify and unify the procedures for state registration, control, and permitting of various types of activities. This can help reduce bureaucratic pressure on enterprises and simplify the process of doing business in the sector (Lagodiienko et al., 2022).

It is also essential to ensure proper protection of property rights to land and other resources used in the agricultural sector. Modern technologies, such as geospatial analysis systems, can be used for this purpose. They allow for accurate accounting of land plots and their more efficient management.

To summarize, the transformation of the state regulatory policy in the agricultural sector of Ukraine can become an important tool for ensuring sustainable development of the industry, increasing its competitiveness, and attracting new investments. To succeed in this endeavor, it is important to ensure a dialogue between government agencies and business representatives, effective monitoring and evaluation of the results of the implementation of new regulatory mechanisms, as well as simplification and unification of procedures for state registration and issuance of permits for activities in the agricultural sector, ensuring global food security. It is also important to

consider international standards and norms governing the agricultural sector and work on their implementation in national legislation (Lagodiienko et al., 2022).

Meanwhile, it should be noted that the transformation of regulatory policy in the agricultural sector is not an overnight process and requires a comprehensive approach and a long-term strategy. Furthermore, the success of modernization depends on many factors, including political will, mechanism of state regulation of the investment activity in agriculture, the efficiency of the state apparatus, the level of business development, and others (Vovchak et al., 2022).

Thus, the transformation of the state regulatory policy in the agricultural sector of Ukraine is an important component of reforming the industry and ensuring its sustainable development. This can be achieved through effective cooperation between government agencies and business representatives, the use of modern technologies, and the adoption of international standards and norms.

It is also crucial to consider the peculiarities of the agricultural sector and its regulatory environment, which differ from other sectors of the economy. For example, the agricultural sector has a complex chain structure involving various actors, from seeds and fertilizers to products and their processing. Therefore, regulatory policy should reflect all stages of this chain and the interrelationships between them.

Besides, it is important to ensure transparency and openness in the decision-making process in the agricultural sector. This can be achieved by holding open consultations with stakeholders, publishing draft regulations following the requirements of the law, and ensuring access to information on decisions and actions of regulatory authorities.

Besides the regulatory policy, it is also important to ensure infrastructure development and access to financial resources for agricultural enterprises. For instance, attracting investment and introducing modern technologies can increase production efficiency and ensure competitiveness in the international market (Bondarenko, 2021).

To summarize, the transformation of the state regulatory policy in the agricultural sector of Ukraine is a complex but necessary task that requires a comprehensive approach and a long-

term strategy. This can be achieved through the effective cooperation of various public and private entities, the introduction of the latest technologies and quality standards, the improvement of education, and support for small and medium-sized businesses.

One of the most important components of an effective regulatory policy is a system for monitoring and evaluating its impact on the industry. This allows for the timely detection of negative consequences of decisions and necessary adjustments to the policy. Such a system should be as objective and independent as possible, as well as open to stakeholders.

An important component of an effective regulatory policy is also to improve the skills and competence of professionals involved in the development and implementation of regulatory policy in the agricultural sector. For this purpose, specialized courses, training, and master classes on regulatory policy in the agricultural sector can be organized.

Thus, the transformation of the state regulatory policy in the agricultural sector of Ukraine is an important task to ensure the stable and sustainable development of the industry. To do this, it is necessary to take into account the specifics of the agricultural sector and its regulatory environment and implement a comprehensive approach and a long-term strategy. It is crucial to ensure transparency and openness in the decision-making process, improve the skills and competence of specialists, and improve the system of monitoring and evaluation of the impact of regulatory policy on the industry. This will help create a favorable environment for the development of Ukraine's agricultural sector, maintain its competitiveness in the international market, and ensure a sufficient level of income for farmers and other industry actors.

One of the key challenges facing the agricultural sector is ensuring the country's food security. Ukraine has the potential to become a leader in food production. However, to reach this goal, it is necessary to implement effective regulatory policies that will increase production and improve product quality.

One of the main components of food security is ensuring the availability and quality of food for all citizens of the country. To achieve this goal, it is necessary to control the quality and safety of food at all stages of its production, processing,

and marketing, from sowing in the fields to selling on store shelves.

To improve product quality and ensure consumer safety, it is necessary to introduce the latest technologies and quality standards and to systematically monitor and evaluate the impact of regulatory policy on food quality.

To ensure the availability of food for all citizens of the country, it is necessary to take into account the diversity of regions and their specifics. For this purpose, special programs and measures can be developed to support small and medium-sized businesses in rural areas, which will promote the development of local production and provide the local population with fresh and high-quality food.

One of the important directions of regulatory policy to ensure food security is to support innovation and the development of new technologies in agriculture.

This will increase production and improve its quality and safety, reduce production costs, and increase the economic efficiency of the sector. However, it is necessary to ensure an adequate level of intellectual property rights protection for innovative enterprises and to control the use of new technologies in the agricultural sector.

Another important area of regulatory policy to ensure food security is the development of a crop and other risk insurance systems related to increased production and improved product quality. This will reduce the risk of financial losses for producers and ensure the stable development of the industry.

Furthermore, to ensure food security, it is necessary to comply with international standards and ensure that the products produced meet them. This is important from the perspective of food exports and ensuring the competitiveness of producers in the international market.

Thus, the modernization of the state regulatory policy in the agricultural sector of Ukraine is a key element in ensuring the country's food security. Ensuring the quality and safety of products, supporting innovations and the latest technologies, developing the insurance system, and meeting international standards are the main areas that will help ensure the effective development of the agricultural sector and strengthen the country's food security. Besides, attention should be paid to ensuring the availability and even distribution of products

throughout Ukraine, including in rural areas and remote regions.

To achieve these goals, it is necessary to actively engage with all participants in the agricultural market, including farmers, agricultural cooperatives, and other industry players. Only through cooperation and partnership can the country's food security be achieved.

Thus, food security is a complex and multidimensional process that requires an integrated approach and active participation of all market participants. Transformation of the state regulatory policy in the agricultural sector of Ukraine's economy is an important step in ensuring the country's food security and strengthening its economy as a whole.

### Discussion

The development of the agricultural sector is a key factor in Ukraine's economy, as it is one of the largest exporters of agricultural products in the world. However, to achieve high productivity and product quality, it is necessary to modernize the regulatory policy and create favorable conditions for the development of the sector. In addition, transformation of the state regulatory policy can help to increase the country's food security and ensure the availability of products for all the population. However, it is necessary to take into account the possible increase in administrative costs and bureaucracy in the transformation of regulatory policy, which may negatively affect the activities of agricultural enterprises and farms. In addition, changes in regulatory policy may cause resistance and distrust among some industry participants, which may lead to a decrease in their activity and investment in the development of the agricultural sector. Therefore, it is important to develop and implement regulatory policy with due regard for the interests of all stakeholders and to ensure openness and transparency in the process of developing and implementing changes.

The introduction of modern production and processing technologies can help to improve quality and reduce waste, which will also contribute to food security. However, insufficient attention to consumer health and safety may lead to the adoption of regulatory policies that do not meet modern standards and requirements. Moreover, strict rules and standards may increase production costs and reduce the competitiveness of products on the international market. Modernization of regulatory policies can help to improve food quality and safety by setting strict

standards for product safety and quality along with controlling the production and supply of products to the market, but it is necessary to be attentive to the needs and requirements of the market and consumers to ensure an efficient and competitive industry.

The state can provide support for agricultural enterprises and farms by providing them with access to finance and investment to implement new technologies and standards. In addition, the state can conduct information campaigns to educate and raise awareness among rural residents about the new regulations and standards, and help implement new food quality control and monitoring systems. For this purpose, special programs and initiatives can be created to provide support and advice to agricultural enterprises and farms. However, there is a risk that the state may not have sufficient financial resources to provide support to agricultural enterprises and farms during the transformation of regulatory policy. In this case, there may be a misuse of funds or corruption in their distribution. Besides that, some agricultural enterprises and farms may not be sufficiently motivated to implement new standards and regulations that may increase their costs and reduce their profitability.

The failure to implement a modernized state regulatory policy could lead to a decline in food quality and safety, which would negatively affect public health and relations with international partners. Furthermore, it may reduce Ukraine's competitiveness in the international market and reduce the export potential of the agricultural sector, which could harm the country's economy and increase its dependence on food imports. However, the introduction of new standards and regulations may create additional bureaucratic obstacles for agricultural enterprises and farms, which may increase their costs and reduce profitability. Besides, the consequences of not implementing the modernized state regulatory policy may be less noticeable and will not affect the overall economic situation of the country.

The introduction of a modernized state regulatory policy in the agricultural sector of Ukraine's economy can have a significant positive impact on the quality and safety of food, the competitiveness of Ukrainian agricultural enterprises and farms, and the country's economy as a whole. To achieve these goals, it is necessary to support the government in implementing new standards and regulations, as well as providing support and advice to agricultural enterprises and farms.

However, it is also necessary to take into account possible risks and challenges associated with the introduction of new standards and regulations, such as bureaucratic obstacles and a lack of motivation for agricultural enterprises and farms to implement new standards and regulations. Nevertheless, considering all aspects, the introduction of a modernized state regulatory policy in the agricultural sector is a necessary step to ensure the sustainable development of Ukraine's economy and improve food quality and safety (Ministry of Economic Development, Trade and Agriculture of Ukraine, 2021).

## Conclusions

To conclude, the modernization of the state regulatory policy in the agricultural sector is an important step for the sustainable development of Ukraine's economy and the improvement of food quality and safety. The introduction of new standards and regulations will reduce the risks of a slowdown in the agricultural sector, increase the competitiveness of Ukrainian products on the global market, and ensure an increase in production while reducing production costs.

However, successful transformation of regulatory policy requires significant efforts on the part of the state and business entities. These may include awareness-raising and education measures, infrastructure improvements, and increased financial resources to make the necessary investments.

Additionally, international experience and standards should be incorporated to ensure the harmonization of domestic regulations and increase the competitiveness of Ukrainian products on the global market.

Overall, the transformation of the state regulatory policy in the agricultural sector has great potential for developing Ukraine's economy and ensuring food safety and quality.

To successfully implement this transformation, it is necessary to involve the general public, including representatives of the agricultural sector, scientists, and experts. This approach will help to create an effective system of monitoring and control over the implementation of new standards and regulations.

It is worth noting that ensuring the sustainable development of the agricultural sector and increasing its competitiveness is an important task not only for Ukraine but also for many other countries around the world. The application of

the latest methods and technologies in production, as well as improving the quality and safety of food, are key elements in the fight against global challenges such as climate change and resource scarcity.

Thus, it can be argued that modernization of the state regulatory policy in the agricultural sector is an important step towards sustainable economic development and improvement of the quality of life.

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## Factors influencing the selection of university studies in early childhood education

### Factores que influyen en la elección de estudios universitarios de educación infantil

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#### Abstract

This research analyzes the factors that may influence the moment in which students opt for university studies oriented to Early Childhood Education teaching. An exploratory and descriptive cross-sectional research was designed, under a non-experimental quantitative approach and with a non-probabilistic convenience sampling. A total of 157 university students from public and private institutions participated in the study, which was conducted using a questionnaire with 4 dimensions and 31 items. The vast majority agreed that the Early Childhood Education stage is important for children's development, this being the most important factor when opting for university studies leading to teaching at this stage. It is concluded that intrinsic motivations are the most influential on students, although the family and close context can also be determinant.

**Keywords:** Early childhood education, educational qualifications, preschool teacher education, preservice teacher education, university students.

#### Introduction

The selection of a particular degree to pursue university studies includes a set of elements that are interrelated and that are part of personal identity. This selection is a process in which the interested party reviews his or her professional future and links it to his or her own interests and aptitudes. In the case of teaching degrees, this selection is influenced by the value attached to teaching and by personal and vocational inclinations (Stellmacher et al., 2020). Deciding to pursue studies in the Bachelor's Degree in Preschool Education (hereinafter IE), is an

#### Resumen

Esta investigación analiza los factores que pueden influir en el momento en el que los estudiantes opten por estudios universitarios orientados a la docencia en Educación Infantil. Se diseñó una investigación transversal exploratoria y descriptiva, bajo un enfoque cuantitativo no experimental y con un muestreo no probabilístico por conveniencia. Un total de 157 estudiantes universitarios de instituciones públicas y privadas participaron en el estudio, que se realizó mediante un cuestionario de 4 dimensiones y 31 ítems. La gran mayoría coincidió en que la etapa de Educación Infantil es importante para el desarrollo de los niños, siendo éste el factor más destacado a la hora de optar por estudios universitarios conducentes a la docencia en esta etapa. Se concluye que las motivaciones intrínsecas son las que más influyen en los estudiantes, aunque el contexto familiar y cercano también puede ser determinante.

**Palabras clave:** cualificación académica, educación infantil, estudiante universitario, formación de docentes de preescolar, formación preparatoria de docentes.

opportunity to review the factors that may influence when making this decision, since the identification of these may allow a reading on what the student really identifies as determining elements or the motivations surrounding professionalization for that educational stage and hence the importance of recognizing the reasons for selecting the IE degree. This can be identified at the beginning of the studies (García-Poyato et al., 2018) since, at that moment, students can express with an important level of concreteness, those aspects that have allowed them to

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recognize their interest in these studies and, in addition, it implies an adaptation with a view to a professional training (Restrepo, Sánchez, & Castañeda, 2020). Students who enter the IE career already have references with respect to the teaching work and have certain ideas about what will be developed in their studies, in addition to linking them to their interest in becoming professionals (Stenberg & Maaranen, 2020).

The university context and one's own experience in studies makes the interrelation between students serve for the maturation of what professionalization as an IE teacher implies (Pérez Ferra et al., 2018; Cachón et al., 2022), this means that the socialization of life experience, of different realities and points of view, will help the student to outline his or her identity as a future professional, while recognizing what has influenced when making the decision to prepare professionally. The influence of individual and contextual factors are interrelated (Guerra Bilbao & Lobato Fraile, 2015) so that the selection of a particular degree does not respond exclusively to an individual decision, but rather, elements that correspond, for example, to the social vision of the profession, contact with the future work context, personal motivation, particular tastes, altruistic motives, interculturality in undergraduate studies in IE, among others, intervene (Rubio Gómez et al., 2019).

This research presents the findings found regarding those factors that have been at the moment that students decide to do university studies in IE. First, a review of the scientific literature is made in the theoretical framework and then the quantitative methodology designed to develop this study is presented. Subsequently, the results and the discussion based on the research findings are presented in order to reach the final balance as a conclusion. Now, why is it important to know the factors mentioned above? Basically, for two reasons: the first has to do with the need to go deeper into the aspects that can condition or influence people at such an important moment as the selection of university studies, in this case in IE. In this sense, being able to analyze and discover what surrounds that moment and what can have an impact can show that not always what is publicly commented is what really happens and the most suitable way to discover what happens is precisely to investigate the phenomenon. The second reason revolves around the ability to design studies that can guarantee personalized attention to students, but this cannot be achieved if there is no in-depth knowledge of the scope and influence of the

context and what society expects from teachers who will be part of the development of a country while continuing with the interest of considering the student as the center of attention of the University. Finally, with this research we hope to offer elements for discussion that can strengthen future studies that consolidate the generation of new knowledge about the pedagogical process at the University.

### Theoretical Framework

Navarro & Soler (2014) refer to three dimensions that are combined in students when they opt for IE studies: psychological-introspective dimension (interest in what they choose to study and the need for personal self-realization), instrumental dimension (satisfaction of economic needs, social recognition of the teaching profession, job opportunities, among others) and professional dimension (interrelation of the previous dimensions from the professional practice). The identification of these dimensions will serve to outline from a deep critical and reflective process (Gairín Sallán et al., 2019) the revision of the curricular approach of the degrees to visualize to what extent what students expect from their studies, according to Rojas, Estévez & Macías (2018), students can often lean in favor of extrinsic motivations and these can become demotivating.

University studies have a curricular design that theoretically allows interdisciplinarity, but students in the first courses may come to feel that they do not visualize the importance of the degree design, the usefulness of the subjects and the relationship between them (Pérez Ferra et al., 2018). This allows moving towards what these same authors point out and that is that the curricula have a dichotomous relationship between humanistic training and efficiency training, while the interest in teacher training in IE is observed from the need to respond to changes of political, economic and social order (Acosta-Marroquín, 2020), in addition to the fact that the dynamics of adaptation and change is typical of higher education (Cubero-Ibáñez & Ponce-González, 2020; Herrera, Mohamed & Cepero, 2016).

In the studies consulted, there is great agreement that vocational motives are those that exert the greatest influence when students choose the IE Degree (Briones, Palomera, & Gómez-Linares, 2021; Cobano-Delgado Palma, Llorent Bedmar, & Navarro Granados, 2020; Falcón Linares, & Arraiz Pérez, 2020; Guerra Bilbao & Lobato Fraile, 2015; García-Poyato et al., 2018;

Luzón-Trujillo & Montes-Moreno, 2018; Rodríguez, González & Gutiérrez, 2019; Gallardo & Vázquez, 2016). In addition, the reasons for choosing university studies are undergoing a certain evolution that tends more towards labor (Navarro & Soler, 2014) since they would be looking for an increase at an economic and social level (Canal & Rodríguez, 2020), also recognizing that the close context (family and friends) influences the permanence in the studies and their selection (Coppari et al., 2019). Other researches expose various aspects that also have an influence, such as: contact with the school environment and family experiences (Guerra Bilbao & Lobato Fraile, 2015), liking for children (Briones et al., 2021; Rodríguez, González, & Gutiérrez, 2019), impossibility of accessing other studies, family ties with teachers, or a notable professional interest (García-Poyato et al., 2018), the relationship between gender and choice of IE studies (González Alba et al., 2021),

or the fact that IE studies are short and easy (Luzón-Trujillo & Montes-Moreno, 2018).

Rutten & Badiali (2020) identify three categories that should be used to recognize the elements that most influence students' decision to pursue a degree in IE. These three categories are: 1) intrinsic motivation, 2) extrinsic motivation and 3) altruistic motivation. However, for these researchers, the results obtained allow them to affirm that intrinsic and altruistic motivations are the most predominant, among which are: making a difference in each student, training future citizens of the world, the desire to serve students through education in values and interest in teaching in IE based on personal experiences. These researchers point out that the least influential factor was the presence of a teacher in the family. At a global level, the general trend among the authors reviewed can be observed (see Table 1):

**Table 1**  
*Identified factors influencing the selection of IE studies (various authors)*

Author	Factors identified
Navarro & Soler (2014)	Interest in university studies and personal self-realization. Satisfaction of economic needs, social recognition, job opportunities.
Rojas et al., (2018) Coppari et al., (2019)	Extrinsic motivations Personal tastes of students. Close context (family and friends)
Briones et al. (2021); Rodríguez et al., (2019) Cobano-Delgado Palma et al., (2020) Falcón Linares & Arraiz Pérez (2020) Guerra Bilbao & Lobato Fraile (2015) García-Poyato et al., (2018) Luzón-Trujillo & Montes-Moreno (2018) Gallardo & Vázquez (2016)	Vocational reasons
Navarro & Soler (2014); Canal & Rodríguez (2020)	Tendency towards work, increase of economic and social level.
Guerra Bilbao & Lobato Fraile (2015)	Contact with the school environment and family experiences
Briones, et al., (2021); Rodríguez et al., (2019)	Taste for children Impossibility of access to other studies, family ties with teachers, or a notable professional interest.
González Alba et al., (2021)	
Luzón-Trujillo & Montes-Moreno (2018)	IE studies are short and easy

*Note:* table prepared by the author (2023).

Table 1 shows a general tendency identified in the scientific literature reviewed, which is that intrinsic factors are the origin of the motivations that students have when choosing university studies in IE. A significant number of authors agree that vocational reasons are the most determinant, however, there is an inclination to accept that together with the vocational aspect there is also the influence of some factors that

have to do more with the immediate context and to achieve a better job and professional improvement, however, the vocational aspect is the element with the greatest presence among the research reviewed. The current situation of the IE teacher, his or her social recognition or possible job improvements, besides being recognized by the students, has not prevented them from opting for these university studies. Thus, the critical and

reflective process can have a transforming effect on thinking and teaching practice (Agirre, López-de-Arana, & Martínez, 2022). This idea allows relating the reference that IE students have regarding what surrounds the future teaching practice, with those initial expectations linked to a possible personal fulfillment and high satisfaction from the vocational (Cantón Mayo & Téllez Martínez, 2017).

It is clear, then, that the humanization of teaching and the corresponding university studies must be considered when training teachers at the university level. That is, the human aspect that translates into the vocational aspect is not in vain present in a substantive way in the scientific literature and this responds to a fundamental reason: scientists have ratified that when students decide to be professionally trained as IE teachers, they seem to have as a motivational starting point, the teaching vocation and categorically, they identify this teaching vocation almost automatically by liking children. However, this statement is not far from recognizing the great challenges facing IE teaching in the present and in the future. Even though we may think that we do not have the best conditions or the best social recognition, the students, according to the research analyzed, present elements that allow us to infer that their interest in teaching (teaching vocation) overcomes any unfavorable situation.

## Methodology

The general objective of this research was to explore those factors that may influence university students at the time of deciding to pursue a degree in IE. To this end, three specific objectives were established: 1) to recognize the reasons for deciding to study a degree in IE, 2) to identify the support and possible external influence received regarding the decision to study a degree in IE, 3) to know the opinion of students regarding the vision they have of IE as an educational stage.

Design: according to Hernández Sampieri, Fernández & Baptista (2010), this is an exploratory and descriptive cross-sectional research, since the aim was to explore a set of variables at a given time, as well as their possible impact on the population under study. Since there was no manipulation of variables, it is a non-experimental quantitative approach, since the phenomenon is observed without generating a deliberately provoked situation.

Population: university students in the first year of the Bachelor's Degree in IE in two universities located in Madrid, one of which is public and the other private.

Instrument: a specific instrument was designed for this study, which consisted of a questionnaire organized from 4 dimensions: 1) information about the participant (8 items), 2) Motives for pursuing the IE Degree (9 items), 3) Support in the decision to pursue the IE Degree (6 items), 4) External influence regarding the decision to pursue the IE Degree (6 items), 5) External vision regarding IE (10 items). Dimensions 2, 4 and 5 were adjusted to the Lickert scale with 5 points (1= totally disagree and 5= totally agree), while dimension 3 was adjusted to the same scale, but modifying the classification: 1= never, 5= always. (Rositas Martínez, 2014).

Procedure: The sampling was non-probabilistic by convenience. The students were informed of the object of the study whose responses were completely anonymous. The instrument was provided by means of a QR code to facilitate the response process from the students' own mobile devices.

Data analysis: SPSS Statistics (version 26, IBM International Business Machines Corporation) was used.

## Results and Discussion

Of the 157 students who participated in the study, 86% belonged to a private university (n=135) and 14% to a public university (n=22). Of the 157 students who participated in the study, 54.8% (n=86) studied in the blended mode, 22.9% (n=36) in person and 22.3% (n=35) online, with a mean age of 28 years (SD=7.74), although the highest frequency was 22 years and 4.43 years of teaching experience, although the highest frequency was one year of experience. Of the overall total, 41.4% have a job as a classroom teacher, 29.9% are not employed at the time of participating in the study, while 19.1% have a job in the school context, but not as a teacher. Finally, 9.6% have a job, but not in the school context. On the other hand, 73.2% of the participating students do not have any family members involved in teaching (SD=0.444). In addition, 98.1% have not abandoned other studies to enroll in the IE degree, while 88.5% have previous studies, most of them (86%) being studies related to teaching (see Table 2).

**Table 2.**  
*Sociometric variables of the sample*

Variable	N	Minimum	Maximum	M	SD
Age	157	18	48	27,92	7,774
Experience	157	1	27	4,43	5,608
Modality	157	1	3	1,99	,675
Previous_studies	157	0	1	,89	,320
Teaching_studies	157	1		1,25	,650
Abandonment_of_other_studies	157	0	1	,02	,137
Teachers_in_the_family	157	0	1	,27	,444
Employment_status	157	1		2,62	1,293
University_type	157	0	1	,14	,348

Note: table prepared by the author (2023).

The data obtained indicate that 82% of the students consulted are in complete agreement that one of the most relevant reasons for choosing the IE degree is that this stage is important for the development of people (Etapa\_imp) (M=4.76, SD=.582). On the other hand, the liking for children also obtained an outstanding result of 73.9% (Yes\_children) (M=4.61, SD= ,806). However, the teaching vocation aimed at this educational stage is placed as the third reason for the selection of this university degree with 67.5% (Voc\_inf) (M=4.45, SD= ,936) while, for this same indicator, 10.2% partially agree that this is one of the reasons for pursuing the aforementioned studies. The intention to become a professional in the IE stage, although it obtained a percentage that tends to be considered as a reason for pursuing the degree, a certain dispersion observed does not allow us to categorically place it as a majority option among the students.

The results show that 53.5% of the students consulted agree that they did not choose these studies because they were easy to pass (Fac\_aprob) (M=1.80, SD= 1.02) although 17.2% partially agree that they chose these studies because they were easy to pass. In addition, 86.6% totally disagree in considering that they have opted for these university studies because they could not choose another degree (No\_other) (M=1.26) (SD= ,777), however, 45.9% totally disagree with respect to choosing these studies because it is a career with easy employment opportunities (Fac\_labor) (M=1.92, SD= 1.00) and with which they can obtain more opportunities (More\_opor) (M=3.40, SD= 1.57). Regarding the possibility of obtaining sufficient income with this degree, the concentration of the data indicates that the students are inclined to disagree (Revenues) (M= 2.51, SD= 1.249) (see Table 3).

**Table 3.**  
*Item, label, Mean and SD of dimension 2: Motives for doing the IE Degree*

Item	Label	M	SD
Taste for children	Yes_children	4,61	,806
Job opportunities	Fac_labor	1,92	1,00
Ease in studies	Fac_aprob	1,80	1,02
Inability to opt for other studies	No_other	1,26	,777
Job opportunities	More_opor	3,40	1,57
Professionalization in EI	Prof_stage	4,30	1,028
Vocation for the EI stage	Voc_inf	4,45	,936
EI as an important stage in children's development	Etapa_imp	4,76	,582
Sufficient income as an EI teacher	Revenues	2,51	1,249

Note: table prepared by the author (2023).

With respect to the support in the decision to study the Bachelor's Degree in IE, 73.9% of the student's state that they have always received family support (Family\_Support) (M=4.46, SD=

1.077) while the support received from friends and close non-family members stands at 68.2% (Support\_friends) (M=4.47, SD= ,958). However, the support received from teachers

with whom the students consulted have contact, corresponds to 58.0% (Teacher\_Support) with an  $M=4.18$  and  $SD=1.174$ , that is, between almost always and always. Of the three percentages, the lowest corresponds to the support received from teachers. Of the three percentages, the lowest percentage corresponds to the support received from teachers. 72.0% of the students say that they are doing their university studies because they feel they have a teaching vocation, regardless of

the support received (Del\_decidid) ( $M=4.59$ ,  $SD=,751$ ), and 75.8% say that they have never considered abandoning their studies, 8% stated that they had never considered abandoning their studies because they had not received support (Aband\_noapoy) ( $M=1.46$ ,  $SD=,951$ ) and 50.3% could recommend the IE degree based on their own experience (Recommendation) ( $M=4.23$ ,  $SD=,940$ ) (see Table 4).

**Table 4.**

*Item, label, Mean and SD of dimension 3: Support in the decision to pursue a Bachelor's degree in IE*

Item	Label	M	SD
Family support	Family_Support	4,46	1,077
Support from close non-family members	Support_friends	4,47	,958
Teacher support	Teacher_Support	4,18	1,174
Vocation regardless of the support received	Del_decidid	4,59	,751
Abandonment due to lack of support	Aband_noapoy	1,46	,951
Recommend to others to study the EI Degree	Recommendation	4,23	,940

*Note:* table prepared by the author (2023).

When observing the data corresponding to the external influence regarding the decision to pursue studies in the Bachelor's Degree in IE (see Table 5), 40.8% of the students totally agree that they have received positive influence from one or more members of the family at the moment of deciding to pursue the university studies referred to above (Family) ( $M=3,74$ ,  $SD=1.326$ ), however, 39.5% recognize having received positive influence from friends in the close context (Friends) ( $M=3.74$ ,  $SD=1.321$ ) and 36.3% recognize having received positive influence from one or several teachers they have

known throughout their lives (Teachers) ( $M=3.38$ ,  $SD=1.257$ ). On the other hand, 26.1% disagreed with the statement that they had not received any influence at the time of deciding to pursue these university studies (No\_influence) ( $M=2.64$ ,  $SD=1.345$ ), at the same time they totally agree in feeling at ease with their studies (55.4%) (Agusto\_est) ( $M=4.37$ ,  $SD=,819$ ) and regardless of the opinion of others, they remain firm with the objective of continuing with their university studies (Follow\_est) ( $M=4.76$ ,  $SD=,545$ ).

**Table 5.**

*Item, label, mean and SD of dimension 4: External influence on the decision to pursue a degree in IE.*

Item	Label	M	SD
Influence of one or more family members	Family	3,74	1,326
Influence of one or more close persons	Friends	3,74	1,321
Influence of known teachers on school life	Teachers	3,68	1,257
No influence from any person	No_influence	2,64	1,345
Pleasure in studying EI	Agusto_est	4,37	,819
Continuity in studies, regardless of the opinion of others.	Follow_est	4,76	,545

*Note:* table prepared by the author (2023).

32.5% of students think that society does not recognize IE as a fundamental part of the school stage (Company\_recon) ( $M=2.45$ ,  $SD= 1.112$ ), while 33.1% disagree in recognizing that families know of the importance of IE for the education of their children (Impor\_families) ( $M=2.71$ ,  $SD=1.133$ ) (see Table 6). Regarding the social

recognition of teachers at this educational stage, the results are mostly inclined to disagree with the social recognition that these teachers receive (39.5%) (Reconoc\_soc) ( $M= 2.21$ ,  $SD= 1.119$ ). Quite similar proportions are observed when evaluating the recognition of these teachers as university professionals, i.e., the majority

consider that they are not recognized as such (Teachers\_PU) (35.7%) (M=2.49, SD= 1.119) and that the work benefits are not in accordance with the relevance they have (35%) (Benefic\_lab) (M=2.22, SD= 1.048). However, for these students, the vision held regarding IE seems not to be a determining factor when making the decision to pursue university studies (31.2%) (Vision\_ref) (M=2.54, SD= 1.233).

Together with the above, 59.3% partially agree or disagree in recognizing that IE teachers

influence the way in which society recognizes them (Teachers\_influy) (M=2.88, SD= 1.134), while 64.3% agree or totally agree that families influence the social vision held regarding the early childhood stage (Visión\_soc) (M=2.88, SD= 1.134). On the other hand, 66.8% agree or totally agree that the Public Administrations influence the social vision of IE (AA\_PP) (M=3.89, SD= 1.060) while 63.7% partially agree or agree that the students of the Degree in IE influence this vision (Students\_vision) (M=3.63, SD=1.070).

**Table 6.**

*Item, label, Mean and SD of dimension 4: External vision regarding IE*

Item	Label	M	SD
Social recognition of IE	Company_recon	2,45	1,112
Importance of IE by families	Impor_families	2,71	1,133
IE teachers and their social recognition	Reconoc_soc	2,21	1,056
IE teachers and their recognition as university professionals	Teachers_PU	2,49	1,119
Working conditions and benefits of teaching in EI	Benefic_lab	2,22	1,048
The vision of IE and its reference in the selection of the Degree	Vision_ref	2,54	1,233
EI teachers influence the way they are recognized	Teachers_influy	2,88	1,134
Families' view of IE	Vision_soc	3,90	,886
Public administrations and vision on IE	AA_PP	3,89	1,060
Undergraduate students in IE and the social vision of the stage.	Students_vision	3,63	1,070

*Note:* table prepared by the author (2023).

With a large majority, the participating students coincide in considering the IE stage, which is important for children's development, as the most decisive reason when deciding to pursue studies in the IE degree (82.8%) (Cobano-Delgado, et al., (2020); Falcón Linares, & Arraiz Pérez, (2020) who state that vocational reasons are the most influential with respect to the selection of the IE degree. That is to say, in the results observed in this research, the teaching vocation directed to the infant stage, is located in 67.5% being the third influential factor. While the importance of the infant stage in the development of children is found to be the most important element in terms of its importance for studying the degree, as stated by Rutten & Badiali (2020).

Among the studies reviewed, there is coincidence at the time of identifying those factors that influence the decision to study teaching in IE, but the difference lies only in pointing out the main factors. Thus, among the results obtained in this research are, in addition to the main factor exposed in the previous paragraph, the liking for children (73.9%), the teaching vocation for the stage (67.5%) and the interest in becoming a

professional in the EI stage (59.2%) coinciding with the research of Briones et al. (2021); Cantón Mayo & Téllez Martínez, 2017; Rodríguez et al., (2019) and Rutten & Badiali (2020). Considering that IE studies are easily approved as one of the reasons for studying, as well as the vision of earning income or increasing the economic level once this degree is obtained, are not factors that can be understood as determinants, although the studies of Luzón-Trujillo & Montes-Moreno (2018) suggest that these factors may become so. 73.9% of the students affirm that they have always received support from their close family at the moment of deciding to study teaching in IE. This result obtained coincides with the studies of Coppari et al. (2019). The same occurs with the support of friends (68.2%), however, it may be a point of revision that the support received from teachers with whom one has contact is not a mostly notable aspect among the students (58.0%). This result does not contrast completely with the studies of García-Poyato et al. (2018) since these researchers show that family contact with teachers can become a determining factor, but it is not categorically concluded that the teachers with whom one has

contact can exert influence when making the decision to study the IE degree.

A notably significant majority of students do not consider abandoning their studies in the event of not receiving support. That is to say, 86.6% have never or almost never considered this possibility, with which, these students show a deep conviction before the proposed objective once they have started their studies therefore it is in agreement with what Navarro & Soler (2014) express since it corresponds with the presence of the psychological-introspective dimension, and with Rutten & Badiali (2020) when intrinsic motivation is observed as predominant since 72% of these students claim to have a teaching vocation regardless of the support received, and 79% would always or almost always recommend others to study the IE degree.

The results indicate that 36.3% totally agree that they have received influence from teachers with whom they have had contact; however, the distribution of the data reviewed indicates that it is not an influence that is categorically present. It is true that there is a tendency to assume that it has been received, but, for example, it is a significantly different proportion with respect to the influence received from families (61.8%). This data contrasts with Rutten & Badiali (2020) who state that the least influential factor is the family, when in this case, it stands out that the family is the most influential factor, at least in the students consulted. Similarly, the influence of friends represents 39.5% which coincides with what was investigated by Coppari, et al., (2019). This means that the family context, the close social environment and the professors with whom one has contact do influence the students' decision to study a degree in IE, but with different levels of influence, i.e., not all influence in the same way nor are they equally decisive. The students consulted are of the opinion that, regardless of the support received, they remain firm in their interest in continuing their studies. This is evident in the results: 80.3% totally agree, which corresponds with the studies of Navarro & Soler (2014), and 84.1% feel comfortable with their studies, coinciding with Stenberg & Maaranen (2020). In general, no significantly different differences were observed among students with respect to ascription by type of university.

Among the extrinsic factors, students accept that public administrations have influence regarding the vision held about IE as a stage which, coincides with Rojas et al. (2018) and Guerra Bilbao & Lobato Fraile (2015) in affirming that

contextual factors also come into play when opting for university studies. Students show disagreement when expressing themselves about the social recognition of the teaching profession, and as university professionals. Navarro & Soler (2014) point out the need to increase social recognition and economic level as elements that can influence. This contrasts with the results obtained since, despite the fact that students totally disagree with the current working conditions and benefits of IE teachers, as shown by Cantón Mayo & Téllez Martínez, (2017), they continue to opt for these university studies, without forgetting that to some extent, according to the students, the same stage teachers and families influence the vision and social recognition of IE.

### Conclusions

For the students consulted in this research, intrinsic motivations are the most influential at the time of deciding to study for a degree in early childhood education. Thus, considering IE as an important stage in the development of children is presented as the main factor, without failing to recognize that a liking for children, the teaching vocation for this educational stage or the interest in becoming a professional in this stage, are also factors that exert their influence. In short, as mentioned at the beginning, it is a matter of intrinsic motivations.

However, the context can also become an influential factor and it will depend on each personal reality, as this context can determine to a certain extent the decision to take the step to study IE at a professional level. This does not prevent students from recognizing the reality of IE and what accompanies it, for example, the social recognition of this stage, the working conditions and opportunities, among other elements. Thus, regardless of those situations that can be improved, the students have expressed their personal conviction about any circumstance, therefore, and considering that these are students who are beginning their studies, a strong individual component has been present, which is manifested in this case by the inclination to prepare themselves at the university level to teach in IE.

Now, for these students, the family has been the main point of support at the time of undertaking their studies, as well as an important degree of influence from friends and the close non-family context, however, the teachers who have been present throughout their school life, as well as those with whom they are currently in contact,

have not been the main motivational reference for initiating their studies in IE. This idea, together with the possible general improvements for IE and the social vision that may be held about this stage, has not prevented students from remaining firm in their objective, therefore, it can be said that the teaching vocation emerges regardless of the circumstances, regardless of the fact that over time this teaching vocation may mature and resize towards other spheres of teaching activity.

Among the limitations of this research, the following can be mentioned: a) the need to have a greater number of investigations designed exclusively for the IE stage, b) delays in sending the answers by the students, c) possibly the instrument could have been reduced in terms of the number of items in order to facilitate the students' answers, d) bureaucratic procedures that could have prevented the students from gaining access to a university at the time. As future lines of research, we can propose, for example, studies on the perspective of undergraduate IE students once they have completed their studies, analysis of the entry and exit situation of students once they have graduated, the correspondence between the undergraduate IE curriculum and the promotion of critical thinking as a teaching competence, the influence of the practicum as a training element for IE students, research competence and its presence in undergraduate studies, or gender identity and the teaching practice in IE.

Finally, one of the major findings of this research is undoubtedly to certify that no matter how adverse the circumstances may be and that a not very encouraging panorama may possibly appear at some point, the teaching vocation will appear sooner or later. The trigger for this teaching vocation to appear can be found in different contexts, but society has the duty to ensure that teacher training, as well as the recognition of its social relevance, is translated into attention from a deep respect for teaching and from the commitment to the training of citizens.

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## Current trends in english public speech translation (based on TED talks platform)

### Tendencias actuales en la traducción de discursos públicos en inglés (basadas en charlas TED)

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#### Abstract

Nowadays, the media is rapidly developing, and messaging processes are inexhaustible thanks to the Internet. Audiovisual content has become a separate form of communication and learning. This document analyzes the popular TED Talks platform, describes its use with interpretation students, and shows the research results of students using TED Talks on translation trends for public speaking. The document uses the potential of TED Talks as an unlimited source of knowledge, information, ideas, and inspiration. The use of speeches as methodologically sound and authentic English material has improved listening skills, as well as pronunciation and spelling through the ability to read active subtitles and scripts, and develop and enrich students' vocabulary.

**Keywords:** video content, a form of interaction, genre, rhetorical device, discursive strategy.

#### Resumen

Hoy en día los medios de comunicación se desarrollan rápidamente y los procesos de mensajería son inagotables gracias a Internet. El contenido audiovisual se ha convertido en una forma separada de comunicación y aprendizaje. Este documento analiza la popular plataforma TED Talks, describe su uso con los estudiantes de interpretación y muestra los resultados de la investigación de los estudiantes que utilizan TED Talks sobre las tendencias de traducción para hablar en público. El documento utiliza el potencial de TED Talks como fuente de recursos ilimitados de conocimiento, información, ideas e inspiración. El uso de los discursos como material metodológicamente sólido y auténtico en inglés ha mejorado las habilidades auditivas, así como la pronunciación y la ortografía a través de la capacidad de leer subtítulos y guiones activos, y de desarrollar y enriquecer el vocabulario de los estudiantes.

**Palabras clave:** contenido del vídeo, forma de interacción, género, dispositivo retórico, estrategia discursiva.

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## Introduction

TED Talks, a free video content platform, is now one of the most recognized new forms of information sharing and innovation in the world. TED Talks is categorized as a hybrid genre. The platform covers a variety of genres: lecture form, mass-media, conferences with presentations, scientific shows. We consider TED Talks to be a new semiotic model including spoken, written, video, and acoustic components. TED Talks is mostly perceived in an “ideas worth spreading” format, but the question of researching translations of public speeches on this platform is still open. This is why TED Talks speeches will be of interest to scholars in the pragmatic-linguistic fields (Wu & Qu, 2018). The specificity of TED speeches is evident in its local-temporal framework. The main features of TED speeches are as follows: they are concise, logically thought out, transparent, clear, authoritative, dialogic, and persuasive. TED Talks are perceived by the original genre exclusively by listeners directly present at the TED conference. For other users, the speeches are interpreted as a secondary Internet genre. So, we can call it a hybrid genre with a foundation of popular science style with the attributes of fiction, journalism, and conversational style (Wijnker et al., 2019).

TED Talks has become a favorite platform for teaching English Speaking of the benefits of learning English using this platform, it should be noted that students are exposed to a variety of speakers from different countries, with different accents. This primarily allows one to get into the language environment of native speakers (Mamalipurath, 2021). TED Talks public speeches are also useful for future interpreters, to improve their oratorical skills and learn to differentiate between the speakers' verbal and non-verbal means of communication. Separately, we highlight the issues of the discursive strategy of speeches. Its implementation is usually possible through the introduction of certain communicative tactics, through linguistic means, macrostructural elements structurally filled with argumentative signals with subsequent influence on the audience, its worldview, and political preferences (Khajornphaiboon & Vungthong, 2019). What is interesting for interpreters in TED Talks is the perspective of tracking oratorical discursive strategies: argumentative, persuasive, suggestive, and persuasive strategies. Each of these discursive strategies is conveyed by specifically chosen linguistic and extralinguistic means (Al-Jarf, 2020). Consequently, the speaker's ability in their organic combination is

the determining effectiveness of the manipulative effect of speech on the recipients (Almaged, 2021).

Relevance - the interest in translation research in the media sphere (interest in political speeches, texts, advertising campaigns, Internet discourse) and the lack of scientific works in the perspective of public speeches with extended topics. The aim is to analyze the world experience of using the TED Talks platform, to describe the project using the platform in the English language classes of student-translators, to search for discursive strategies and rhetorical techniques for translating speeches. This goal implies the following tasks: describe the phenomenon of the emergence of the TED Talks platform; characterize pedagogical approaches and component stages of using TED Talks in English classes; describe the concept of strategy within discourse analysis; describe the rhetorical devices in TED Talks and their reproduction in translation.

## Literature Review

TED Talks refers to hybrid genres. The platform encompasses a variety of genres: lecture form, mass media, conferences with presentations, scientific shows. We consider TED Talks to be a new semiotic model including spoken, written, video, and acoustic components. TED Talks is mostly perceived as Ideas worth spreading, but the question of researching translations of public speeches on this platform is still open. This is why TED Talks public speeches are such an interesting subject in pragmatic-linguistic research (Crible et al., 2019).

TED Talks is a nonprofit organization that promotes short spoken-word videos on a variety of topics. The platform can be used without a subscription for live conference playback, as well as the ability to view TED Talks recordings. The topics are very diverse. The phenomenon of these talks is their rapidly growing popularity (Sidelnik, Lutsenko & Germanovich, 2022). Chinese scholars view the phenomenon of TED Talks somewhat differently (Wang et al., 2020). They believe that TED Talks speakers are characterized by a common trait: having their idea and communicating it to the audience. Despite the diversity of topics, the goal is to successfully convey their message to the recipients. This, according to scholars, is what unites them. Public TED Talks are characterized as the organization and dissemination of ideas in

the process of communication (Zarzour et al., 2021). The main component of speech is the speaker's idea, realized through linguistic and extra-linguistic discursive means (García-Sánchez, 2021). The interaction between speaker and listener is the result of the influence of a peculiar type of cognitive-communicative activity related to the strategy of direct communication. In this case, the speaker embodies and disseminates his manifestos thanks to the technical ability to record the conference and post it on the Internet. TED Talks are actively used in foreign language teaching (Tanveer et al., 2018).

In this context, (Shelestova et al., 2021) recommends this platform for future English language interpreters, especially in advanced courses.

The first TED conference was held in 1984, when Richard Wurman, an American architect, and designer, decided to bring together experts and leading specialists in three important areas of life: technology, entertainment, and design. Hence the acronym of the name - TED: Technology, Entertainment, Design. The goal of the conference was to present groundbreaking and innovative ideas to the audience. The author (Salem, 2019) explores this phenomenon in education in detail. The website [www.ted.com](http://www.ted.com) brings together people who have something to say, often in a very original way. The speeches are served in English, so the education industry has very quickly noticed the benefits of watching, using, and adapting film speeches in English. (Maazouzi, Zarzour & Jararweh, 2020) describe TED conference materials from the perspective of educators who have been using them consistently since 2009, are passionate about them, and implement and disseminate the ideas in the videos they watch. The practical idea of using TED materials is to download the speeches in mp3 format and recommend, especially to working students, that they listen to the material in the car, on their way to work or university, for example. Tangential work in (Shih et al., 2020). The authors write about the TED portal and search options in the portal. After clicking on the overview button for the entire library (the text above the pictures of the films offered in the middle of the page), a language search system opens up. Here we can search for material on the topic we want, and the language filter will show versions with subtitles in the selected language. According to (Nursafira, 2020) a much more interesting and useful way to search for site resources is to use the playlists prepared by the authors of the portal. Looking for

resources to make your activity more appealing, you should start by looking at the playlists. In addition to the ability to download an audio or video version of a particular speech, almost every video can be watched with subtitles in the language of your choice. There are always subtitles in English. Each video also has an interactive script, which is a complete recording of the speech. It is interesting that when we want to hear a particular sentence, just click on the selected word and the video will move to the desired fragment. An interesting question is raised by (López-Carril et al., 2020). The authors write about a category of students who are tied to paper versions. They often print the script and carefully analyze the text. However, they suggest that their students analyze the texts of speeches on a computer screen without stopping the video and checking each word. Thanks to the Lingro Dictionary, which is different from others available on the Internet, you can find all the words you need. This dictionary is an overlay for websites. It collaborates with TED materials. The popularity of TED speeches in education has prompted more and more teachers to prepare lessons and exercises using these materials. This led to the creation of the TED-ED Lessons Worth Sharing learning platform (Kemaloglu-Er & Bayyurt, 2019). Interestingly, here you can find lessons based not only on TED videos but also on YouTube education resources combined in this project, giving millions of educators the ability to create and share lessons on the [ed.ted.com](http://ed.ted.com) platform using TED and YouTube videos. One of the biggest problems with watching long videos in a foreign language is that at some point, students become confused and don't fully understand certain passages, causing them to quickly lose interest and stop watching. Adding subtitles to a film eliminates the listening comprehension exercise because our brains choose the easier and more enjoyable channel of reading subtitles, especially in our native language (de Azevedo Fay & Matias, 2019).

Watching videos on TED Talks or doing exercises on [ed.ted.com](http://ed.ted.com), students are faced with a lot of new vocabulary to learn. This is where the portal [fiskoteka.pl](http://fiskoteka.pl) comes in handy, where interactive cards can be created (Humeniuk, Kuntso, Popel & Voloshchuk, 2021). Each word or sentence entered into the system will read correctly in the target language.

## Methodology

The following methods were used to achieve the goals of the work: theoretical review of the scientific literature, projective method,

pedagogical observation, generalization. By introducing the elements of TED Talks work into the English language course for the translation students, the projective method was used, and the empirical method of work with TED Talks public speeches of general social topics was used. The TED Talks project in practical, distance English classes was created in stages. The creation of the project was influenced by the interest of teachers and transfer students in the popular platform. Within the framework of the project, the main task of the students was not only to learn how to work on TED Talks but also to conduct scientific research within the framework of their future specialty, namely, to reveal the main techniques in English-language public speeches while working with translations and materials from the TED Talks platform. The project is divided into stages:

- 1) Listening to a TED Talks presentation on a selected topic by yourself, briefly recording your own playback of what you heard (3-4 minutes).
- 2) Listening to TED Talks presentation again and writing a summary. Oral presentation of summary (1-2 min.).
- 3) Presentation of own opinion, idea, speech (imitation of TED Talks) in a language lab.
- 4) Writing an academic summary on "Discursive Speech Strategies" in TED Talks.

### Results and Discussion

With today's technology and Internet diversity, a teacher can find a lot of materials and ideas to use in foreign language classes. Their proper use in the classroom can motivate students to work, develop their linguistic abilities and uncover their soft skills. A project implemented in English classes for future translators using TED Talks platforms is one of the most popular platforms for speeches.

The TED Talks project in English classes was created in stages, and the choice of platform was influenced by the extraordinary popularity of TED Talks (Technology, Entertainment, and Design), a brand of a series of scientific conferences organized by an American nonprofit foundation. Its goal is to popularize, as the initiative's motto indicates, ideas that should be disseminated. TED Talks conferences are organized locally around the world and are independent of TED Talks but use the same conference format: each speaker is given a maximum of 18 minutes to deliver an important idea or proposal. All presentations are available

on the TED Talks YouTube channel and [www.ted.com](http://www.ted.com).

In the first phase of the project (starting in the second year), students were assigned homework to listen to a TED Talks presentation on any topic, record an oral 3–4-minute result in English, and send it electronically to the instructor. The oral, communicative, and spoken components were assessed. The choice of such criteria was aimed at attracting students-translators to a new form of classes, to get them used to recording their voice, above all to develop the ability to listen, to take notes of the message, and pronounce it orally. This phase of the project, depending on the group and the goal I have to achieve (the emphasis was on oral outlining rather than reading from the written version), can be done twice, but the second time the evaluation criteria also include correctness and linguistic richness. Because this is an exercise that students have not yet encountered, some required additional rehearsal and review of the criteria and deadlines to get the exercise right. Students received comments and grades individually, via email.

The next phase of the project (usually conducted in the first semester of the third year) was to listen to any TED Talks presentation again and prepare to write a summary. In addition, students were asked to give their opinions and reflections on the presentations they had listened to for 1-2 minutes, using a range of phrases previously introduced into the context of the class. However, at this point, they presented a prepared presentation for 6-10 minutes in front of their group during the English class. The main criteria for evaluation were presentation planning, length of presentation, linguistic correctness and richness, body language, and manner of expression. At this stage of the project, students must deal with the stress of public speaking in front of a group, improve their ability to plan their presentation clearly, work on self-presentation, gestures, and voice, and use modern technology (multimedia board, projector, web camera, video clips, PowerPoint, Prezi) for variety of statements. An important element of the students' presentation was to express their own opinions, analyze the idea presented in the TED Talks, and link to its message and content.

The third stage of the project took place in the second semester of the third year. This was the most difficult part because students were asked to present their idea, speech, story simulating TED Talks in front of a group of invited professors. The lingaphone room was

transformed into a stage (it was decorated with a red carpet), the speakers stood under the light of a lamp that replaced a spotlight, and an image of the text appeared on the blackboard. That is, the last stage was a locally organized event. The group was transformed into a lively audience and the instructor into a conference presenter. This stage allowed students to express their own ideas, experiences, and dreams, develop their knowledge and interests, use many sources of knowledge in search of relevant information, be critical of the content and information found, exchange valuable opinions and ideas, and, above all, in accordance with the platform motto - to spread, share interesting ideas with other English speakers.

The last stage is written-translation work with the chosen speech, its translation into Ukrainian, and the identification of discursive strategies for speaking in TED Talks. Summarizing the theoretical work of the students, the most common discursive strategies were chosen: argumentation, suggestion, inducement, and persuasion. Argumentation strategy in general was traced at the beginning of almost all speeches - introductory passage with causal connections, in addition, students pointed out a large number of complex subordinate sentences. The persuasive strategy was characterized by the use of the rhetorical techniques of "antithesis" and "metaphor". Students found the discursive strategy of persuasion in the pathos part of the public speech. The strategy of suggestion was found in the structure of lexico-grammatical, lexical, and syntactic argumentation. The strategy of inducement was expressed in the presence of the imperative inclination. When translating the students used the transformation of the exclamation. This was due to the strict technical requirements of subtitles on TED Talks.

So, the main motivation for implementing the TED Talks project in English classes among translation students was the desire to use authentic language material. This project made the development of listening comprehension skills, processing of the heard utterance, and, above all, speaking, especially the formulation of a long and planned oral utterance. Objectively, students' motivation to learn a foreign language outside of class increased significantly, and their academic performance increased accordingly. In the course of the project, it turned out that the ideas presented by the speakers of the TED Talks conference become a great platform for discussion during the class. As a result, close contact is established between teacher and

students, motivation to act and inspiration to plan for the future and change their own thinking about reality, people, and the world grows. The implementation of this project over time has led to the popularization of collaborative conference viewing in classes in higher education.

## Conclusions

Using the potential of TED Talks presentations in English classes as a source of unlimited resources of knowledge, information, ideas, and inspiration for action from distinguished speakers, scholars, and ordinary people with a passion and history is an effective teaching solution. For teachers of English, the use of presentations is to work with excellent authentic material in English, to improve listening, pronunciation, and spelling skills through the ability to read subtitles and active script, and to develop and enrich the vocabulary of future interpreters. By allowing students to choose the topic, length, duration, and difficulty of the presentation they work on, the presentations become perfectly personalized material and adapted to the individual needs, interests, and language competencies of the students, and have therefore become a stimulus for further language development work. Further use of the materials of this research work is promising both for pedagogy and for translation departments, to find interesting methods and techniques of teaching English in higher education institutions.

Recently, more and more websites have been posting lesson plans using TED Talks conference materials. They are a great help in preparing lessons and practicing the language used in the presentations. Such classes are very popular. TED Talks guarantee unprecedented emotion in classroom discussions and make it easier for teachers to work on various topics that are so often forgotten in foreign language textbooks. Many different Web sites and programs facilitate the use of these videos. However, simply watching videos will not bring anything to a student's language life. Every video activity should be preceded by reflection and a clear definition of the purpose of its use.

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## Analysis of the role of emotional intelligence in the formation of identity in different European cultures

### Análisis del papel de la inteligencia emocional en la formación de la identidad en diferentes culturas Europeas

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#### Abstract

The objectives of the article are to determine the peculiarities of the theoretical, ideological and practical-functional factors that determine the cultural characteristics of the global European society and individual communities of the European region. The methodological basis of the study was a combination of general scientific, scientific-cultural, and philosophical methods. The results of the study show that emotional intelligence is a mechanism for implementing the fundamental principle of European society in varied Concordia and providing functions of adaptation, integration, as well as pragmatism, and balancing socio-cultural dimensions. Consequently, emotional intelligence appears to be an important component that determines the peculiarities of the formation of the cultural identity of European communities.

**Keywords:** emotional intelligence, cultural intelligence, mentality, European community, cultural identity.

#### Resumen

Los objetivos del artículo son determinar las peculiaridades de los factores teóricos, ideológicos y práctico-funcionales que determinan las características culturales de la sociedad europea global y de las comunidades individuales de la región europea. La base metodológica del estudio fue una combinación de métodos científicos generales, científico-culturales y filosóficos. Los resultados del estudio muestran que la inteligencia emocional es un mecanismo de aplicación del principio fundamental de la sociedad europea en variada concordia y que proporciona funciones de adaptación, integración, así como pragmatismo y equilibrio de las dimensiones socioculturales. Consecuentemente, a inteligencia emocional aparece como un componente importante que determina las peculiaridades de la formación de la identidad cultural de las comunidades europeas.

**Palabras clave:** inteligencia emocional, inteligencia cultural, mentalidad, comunidad europea, identidad cultural.

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## Introduction

The cultural identity of the European community does not imply geographical or administrative affiliation. Rather, this question is associated with the value aspects of the development of the European socio-cultural space. Material, intellectual and spiritual values form the cultural heritage of the region, which has specific mental peculiarities.

European culture has always been in search of an effective worldview paradigm, which takes into account all aspects of civilizational, regional, and national development on the continent. Attempts to form a worldview paradigm based on a dominant element (religion in the Middle Ages, rationalism in the New Age) have not yielded the desired result. Consequently, the European community, since the middle of the twentieth century (after another continental catastrophe caused by World War II), has been guided by the notion of balance as the key guide of sociocultural development. The search for balances requires appropriate mechanisms that will first identify them and then create the prerequisites for ensuring them.

The fundamental components that form the necessary balances in the European sociocultural paradigm are rationality (with the key factor - intellect) and spirituality (with the key factor - emotion). For a long time, these elements developed powerful theoretical and ideological, and practically oriented precepts separately from each other. However, the turn of the twentieth to twenty-first centuries was a period of actualization of synergetic principles, which led to the convergence of rational and spiritual aspects of European culture. Emotional intelligence became one of the mechanisms in which emotions and intellect acted in concerted unity on issues of identification of socio-cultural features of society. At the same time, emotional intelligence has demonstrated effectiveness in processes of influencing the transformation of cultural space in global or national dimensions.

The aim of the study is the need to harmonize the rational and spiritual elements of the socio-cultural development of European countries, which will allow to explain the principles of the mentality of European cultural identity. The results of the study focus on the illuminated functions that emotional intelligence performs in the modern European worldview paradigm. The mechanisms of emotional intelligence are realized in two mental manifestations:

- Theoretical and attitudinal, according to which cultural identity is characterized by the motto of the European community “united” in diversity.
- Practical-functional, which implies the implementation of the principles of adaptability, integration, pragmatism, and balance.

One of the key research focuses of scientific research is the question of the functions of emotional intelligence in the practical and everyday dimension of the cultural identity of Europeans. The results of the study indicate the dominance of pragmatic functions: adaptive, integrative, and balancing.

## Theoretical Framework or Literature Review

For a long time in the scientific discourse, the problem of emotional intelligence has been associated with psychological studies of the emotional-volitional development of human beings (MacCann et al., 2020). A study by Sánchez-Álvarez et al., (2020) reveals the content of emotional intelligence as an academic phenomenon in psychological practice that studies the emotional-volitional sphere of human life. Such studies have not directly dealt with problems of cultural identity but have provided a theoretical basis for the analysis of the principles of the mentality of the European community.

In studies that dealt with emotional intelligence, the key role was given to the behavioral component (Boyatzis, 2018). Behavioral elements dominated the emotional-intellectual characterization of mentality at the national or regional level. At the same time, other characteristics of EI, which are equally important in the process of cultural identification, were somewhat leveled. The study attempts to actualize the elements of EI of a sociocultural nature that allow us to interpret the cultural identity of Europeans in a holistic and balanced way (Kotsou et al., 2019).

The intercultural interactions inherent in the European space have increased interest in cultural intelligence (Rockstuhl & Van Dyne, 2018). “Cultural intelligence (CQ), the human ability to function and manage effectively in culturally diverse situations and contexts, has become the center of a vibrant scholarly and thriving field of interdisciplinary research” (Ott & Michailova, 2018). The process of studying problems related to emotional

intelligence in scientific discourse is also developing in a similar scenario. The general characterization of cultural intelligence problems (Fang et al., 2018) has contributed to the actualization of emotional intelligence research (Prentice, 2019). That is, an interdisciplinary approach is becoming key in illuminating the role of emotional intelligence in various sociocultural dimensions, including cultural identity issues.

### Methodology

Issah (2018) identifies five methodological components of emotional intelligence, namely self-awareness, self-regulation, self-motivation, empathy, and social skills, through which direct management of sociocultural processes is carried out. The proposed study uses methodological principles close to synergetic attitudes - self-awareness and self-motivation - as elements of human self-organization in the socio-cultural space. Self-organizing elements are an effective principle for the implementation of the identification of social consciousness and worldview beliefs.

It is important to understand the general methodological approaches in determining the role of emotional intelligence in the formation of cultural identity. In particular, the scientific discourse of the twentieth century offers conceptualization as a leading methodological principle in the study of emotional intelligence. It has not been used in the study but requires a separate presentation as a reference point for further research of a similar format, such as the Geneva Emotional Competence Test (GECe), which defines abilities in the context of features of perception, understanding, and regulation of emotions (Schlegel & Mortillaro, 2019). The results of such testing are situational judgments that are especially relevant in the dynamics of the study, as cultural identity in the contemporary permanent European sociocultural space, is constantly changing its characteristics. Moon (2010), in turn, proposes to study the connections between emotional intelligence in the context of a four-factor model of cultural intelligence - metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ.

An important methodological element in investigating the role of emotional intelligence in the process of cultural identity formation across European cultures is the conceptualization of mental capacities (Prentice, 2019). A clear delineation of the conceptualization of intellectual-emotional elements in the example of managerial activity was used in the study to

correlate the principles of emotional intelligence (specific emotions) and cultural intelligence (specific cultural environment) within the identity of the European community.

In general, the intellectual dimension is shaped by different variations. The positioning proposed by Crowne (2009), according to which cultural intelligence (CQ) and emotional intelligence (EI) form holistic social intelligence (SI), is taken to explore the influence of EI on cultural identity formation. The use of this methodological paradigm allows us to clearly trace the functionality of emotional intelligence in the system of socio-cultural activity. A promising direction of research aimed at determining the positioning of emotional intelligence in the paradigm of cultural identity is the allocation of the concept of socio-cultural intelligence (SCI). This will optimize the theoretical and methodological principles of emotional intelligence in the system of cultural identification.

### Results and Discussion

The results of the study actualize two components that form the paradigm of the cultural identity of European communities:

- practical and functional characteristics of emotional intelligence;
- theoretical and methodological principles of emotional intelligence.

Understanding and managing emotional state is an important component in an individual's ability to identify elements of the environment (Kotsou et al., 2019). Cultural identity needs a human-cultural capacity. Awareness of cultural, state and regional peculiarities of development determines the formation of the cultural identity of a nation, region, or civilizational type of development. For European society, cultural identity is characteristic for all the above-mentioned manifestations.

Emotional intelligence on the practical level performs many functional elements related to the influence of emotions on the positioning of the individual in the socio-cultural space. For the European space traditionally in the historical section, and especially in the modern cultural environment, a synergetic attitude in relation to different spheres of social activity is inherent. Synergetic principles of unification and the development of a common value paradigm dictate their conditions to the principles of cultural identification of Europeans.

One of the principles of the practical manifestation of emotional intelligence in the formation of the cultural identity of Europeans is its impact on the organization of teamwork (Jamshed & Majeed, 2019). Teamwork is realized at different levels, from the unification of the professional team to the macro indicators of social activity. All European Union countries and the vast majority of the rest of the region,

striving to emulate European values, implement strategies for socio-economic, socio-political, and cultural-mental engagement, in which the emotional-intellectual component is one of the determining ones.

Emotional intelligence in the practically oriented cultural identity cluster of Europeans performs several fundamental functions (see Table 1).

**Table 1.**

*Functions of emotional intelligence in the practically oriented cultural identity cluster of Europeans*

The emotional and intellectual component in the cultural identity of Europeans	
Functions of emotional intelligence	Practical implementation in the socio-cultural European space
adaptive	awareness of the role of emotional abilities in the process of finding optimal conditions for the implementation of socio-cultural activity
integrative	use of emotional potential in the process of access to the cultural heritage of local (individual European countries or regions) or global (holistic civilizational European progress) nature
pragmatic	optimization of the emotional component when being active in the cultural space of the European community
balancing	coordination of indicators of emotional and cultural intelligence in the cultural space of Europe (general or in the context of a particular region, country, or community)

Source: authors' own development.

Crowne (2013) points to the ease of understanding in contact with other cultures when using the principles of emotional intelligence. This is how at least three practically functional principles of EI in the sociocultural dimension of Europe are realized: adaptation, integration, and pragmatism. Lin et al., (2012) highlight the moderating role of emotional intelligence in cultural adaptation. Caputo et al., (2019) note that "it becomes important for negotiators to develop the ability to recognize cultural differences and adapt their negotiating styles to the cultural contexts they face", suggesting that there is no alternative to using emotional intelligence in cultural engagement.

"Emphasizing the importance of cross-border effectiveness in today's globalizing world, cultural intelligence is a leader's ability to effectively manage in culturally diverse environments" (Rockstuhl et al., 2011). At the same time, emotional intelligence is designed to shape these leadership competencies because it does not focus on professional skills but extends its influence on the social, individual, and psychological aspects of human activity. The role of emotional intelligence in cultural and practical activity is most fully revealed by the activities of global managers and the characterization of their leadership and emotional-will qualities (Miao et

al., 2018). In particular, such an attitude as creativity is actualized (Darvishmotevali et al., 2018), which equally attracts both intellectual and emotional factors.

One of the key elements promoted in the European worldview system (implemented primarily in the educational, scientific, and cultural space) is the balance of ability and self-esteem (MacCann et al., 2020). The focus on human capabilities as a fundamental component of one's success is already traditional for the European community. All spheres of social life are aimed at achieving optimal conditions in which people can develop and realize their potential (creative, intellectual, productive, etc.). This organizational attitude requires the correlation of the intellectual and emotional components, both in the social manifestation and in the individual dimension. Emotional intelligence offers self-assessment as an indicator of the effectiveness and efficiency of the implementation of human abilities. This is how the attitudes of pragmatism, one of the main tendencies of the cultural identity of European and Western society, are formed.

Emotional intelligence, through the mechanisms of emotional labor, shapes the priorities of material culture development (Wen et al., 2019).

Emotional intelligence is an important factor in the process of increasing productivity (Yusuf & Kuras, 2020), which has become a real worldview mainstream of European cultural identity in recent decades (Khosravi et al., 2020). The study of the principles of pragmatism as a sociocultural element of the mentality of Europeans clearly correlates with the intellectual-emotional characteristics of labor productivity (Sanchez-Gomez & Bresó, 2020).

The task of emotional intelligence is to shape individual and social understandings of happiness and well-being (Guerra-Bustamante et al., 2019). For European society, these concepts are fundamental in the context of cultural heritage formation.

Tolerance, humanity, and equality are elements of the theoretical and attitudinal principles of European society, which are expressed in concretized elements such as immersive learning (Namestiuk, 2022). The democratization of European cultural heritage, which is characterized by responsibility and respect and is realized through mechanisms of emotional and cultural intelligence, is a value reference for other communities to emulate (Rakhimov & Mukhamediev, 2022).

Emotional intelligence has become an effective tool for psychological resilience (Sarrionandia et al., 2018). With the development of knowledge about emotional intelligence, the limits of human resilience have expanded significantly. The dynamism of today's globalized world dictates the reality that human resilience becomes almost a worldview element of cultural identity. Each community forms mechanisms to ensure the said resilience of the individual to permanent and rapid changes in the sociocultural space. The European community uses a combination of intellectual and spiritual elements to build an effective protective model for the individual and society. Emotional intelligence as a successful synergetic balance of intellect and emotion is a sought-after tool in the European cultural tradition. The features of intellectual-emotional characteristics of Europeans have become an integral part of their cultural identity.

The European community is focused on performance indicators in all areas of social activity. Therefore, the issue of improving indicators of psychological capital is one of the fundamental ones for the average European, which qualitatively distinguishes and identifies him/her in the civilizational socio-cultural space. Since emotional intelligence is a tool for improving the level of psychological capital, it contributes to the automatic incorporation of its principles into the cultural-value paradigm (Gong et al., 2019).

The cultural identity of European countries is defined from several elements that shape the mentality of the inhabitants of this region. Among the key ones are national, cultural, and religious components. Of great importance in interpreting the role of emotional intelligence is spiritual intelligence. The principles of diversity of European culture are realized through tolerance of religious or worldview beliefs (Anwar et al., 2020). Tolerance acts as a principle that translates the characteristics of emotional-intellectual manifestation.

Emotional engagement is also one of the characteristics of the emotional-intellectual component of the sociological cut of European citizens. In order to analyze the influence of emotional intelligence on the cultural identity of individual European cultures, one should consider not only the general characteristic of activity but also investigate its extreme manifestations. In particular, Pérez-Fuentes et al., (2019) highlight the level of aggressive behavior as an element of response to the socio-cultural characteristics of the development of society. In general, cultural identity involves taking into account a variety of components of the emotional-spiritual dimension, which requires a rational characterization.

Consequently, it is possible to determine the key characteristics of emotional intelligence, corresponding to the principles of the cultural and worldview slogan of the European Union in *variedade concordia* (see Fig.1).



**Fig. 1.** Theoretical and ideological principles of manifestations emotional intelligence in the cultural identity of Europe.

Source: authors' own development

It should be noted that contemporary scientific and cultural discourse has somewhat adjusted the concept of emotional intelligence. The primary potential of EI, which was reduced to the management of one's own and others' emotions, despite its ambitiousness, has failed to prove this ability on a practical and everyday level (Petrides et al., 2018). Consequently, the principles of emotional intelligence refocused from active management to an understanding and awareness of one's own and others' emotions. And already, based on these worldview beliefs, one identifies oneself in a particular cultural community.

A promising area of research is the harmonization of the principles of emotional and artificial intelligence (Prentice et al., 2020). The combination of human intelligence and technology opens up new prospects for the development of society. At the same time, this symbiosis generates risks associated with anti-humanistic and anti-democratic manifestations. The European value system responds swiftly to risks by activating norms of respect and responsibility. Emotional intelligence is an effective mechanism to counteract the potential negative impact of the technology process and digitalization on the cultural identity of Europeans. Artificial intelligence blurs the notion of belonging to a nationality, citizenship, and cultural values. Emotional intelligence is designed to provide the individual or society with mechanisms of protection against the total

influence of technologization. Consequently, it preserves the principles of the cultural identity of the European community.

“Science fiction often portrays future artificial intelligence technology as having sophisticated emotional intelligence skills to the point where the technology can develop empathy. Such a strategy can be realized through the three basic domains of emotion--recognition, generation, and augmentation--elements necessary to achieve a new era of artificial intelligence emotional intelligence” (Schuller & Schuller, 2018).

### Conclusions

Thus, emotional intelligence, through the realization of mental abilities, indicates the peculiarities of the cultural identity of the European community. At the practical and functional level, cultural identity in the intellectual and emotional dimension is realized by the principles of adaptation, integration, pragmatism and balance. A characteristic feature of emotional intelligence is the synergistic function, which is designed to balance and correlate the emotional and spiritual elements of different nationalities and ethnicities that form a common European socio-cultural space.

Emotional intelligence does not exacerbate the contradictions between the mental or spiritual-

emotional characteristics of different European communities, but, on the contrary, is part of the principles of socio-cultural intelligence, whose vocation is to develop the theoretical, ideological and practice-oriented integrity of the cultural paradigm of European society. At the theoretical and ideological level, the principles realized through emotional intelligence form the culturally identical meaning of the European Union's ideological slogan "in varietate concordia" and are manifested in such guidelines as democracy, humanity, equality, tolerance, respect and responsibility.

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## Applying ploughs for determining the optimal depth of soil cultivation: the development of the scientific views

### Aplicación de arados para determinar la profundidad óptima de cultivo del suelo: el desarrollo de los puntos de vista científicos

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#### Abstract

The presented article examines the historical process of using deep and shallow ploughing of the fertile soil. Therefore, the most optimal option for achieving the highest possible productivity is considered, for example, multi-depth tillage of the soil, when deep, medium, shallow and surface inversion and non-inversion tillages alternate in crop rotations. In particular, when ploughing to the depth of 30 cm, the level of available moisture remains the highest during chiselling, and in conditions of deep ploughing (from 30 to 75 cm), the level of available moisture falls for any type of tillage. As a result of the study, the authors came to the conclusion that when choosing the depth of tillage, it is necessary to take into account the information on the crops to be grown and, first of all, the condition of the root layer of the specific field. Thus, in the course of the full-scale Russian aggression against Ukraine and the possible food crisis in some countries of the world caused by this armed conflict, the conducted research cannot be seen as comprehensive and thorough and has further prospects.

**Keywords:** ploughing, furrow, applying plough, flat tillage, inversion tillage, non-inversion tillage, mineralisation.

#### Resumen

El artículo presentado examina el proceso histórico de usar el arado profundo y superficial del suelo fértil. Por lo tanto, la opción más óptima para lograr la mayor productividad posible se considera, por ejemplo, la labranza del suelo en profundidad múltiple, cuando se alternan labranzas profundas, medias, superficiales y superficiales con inversión y sin inversión en la rotación de cultivos. En particular, cuando se ara a una profundidad de 30 cm, el nivel de humedad disponible sigue siendo el más alto durante el cincelado, y en condiciones de arado profundo (de 30 a 75 cm), el nivel de humedad disponible cae para cualquier tipo de labranza. Como resultado del estudio, los autores llegaron a la conclusión de que al elegir la profundidad de labranza, es necesario tener en cuenta la información sobre los cultivos a sembrar y, en primer lugar, el estado de la capa de raíces del campo específico. Por lo tanto, en el curso de la agresión rusa a gran escala contra Ucrania y la posible crisis alimentaria en algunos países del mundo causada por este conflicto armado, el estudio no está agotado y tiene más perspectivas.

**Palabras clave:** labranza, surco, aplicación de arado, labranza plana, labranza de inversión, labranza de no inversión, mineralización.

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## Introduction

**Research Problem.** The problem of improving soil fertility can now be considered one of the main among scientific research to improve the research methodology in the field of certain practical models (Ravshanov et al., 2020; Vanderhasselt et al., 2022). One aspect of saving money in agriculture is considered as shallow tillage as possible (Prymak et al., 2005). However, the effectiveness of a particular depth of tillage, depending on certain crops and specific soil and climatic conditions, has not been determined (Tuba et al., 2021; Bhattacharyya et al., 2022). This issue is particularly relevant under conditions of full-scale Russian aggression against Ukraine, which provoked food shortages in many countries of the world.

**Research Focus.** The object of research selected the existing history of tillage in different countries, taking into account the influence of nutrients on plants, that is, the components of biological, chemical and physical fertility.

**Research Aim.** The aim of this study was to find the optimal model of tillage of root zone depending on certain soil conditions for growing agricultural crops.

## Theoretical Framework or Literature Review

The generally accepted opinion that productivity yield depends on the depth of tillage gradually emerged from the Middle Ages. In the second half of the 18th century the opinion about the usefulness of deep ploughing became dominant in the scientific circles. These issues were investigated by Acharya et al., (2019), Artursson et al., (2006), Buragienė et al., (2019), Ravshanov et al., (2020). At the turn of the 19th–20th centuries, the experimental material began to accumulate rapidly, which proved that soil properties, climate, and biological features of plants should be taken into account when finding out the depth of ploughing. In the 19th century scientists and practitioners recommended deep ploughing, but did not specify the maximum depth in relation to the specific soil and crop while in the 1920s a large amount of experimental material had already been accumulated regarding the depth of tillage. Most researchers came to the conclusion that even for the crops which are the most demanding of deep tillage, the optimal ploughing depth of black soils is 18-22 cm and only in some cases 27 cm. With the further deepening, yields, as a rule, did not increase or their increase was very insufficient. For grain crops, shallow tillage is sufficient

(Prymak et al., 2005). Scientists Tomchuk (2021) and Nouri et al., (2019), who received the support of the power structures of the former USSR, spoke against shallow ploughing.

Researches conducted in 2022 by Azimi-Nejadian et al. (2022) proved the advantage of cultivation to the depth of the humus layer with the most complete overturning the soil layer. From that time, the theory and practice of the soil cultivation began a sharp turn towards deep ploughing, and till almost the 1950s, this opinion was dominant. However, there is still no unanimous opinion regarding the optimal depth of tillage, as well as scientific grounding the need for a certain depth of tillage.

Byrne et al., (2022) also spoke against deep tillage in the USA, who called ploughing a mistake and named the inverse plough a thief in the world agricultural drama and suggested shallow soil cultivation with disk tools with leaving the organic matter on the soil surface. His ideas became the beginning of the critical review of the basics of the scientific agriculture in the USA, which received the greatest development after 1950. In the USSR also, after the publication of the works of Umurzakov et al., (2020), the issues of deep soil cultivation began to be completely reviewed again.

Onasanya et al., (2021), summarizing the work of the Academy of Sciences of Nigeria team on the no-tillage system, expressed doubts about the conservation and accumulation of soil humus with this approach. They noted that with systematic no-tillage, 70-75% of the roots are concentrated in the surface layer up to 10 cm deep, and since this layer is repeatedly loosened, this part of the roots along with post-harvest residues is heavily mineralized and is unlikely to be a source for humus layer formation.

According to the results of the research of the agricultural experimental stations of Ukraine, the following optimal tillage depth was determined: Kharkiv experimental station – 9-13 cm for grains and 18-22 cm for root crops; Sumy – 18-22 cm for sugar beets; Nosivska – 13 cm for winter and spring grain; Mariupol – 11 cm for winter and spring wheat; Adzhams'ka – 11 cm for May and black fallows (Prymak et al., 2005).

The issue of turning over the soil layer is important in the theory of tillage. The theoretical grounds of inverse ploughing were developed by the Ukrainian scientists and summarized in the

works of Tomchuk (2021). According to them, in the upper part of the arable layer, as a result of the aerobic conditions and other circumstances, the structure of the soil, which was considered the basis of the fertility, is destroyed, while in the lower layers, where the conditions are anaerobic, it is restored. Hence, the task of ploughing included the mutual movement of the upper sprayed and lower structured parts of the plough layer. The researches of Battisti et al., (2022), Gulyarenko and Bembenek (2022) found out that the upper part of the arable layer of the soil of various genesis, as a result of the large accumulation of roots in it, alternating moistening and drying, increases its fertility at the end of the summer season. After cultivation, in the soil there is a kind of differentiation of the arable layer in terms of fertility, and after 5-6 months, sometimes even earlier, its upper part turns out to be more fertile than the lower one. In practice, it was proven that not after all crops at the end of the growing season the lower part of the arable layer is better structured than the upper one (Prymak et al., 2005).

Ovsinskiy (1899) was the first researcher to widely promote non-inverse tillage, and he recommended loosening the soil no deeper than 2 to 3 inches with multi-body peelers or specially designed knife cultivators, believing that the top layer of the soil, as more fertile, should be left on top. He attached great importance to dew and fog, which supposedly enrich the soil with moisture and nitrogen. According to the scientist, manure wrapped in a two-inch plough layer, gives better results. However, the experimental verification of his recommendations by the Poltava and Odesa research stations did not confirm the results that the author promised. Researchers Nouri et al., (2019) criticized Ovsinskiy's theory for its advertising nature and weak theoretical base. In general, the ideas and recommendations of Ovsinskiy and his followers did not have much success.

However, at this time, in particular, Vanderhasselt et al., (2022) suggested a kind of compromise option: alternating years and fields of deep (40-50 cm) tillage (once every 4-6 years) with special, narrowly streamlined risers, ploughs and surface tillage with disc peelers to the depth of 10-12 cm in the fallow-grain and fallow-grain-crop rotations. The scientist believed that both annual plants and perennial grasses are capable of enriching the soil with humus and improving its structure under certain conditions.

Thus, a large number of experiments were conducted on the issues of depth, measures and methods of soil cultivation and their results were covered in numerous publications. Experimental data on these issues were analyzed in detail in the articles of de Lima et al. (2021), Tuba et al., (2021), Cavalcanti et al. (2019), Cheboi et al., (2021), Kurok (2009), Celik et al., (2020), Kurylo and Pryshlyak (2020), textbooks and manuals on agriculture, "Scientific bases of agricultural management" by country zones and in the other works. The scientists came to the conclusion that on the soils, even with the deepest humus horizon, the depth of the plough layer should be 28-32 cm. The further increase of the ploughing depth, as a rule, does not increase the yield and is not economically justified.

### Methodology

Our research used the complex of the historical methods for the study and interpretation of primary source texts and bibliographic material, as well as presenting the scientific historical events. In addition, due to the general scientific and source science methods, the evolution of the views of scientists and practitioners regarding increasing soil fertility depending on the depth of their plowing was analysed.

### Results and Discussion

The further numerous studies proved that in the process of the obligatory differentiation of the root layer, the upper soil layer (0-10 cm) acquires higher fertility, but not the lower one, as it was predicted by Tomchuk (2021). However, the requirement to turn over the cultivated soil layer remained strict. New arguments were found that confirmed its necessity. In particular, Al-Dosary et al., (2022) stated that after moving the upper part of the arable layer to the place of the lower one, the cultivated plants most intensively use the elements of fertility accumulated in the layer that became in the process of cultivating the bottom layer of the furrow. The lower part of the arable layer, which was moved upwards by tillage, must restore fertility during the growing season. At the same time, it was noted that in the absence of overturning of the cultivated soil layer due to the differentiation of the root-containing layer and the increase in fertility in its upper part, cultivated plants form the bulk of the root system in the upper layers. Under the conditions of moisture deficit, this leads to a decrease in the yield level and stability, as well as a decrease in the sustainability of agriculture in general. Therefore, it is necessary to turn over the treated soil layer. This conclusion was made by

Abbaspour-Gilandeh et al., (2020), Kim et al., (2020), as well as Acharya et al., (2019). On the basis of the presented research results, the idea was formed that the main and the most important condition for obtaining high and stable yield is creating the deep, relatively homogeneous, cultured root-containing soil layer.

In Europe and Asia, Mamatov et al., (2021), Morgun et al., (1988), Nadeem et al., (2019) and others advocated the complete rejection of ploughing the soil. They believed that tillage in combination with fertilizers contributes more than ploughing to the increase of humus reserves and would be able to ensure its deficit-free balance with applying a smaller amount of manure. According to Nadeem et al., (2019), the localization of plants remnants, roots and fertilizers in the surface layer of the soil is necessary to ensure the soil protective effect, improve forming soil, increase amount of humus in the soil; while cultivation without turning over the soil layer and mulching the soil with post-harvest residues simulates the sod (black soil) process of forming soil in the conditions of production.

The majority of scientists support the idea that the differentiation of the arable layer in surface and flat cut cultivation with the localization of nutrients in its upper (up to 10 cm) part of the layer has its negative effect on the development and yield of crops (Prymak et al., 2005). The researchers stress that the systematic use of flat cut and surface (10-12 cm) tillage is accompanied by the increased acidification of the upper part of the tilled soil layer, which is obviously caused by the shallow application of mineral fertilizers (Prymak et al., 2005).

At present, among the agricultural practitioners and scientists (Artursson et al., 2006; Buragienė et al., 2019; Kurylo and Pryshlyak, 2020; Palamarchuk et al., 2020), the prevailing opinion is that tillage of the soil in crop rotations should be of various depths, in which deep, medium, shallow and surface inverse and non-inverse tillage alternate.

Correct modern soil cultivation in accordance with the biological requirements of agricultural plants significantly affects the yield. When analysing the factors that ensured the growth of corn grain yield in the state of Minnesota (USA) from 0.20 to 0.65 t/ha in the period from 1930 to 1980, it was found that a 5% increase in the yield was due to the improvement of soil cultivation (Cardwell, 1982).

However, recently, for some crops in a number of countries around the world, soil cultivation systems were developed, including “no-till” one. It is believed that this is due to the increase in the use of herbicides and pesticides, which significantly narrows the functions of the mechanical soil cultivation, with the increase in the price of fuel, the appearance of high-performance advanced equipment for the minimum soil cultivation and special seed drills (Chekrizov, 2004).

That is, the minimisation of soil cultivation is not effective in all the soil and climatic conditions and not for all crops, and sometimes it is even inferior to the traditional methods of cultivation in terms of impact on the harvest. It was found that for the transition to minimum tillage, the necessary conditions include the presence of a powerful highly fertile root soil layer, applying phosphoric and often potash fertilizers to the soil, the cultivation of varieties of agricultural crops adapted to the conditions of minimum tillage and stubble crops, the availability of the necessary amount of appropriate herbicides (Chekrizov, 2004).

When tillage is minimized, after-harvesting remnants are located on the surface of the soil or partially wrapped in the soil. At the same time, in addition to the positive effect on soil properties (increasing moisture supply, lowering soil temperature, reducing erosion, etc.), their phytotoxicity can be seen, immobilization of soil nitrogen can be observed. The negative effect of post-harvest residues can be largely overcome by applying mineral fertilizers, primarily nitrogen-phosphorus ones.

Fallowing makes a great influence on the conditions of the mineral nutrition of plants. It was found that long term use of fallow and grain crop rotations leads to rapid depletion of humus, nitrogen and phosphorus reserves. Therefore, nitrogen fertilizers are often applied even for crops that are sown in pairs taking into account the amount of mineral nitrogen in the soil in the root layer. The use of fallowing is justified mainly in the areas of insufficient moisture, where the soils are provided with phosphorus or a sufficient amount of phosphorus fertilizers is applied (Stanford, 1981).

The use of mechanical equipment with the high specific pressure causes compaction of the arable and even subsoil layer, especially in the case of overmoistering soils with a heavy mechanical composition, acidic ones, with unsatisfactory physical properties, which leads, especially in

ruts, to a decrease in the yield due to the deterioration of the water-air condition, mechanical conditions for the growth and activity of the root system. Increasing phosphorus and potassium nutrition while applying fertilizers does not completely compensate for the decrease in yield caused by the excessive soil compaction. Liming the acidic soils reduces the negative impact of soil compaction, providing improvement of the physical properties, creating the soil reaction favourable for the root system, increasing access to phosphorus and the other elements to plants, increasing soil biological activity.

According to the views of Hallsworth (1981), the ability of the soil to form a yield of agricultural crops consists of three main components: chemical fertility – the ability to provide the plant with the elements of mineral nutrition; physical fertility – the ability to provide the plant with water, creating the environment favourable for root growth; biological fertility – the result of the interaction of various constituent parts of the soil biota, which affects the condition of mineral nutrition and the sanitary condition of the soil. These components of soil fertility are closely interrelated, so a managing them human is able to influence plant nutrition in the targeted manner, overcoming some of the negative effects of climate and other factors on plant fertility in production conditions.

The direct and indirect effect of tillage helps to regulate the availability of nutrients and makes it possible to influence the individual components of soil fertility (Chekrizov, 2004). Undesirable formation of the soil compaction was observed during the long-term cultivation of the soil to the same depth with the inverse tools. According to the researches (Soil Fertility Manual, 1979) conducted in the USA, with the long term use of the inverse plough the soil compaction is formed at the depth of ploughing with the volumetric mass of up to 1.75-2.00 t/cm<sup>2</sup>, with a small number of macrogaps, which sharply limits the depth of root penetration and the total size of the root system (Sommers and Biederbeck, 1978). During a relatively short drought in such areas, plants experience a lack of moisture, because the moisture available deeper than 25 cm (under the soil compaction) cannot be used by them due to the lack of a significant number of roots there. Therefore, the nutrients of the soil and fertilizers cannot be effectively used from the parched arable layer.

An interesting investigation was conducted by Kamprath et al., (1979). On the loamy soil (Arenic Paleudult) with the presence of the soil compaction after inverse ploughing to a depth of 25 cm, they grew soybeans after the conventional cultivation (inverse ploughing to the depth of 25 cm +3 cm disking before sowing), chiselling to the depth of 27 cm, loosening between rows to the depth of 45 cm (Table 1).

**Table 1.**  
*The influence of the tillage method on the distribution of the soybean root system in loamy soil*

Depth, cm	Soil tillage method		
	Inverse tillage	Chiselling	Loosening undersoil
<i>Weight of dry root matter (mg/1000 cm<sup>3</sup>)</i>			
0-10	334	323	326
10-20	219	276	198
20-30	64	236	101
30-45	14	45	65
45-60	10	48	74
60-75	6	59	87

Source: Kamprath et al., (1979)

The expediency of removing the the soil compaction in depth as a result of ploughing process is obvious: 4% of the roots penetrated deeper than 30 cm with the conventional (inverse) tillage, 14% – with chiselling, and 27% with deep loosening between rows. While in the first case the soybean yield was 2755 kg/ha, the destruction of the soil compaction contributed to its increase by 29%. At the same time, the removal of nutrients from the soil increased

almost proportionally. This can be explained by the direct connection with the size of the root system, which increased (in terms of dry mass) by 30-50% when the plough compaction was destroyed.

According to the agronomic research station of the Department of Ain (France), deep loosening prevents forming the soil compaction in depth as a result of ploughing process. At the same time,

ripening the soil for cultivation in spring is somewhat delayed, but the infiltration of moisture into the deep layers of the soil is enhanced and its profile is more evenly moistened. The root system of agricultural plants becomes more powerful. As a result, absorbing nutrients from the soil by plants increases significantly, the yield of sugar beets and other crops increases. But during soil cultivating the total surface of soil particles and aggregates increases, which contributes to the growth of potential opportunities for evaporation and losing moisture.

In general, soil cultivation leads to increasing moisture loss, which is undesirable, especially when there is a lack of it. This is confirmed by numerous studies of moisture accumulation with various methods of soil cultivation and in its absence.

In the state of Texas (USA), the amount of available moisture before sowing in the 0-180

layer in the variants without tillage, with the flat cut (subsoiling) cultivation and disking is 217, 170 and 152 mm, respectively (Table 2), during the fallow period of the previous summer, it was preserved, respectively, 32.5%, 22.7% and 15.2% of the amount of moisture that arrived with precipitation (Sommers & Biederbeck, 1978).

When the soil is characterized by overmoistening, accompanied, as a rule, by weakening aeration, the availability of phosphorus and potassium to plants decreases. This is primarily due to weakening root growth and their weak activity in absorbing nutrients. In addition, one of the reasons for the weak supply of phosphorus to plants is slowing down the mineralization of soil organic matter and organic fertilizers as the most important sources of phosphorus, especially if overmoistening occurs at the low temperature (Soil Fertility Manual, 1979).

**Table 2.**

*The influence of soil cultivation methods on accumulating moisture*

Parameter	The method of soil cultivation		
	without cultivating	flat cut tillage (subsoiling)	loosening soil by disks
Moisture saved during the fallow period (% of precipitation)	32,5	22,7	15,2
Amount of available moisture in 180-cm soil layer before sowing, mm	217	170	152

Source: Soil Fertility Manual (1979)

In Germany, the most important conditions for creating the high level of soils fertility and their effective use include involving subsoil layers into the intensively used root zone, periodic deep ploughing, increasing the size and improving the configuration of the fields (Kundler et al., 1977), which contribute to the higher quality, uniform tillage of the soil.

In a number of countries, the practice of very deep tillage of the soil for field crops has traditionally developed. Thus, in Italy, ploughing for winter wheat is done to a depth of about 50 cm, and for potatoes and sugar beets or can be even up to 75 cm, without the sufficient experimental grounding, taking into account the level of chemicalization of agriculture, appearing new varieties and hybrids. Researches in this direction have already been started, in particular by the University of Bologna (Chekrizov, 2004).

On the soils with the heavy mechanical composition, deep ploughing (for example, in the

sub-humid area of the Ethiopian highlands) when creating highly productive crop rotations, cultural meadows and pastures in combination with liming (if necessary) to the depth of ploughing and applying high doses of fertilizers, ensures the improvement of the water and air conditions and obtaining high yields of agricultural crops, especially having deep root system, like sugar beets and alfalfa, according Hussein et al., (2019).

Loosening the subsoil is effective, as a rule, only when fertilizers are simultaneously applied to a great depth. If high doses of fertilizers are not applied to the loosening horizon, then a positive result will not be obtained or it will be negative, as it was evidenced by studies in many countries of the world.

In addition, while deepening the arable layer, as a rule, it is undesirable to bring infertile subsoil with the poor physical and chemical properties to the surface. Research conducted in Sweden using

isotopes showed that grain crops in areas with systematically high doses of fertilizers and calcareous materials are able to absorb a significant amount of nutrients from the soil: after the tillering phase – 0-25% of phosphorus, 0-25% of potassium and 10- 40% of calcium, in the earing phase – 10-50% of phosphorus and potassium and 40-80% of calcium (Chekrizov, 2004). Therefore, applying the system approach allows defining the influence of interaction between the components of the agricultural system, creating the logic and mathematical models of the researched processes that are close to reality. However, with a small root-rich layer, applying high amounts of fertilizers is ineffective, since the part of the nutrients may be outside of the layer and become positionally inaccessible to the roots; in addition, there may be large losses of nutrients because of leaching.

### Conclusions

Thus, one of the main problems of the scientific research into the aspects of increasing soil fertility is the need to improve the research methodology in the direction of creating models of processes that more closely correspond to the reality. Researches of the agrarian scientists and practitioners in different countries of the world found that the minimization of tillage is not effective in all soil types and climatic conditions and not for all crops. Under certain conditions, it is inferior to the traditional methods of cultivation in terms of impact on the yield. Obligatory conditions for the transition to shallow soil cultivation are the presence of a powerful, highly fertile root layer, applying sufficient amount of phosphorous and often potassium fertilizers, the cultivation of varieties of agricultural crops adapted to the conditions of minimal cultivation and stubble crops, the presence of the necessary amount of the appropriate herbicides.

The existing history of tillage is based on the need to regulate the impact of nutrients on plants. Thus, the ability of the soil to form a crop requires the presence of three main components: biological fertility – the result of the interaction of various constituent parts of the soil biota which affects the regime of mineral nutrition and the sanitary condition of the soil; chemical fertility – the ability to provide plants with the elements of mineral nutrition; physical fertility – the ability to provide the plant with water, to create an environment favourable for root growth.

At the same time, the basis for the choice of the technological operation and a means for implementing the depth of soil cultivation is operational information about the state of its root layer in the specific field with the determination of the correspondence of the data indicators of the quantitative model of the optimal state of the soil layer for growing crops. Therefore, in the course of creating the effective means for the mechanization of cultivation and the depth of soil ploughing, the problem that always bothered and is bothering the whole humanity right now, concerns the conditions of the full-scale Russian aggression in Ukraine: if there is a sufficient amount of food and its affordable cost for the population. Therefore, the research conducted by us is not comprehensive and has further prospects for the study, especially in the conditions of the food crisis and the need to further increase the yield of agricultural plants.

### Conflicts of interest

The authors declare no conflict of interest.

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## Information and communication and digital technology in education: Some aspects of SMART technology application

### Información y comunicación y tecnología digital en la educación: Algunos aspectos de la aplicación de la tecnología SMART

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#### Abstract

The relevance of the research work is due to the growing interest in the implementation of information and communication and digital technology in the educational process. The article pays special attention to the peculiarities of the impact of smart-technology on the formation of the digital component of professional competence as a mediated indicator of the effectiveness of the implementation of innovative teaching technology. Modern smart technologies in education are designed to make education modern, accessible, and effective. The aim of the work was to identify the impact of implementing smart-technology on students' academic success and the dynamics of the formation of the digital component of professional competence, and then to investigate the features of the proposed innovative educational method. The article investigates and systematizes the peculiarities of the experience of using digital and information and communication technologies, taking into account the need to organize the educational process in the conditions of distance and mixed forms of education. Methods of

#### Resumen

La relevancia del trabajo de investigación se debe al creciente interés por la implementación de la tecnología de la información y la comunicación y la tecnología digital en el proceso educativo. El artículo presta especial atención a las peculiaridades del impacto de la tecnología inteligente en la formación del componente digital de la competencia profesional como indicador mediato de la eficacia de la aplicación de la tecnología de enseñanza innovadora. Las modernas tecnologías inteligentes en la enseñanza están diseñadas para hacer que la educación sea moderna, accesible y eficaz. El objetivo del trabajo fue identificar el impacto de la implementación de la tecnología inteligente en el éxito académico de los estudiantes y la dinámica de la formación del componente digital de la competencia profesional, y luego investigar las características del método educativo innovador propuesto. El artículo investiga y sistematiza las peculiaridades de la experiencia del uso de las tecnologías digitales y

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mediated research of the effectiveness of the implementation of innovative educational technologies are actualized. Given the multifaceted nature of the topic under consideration, future research should focus on studying the specifics of implementing smart-technologies for training specialists in various educational areas. Also, special attention of researchers is required to analyze the effectiveness of popular tools of smart-technologies.

**Keywords:** digital environment, educational technology, digital competencies, smart-education, modern education.

## Introduction

The modern world is characterized by the rapid saturation of data processing systems in almost all spheres of social life. Information has become a strategic resource for society, leading to the inevitable proliferation of information and communication technologies (hereinafter ICT). In today's competitive market environment, everyone must have the ability to adapt quickly to market conditions that are constantly changing and creating conditions of ontological uncertainty. ICTs are now capable of radically changing the way different institutions and the state as a whole function (Ignatenko, 2022). That is why special attention needs to be paid to the issue of applying ICTs and digital technologies in the educational and pedagogical process in order to develop appropriate professional competence in future professionals (Núñez-Canal, Obesso & Pérez-Rivero, 2021).

Combining information and communication technologies leads to the improvement of the traditional educational sphere, the development of new progressive and innovative teaching methods, as well as the creation of a special ecosystem of educational and digital environment of EHE. Such technologies are a tool for creating new means of managing the educational process, which produce qualitative results both at the level of HEIs and at the level of efficiency of the educational institution as a whole (Tsekhmister, Konovalova, Tsekhmister, Agrawal & Ghosh, 2021).

The rapid development of information and communication technologies requires increased

de la información y la comunicación, teniendo en cuenta la necesidad de organizar el proceso educativo en las condiciones de la educación a distancia y mixta. Se actualizan los métodos de investigación mediada de la eficacia de la aplicación de las tecnologías educativas innovadoras. Dado el carácter polifacético del tema que nos ocupa, las investigaciones futuras deberían centrarse en el estudio de las particularidades de la aplicación de las tecnologías inteligentes para la formación de especialistas en diversos ámbitos educativos. Asimismo, se requiere una atención especial de los investigadores para analizar la eficacia de las herramientas populares de las tecnologías inteligentes.

**Palabras clave:** entorno digital, tecnología educativa, competencias digitales, educación inteligente, educación moderna.

concentration in the processes of their implementation and use. Ignoring the management of information and communication technologies leads to a set of different technologies that are not compatible with each other, thus leveling their effectiveness. In fact, it has become clear that in the course of the ICT evolution decisions are made mainly not based on the analysis of the needs to improve the methodology of the educational process, but under the influence of external factors of the rapid development of socio-economic spheres (Palanivel, 2020).

The social changes of the late 20th and early 21st centuries caused by the technological revolution have led to the emergence of a new generation for whom information technology and the digital environment are a natural part of their life-world, an everyday reality. These technologies make everyday life itself more comfortable, many actions and decisions more simple, open, and accessible, but at the same time require creativity, the ability to benefit from information abundance and excess, often not based on traditional knowledge, but through intuition (Gokbulut, 2020).

Today's educational institution must orient its student in a changing ocean of innovative digital change. Consequently, we can say that the modern education system should be the flagship of the implementation of the most advanced ICT and digital technologies in society. These are the features of a Smart society, the norms of Smart culture, in which new generations are born and

socialized. The education system should also naturally change, acquiring the characteristics of Smart. The influence of human capital is not enough for the development of modern education (Hoel & Mason, 2018).

The very content of education, its forms, methods, practices, spaces, and environments require changes. To implement such changes, the concept of smart-universities was developed, which in general provides an interactive educational environment, flexibility, and personalization of education along with free access to the necessary content. Theoretical sources on smart-education began to appear relatively recently and are not yet of a systematic, analytical nature. There is no unambiguous definition for the term "smart-education" yet. But summarizing the existing definitions, the following definition can be given (Rosida, Muin & Sakka, 2021). "Smart education is the association of educational institutions and faculty for joint educational activities on the Internet based on common standards, agreements, technologies, and a common repository of educational materials" (Cattaneo, Antonietti & Rauseo, 2021). Today it can be noted that there is a lack of comprehensive research on the topic of implementing smart technologies in teaching practice. At the same time, the topic of ICTs and digital technologies in education is actively disclosed. The concept of a digital environment is widely consumed (Ahmed & Ganapathy, 2021).

Information and educational technologies, among which Smart technologies stand out, are technologies "that have a particular universality and dramatically increase the degree of virtualization of not only educational interactions but also other communicative relationships. With the help of this kind of technology, it is possible to improve the efficiency of the educational process and the quality of education".

Thus, the topic of a "smart" educational environment, education, technologies, and even universities is relevant and in demand among scientists and practitioners, but it has not been studied sufficiently and requires research and systematization (Bouchrika, Harrati, Wanick & Wills, 2019).

The purpose of the study is to identify the impact of the use of information and communication and digital technology on the educational process. The study analyzes the impact of the application of smart-technology on academic performance

and the formation of the digital component of professional competence.

The hypothesis of the study is the impact of the introduction of smart technology on academic success and the formation of the digital component of professional competence. The task was to investigate the peculiarities of the impact of smart technologies on the results of the learning process.

### **Theoretical Framework or Literature Review**

The intensive introduction of digital technologies into the life of modern society, the formation of information space, and the development of electronic educational systems, as noted by Achilovich (2021), leads to the formation of new scientific and pedagogical ideas about the organization of the educational process of EHE students, a qualitative rethinking of approaches to education, as well as the acceleration of its development. The intensive introduction of digital and information technologies into the education system and educational process, according to Movlonovich (2022), is a global trend and one of the most significant processes that have occurred in the education system over the past decades.

Poddubnaya, Zadneprovskaya, Dhum, & Khatit (2020) posit that the concepts of "communication" and "information" are closely interconnected and mutually complementary. Specifically, "information" refers to any data that is transmitted, whereas "communication" refers to the transmission of this data through specific channels. It is important to distinguish between the concepts of "literacy" and "competence" as well. The initial step in developing the information and communication competence of a higher education institution student is the acquisition of information and communication literacy. This encompasses the ability to navigate the information space and effectively utilize information and communication technology tools to facilitate social and professional interactions.

ICT competencies in the scientific literature, in particular, Chisango, Marongwe, Mtsi & Matyedi (2020), are defined as receiving, processing, and giving out information, skills of working with multimedia and mass-media technologies, as well as possession of skills of working with Internet resources. All definitions reflect the component composition of ICT competence, but none of them shows the specificity of a particular academic discipline,

which would allow us to consider these definitions as universal. Thus, according to Vincent-Lancrin (2022), ICT competences are among the leading key competences and can be singled out as a separate group of competencies requiring targeted formation in the process of students' mastering different disciplines.

According to Järvis, Tambovceva & Virovere (2021), information and communication competence refers to a set of knowledge, skills, and abilities that are acquired through learning and self-education in computer science and information technology. This competence encompasses the ability to effectively use information technology in performing professional tasks, including tasks related to information management, analysis, and transfer. Additionally, this competence includes the ability to model and design one's own professional activities, as well as the activities of a team, using modern ICT tools. This proficiency in modern ICT enables individuals to navigate the organizational environment effectively and enhances labor productivity. These definitions underscore the importance of developing ICT and digital competencies among students to prepare them for their future professional pursuits, as noted by Abdurahimovna (2020). In general, ICT competence, as noted in Wojciech, Sobczyk, Waldemar & Pochopień, (2022) understand the ability to collect, assess, transfer, search, analyze information, model processes, objects through the use of the capabilities of communication and information technology.

Recently, the term "smart education" has become popular. According to Kopotun, Durdynets, Teremtsova, Markina & Prisyakova (2020), it explains the new development strategy, the main feature of which is the maximum availability of knowledge. The new motivation to acquire knowledge is created through the active use of materials placed in open educational resources. Accordingly, this knowledge, in turn, becomes available to more and more people.

As Schomakers, Lidynia & Ziefle (2022) point out, smart education is flexible learning in an interactive educational environment through freely available content from around the world.

### Methodology

Numerous systems exist for evaluating the impact of digital technology on the learning process. However, many of these systems solely focus on assessing the knowledge and activities that comprise professional competence.

Therefore, relying solely on exam scores and ratings does not provide a comprehensive evaluation of the level of digital competence achieved - the primary goal of integrating information and communication technology (ICT) into education.

To address this issue, monitoring the formation of digital competence can be achieved through various components of a methodological complex. These components may include a cyclogram for monitoring a discipline or professional module, a summary sheet for monitoring a discipline or professional module, and a set of measuring and control materials. Assessing the level of digital competence formation is based on levels of expression, which are determined by activity criteria. The criterion for the basic level is the ability to perform reproductive activities based on a given algorithm, which involves understanding and reproducing professional actions.

The study of information-communicative and digital technologies was carried out in several stages.

1. The first stage (2021): development of indicators of digital and information-communication competence of students as indicators of the effectiveness of digital technology application during training; development of generalized characteristics of levels of formation of each competence component; selection and development of diagnostic tools to assess the degree and dynamics of development of levels of formation of digital competence.
2. In 2022, the second stage of the study was carried out, which involved examining the initial level of students' digital competencies. The experiment was designed to determine the effectiveness of the educational interventions on digital competency formation. To assess the formation of the digital component, a test was administered at the end of the experiment containing 16 closed-type questions, with four questions for each of the four competencies of the block. Each correct answer was given one point, and the maximum score for the test was 16 points, four for each competence. Additionally, the activity component was assessed by a panel of 25 experts, all of whom were teachers at the Department of Cultural Studies at Taras Shevchenko National University.

The study involved 180 students studying cultural studies and art criticism at Taras Shevchenko National University. A stratified cross-section sample was used to allow for more objective research and analysis of the impact of augmented reality technologies on educational performance. The participants were divided into two groups: experimental and control, with 90 students in each group. The experimental group received instruction using smart technologies during the academic year 2021/2022, while the control group followed the standard curriculum. Formal statistical analyses, including Wilcoxon's criterion and Student's t-criterion, were used to check the conformity of the data to the normal law of distribution.

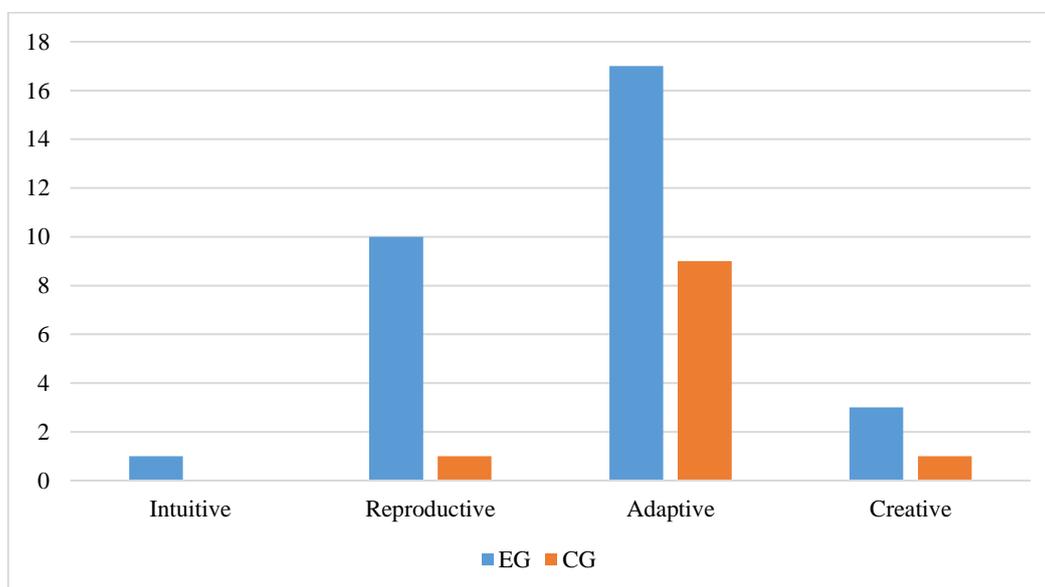
The study was conducted using digital survey tools. All respondents were informed about the

goals, objectives, and subject matter of the study and gave consent to process personal data and use the results in a scientific publication.

The main limitations of the study are the lack of a clear and transparent methodological framework for analyzing the impact of a particular educational technology on the learning process. Consequently, conclusions about the impact of information and communication and digital technology can be obtained indirectly.

## Results and Discussion

The general results of diagnostics of the formation of the block of digital competencies are reflected in Fig. 1.



**Figure 1.** Comparative diagram of the levels of digital competence of future culturologists  
*Source:* Compiled by the authors of the study based on the results of the experiment

The illustration depicts a notable contrast in the level of digital competence development between EG and CG students. To determine the significance of the variance in proficiency levels, we will employ the nonparametric statistical Mann-Whitney test, which enables the identification of differences in the measured attribute between two independent samples of small size (less than 100 values). The experimental data fulfills the criteria for using this test, with each sample consisting of values ranging from 3 to 100, represented by scores that reflect the overall outcomes of the digital competence block formation.

To evaluate the significance of differences in the levels of personal elements and psychological

attitudes formation from the competencies composition in the EG before and after the formative experiment, we will utilize the Wilcoxon criterion. This criterion enables the comparison of changes in indicators between two different conditions on the same sample of subjects. It can help determine whether the shift of an indicator in one direction is more significant than in the other and establish the direction and severity of change.

To satisfy the condition for the sample size, which is  $5 \leq n \leq 50$ , we have 24 sample elements. The Wilcoxon criterion's empirical value is determined by summing up the ranks corresponding to atypical shifts. In this case, there is only one such shift, which corresponds to

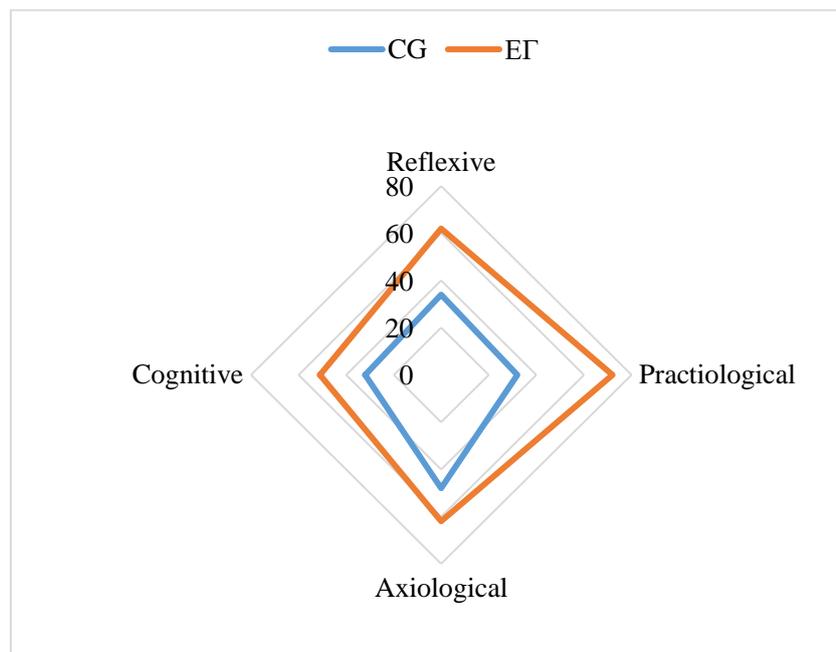
a rank of 5, resulting in an empirical value of  $Temp=3$ .

Assuming a significance level of  $\alpha=0.01$ , the critical value is  $Tcr(0.01)=61$ . If the critical value is not greater than the empirical value, then at this level of significance, there is no reason to reject the null hypothesis of the significance of differences. On the other hand, if the critical value exceeds the empirical value, then the null hypothesis is rejected.

In this instance,  $Temp=3 < 10$ , so the null hypothesis should be rejected. Therefore, there is evidence to suggest that there is a significant difference between the levels of personal elements and psychological attitudes formation from the competencies composition in the EG before and after the formative experiment.

Fig. 2 displays the changes in learning outcomes for both the experimental group (EG) and control group (CG). Petal diagrams were used to illustrate the percentage of students who

achieved basic and advanced levels of competency, indicating a "productive" level of learning, at the beginning and end of the study. The largest variations in learning outcomes were observed in the cognitive, praxiological, and reflexive criteria. The improvement in the cognitive component can be attributed to the implementation of strategies to adapt the educational content and monitor students' self-learning progress. The significant increase in the praxiological component was a result of the heightened participation of students in the educational process, which correspondingly developed their activity component. The improvement in the reflexive component was attributed to the regular use of self-assessment methods and the inclusion of mechanisms for ongoing monitoring of their educational progress. The growth of the axiological component was facilitated by the incorporation of a control action block into the educational process management submodel, which enhanced students' motivation and engagement in the learning process.



**Figure 2.** Dynamics of the formation of digital competence in the CG and EG  
Source: Compiled by the authors of the study based on the results of the experiment

Assessment of the authenticity of the results of the experimental work was carried out using methods of statistical analysis of data. To check the applicability of the parametric one-factor analysis of variance, we checked the data for normality and homogeneity.

Since the results of the applicability of classical analysis of variance, we obtained the fulfillment

of the normality and homogeneity conditions, therefore, to assess the effectiveness of the pedagogical study, we can use the criteria of parametric analysis of variance, such as Student's t-criterion for comparison of independent samples of experimental and control groups (Table 1).

**Table 1.**  
*Test results according to Student's test*

	Start of the experiment	End of the experiment
Statistics	t = 0.82634	t = -5.7036
Level of significance	0,05	
p value	0.5214	3.315e-08
Interpretation	No statistically significant differences were found between the groups	Statistically significant differences were found between the groups

*Source:* Compiled by the authors of the study based on the results of the experiment

The analysis showed the absence of statistically significant differences before the beginning of the experiment between CG and EG students. Since the t-test statistic is less than the critical value and is in the zone of insignificance, we accept the null hypothesis and reject the alternative hypothesis.

Difficulties arising in the implementation of ICT and digital technologies are associated with difficulties in attracting and retaining students in the educational process, reduction of motivation to learn in the conditions of increasing the volume of independent work. The transition to a hybrid model of learning requires a radical transformation of traditional technologies and the development of models for the organization of learning activities in an electronic environment, ensuring the achievement of learning outcomes.

But despite the existing problems and risks, this direction is actively developing and today is a phenomenal cardinal shift in the paradigm of modern learning. Organization of learning with the help of smart-technology comes down to the development of new educational methods, disciplines, and navigation mechanisms, the formation of a system of control and monitoring of knowledge, competencies and learning outcomes, feedback mechanisms. The body of research methods for this is very broad, which is due to the fact that smart-technologies are at the intersection of digital and pedagogical technologies. The approaches used are based on the methodology of systems analysis, the technology of operational and intelligent data analysis, machine learning, methods of sociological research, analysis and processing of empirical data. The scope of smart-technology application in the educational process is constantly growing.

Relying on the data of modern pedagogy on the development of the digital component of professional competence, as well as on the results obtained by summarizing and analyzing the existing experience of applying smart-

technology, the following advantages can be noted: increased accessibility of education by erasing territorial and temporal borders, the possibility of implementing individual educational trajectories, economic benefits, the reduced labor intensity of teachers by freeing them from routine processes, nurturing with.

Analyzing the psychological and pedagogical aspects of building the educational process in HEI in an electronic environment, we can conclude that the active use of smart-technology in learning will contribute to the integration of online learning methods with offline best practices and approaches, which have proven their ability in learning and development of students. Using the possibility of combining effective pedagogical and modern digital educational technologies will provide mass availability of education; personalization of learning; the possibility of online analysis of educational results and the learning process; technological capabilities of providing educational content and active management of the educational process.

Thus, we can infer that education today faces new challenges that will seriously change the education system. The retrospective analysis of studies devoted to the development of the problem of building the educational process in the electronic environment allowed to highlight the features of its construction taking into account the psychological and pedagogical features of the modern generation, to specify the concept of using smart technologies in the educational process in the electronic environment, to determine the model of blended learning as the most promising model in terms of mass training of HEI students. The scientific significance of modernization and the development of the use of smart technologies is manifested in the form of innovative pedagogical approaches and teaching methods that can be used as a basis for creating a methodological system of learning in the conditions of digitalization of higher education. The scientific

significance of modernization and development of the use of smart technology is manifested in the form of innovative pedagogical approaches and teaching methods that can be applied in the basis of creating a methodological system of learning in the conditions of digitalization of higher education.

### Conclusions

Thus, we can conclude that education today faces new challenges that will seriously change the education system. Retrospective analysis of studies devoted to the development of the problem of building an educational process in the electronic environment, allowed to highlight the features of its construction, taking into account the psychological and pedagogical features of the modern generation, to specify the concept of using smart-technology in the educational process in an electronic environment, to determine the model of blended learning as the most promising model in terms of mass training of HEI students. Today, digital and information and communication technologies in education are becoming increasingly popular. This is due, first of all, to the rapid development of technology. Modern man today cannot imagine his life without gadgets, the Internet, social networks, and streaming platforms. Education today becomes the flagship of the introduction and assimilation of modern information technologies. Among all ICTs and digital technologies in particular need smart-technology in learning. The study of the formation of the digital component of professional competence during the training in HEI showed high efficiency of the use of smart-technology.

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## Integration of methods and means of distance learning of mathematics during the process of training future teachers of mathematics

### Integración de métodos y medios de aprendizaje a distancia de las matemáticas durante el proceso de formación de futuros profesores de matemáticas

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#### Abstract

The article aims to study the peculiarities of applying different distance education methods and tools in training future teachers of mathematics. The task of the article can be conditionally divided into two stages: differentiation of means and methods of distance education in the conditions of higher education institutions; searching for a model (combination of social, pedagogical, and other elements) of forming professional competence through a combination of distance education tools and methods. The methodological basis of the study was scientific and pedagogical methods. The results of the study highlight the elements of distance education, capable in their totality to provide full and high-quality training of future teachers of mathematics in the digital environment of universities.

**Keywords:** modern education, mathematics education, distance learning tools, digital didactics, vocational training.

#### Introduction

The relevance of the study is due to the need to solve problems of improving the quality of distance learning in mathematics in the preparation of future teachers of mathematical disciplines, which is caused by the need to organize the work of students in the course. In

#### Resumen

El objetivo del artículo es estudiar las peculiaridades de la aplicación de diferentes métodos e instrumentos de educación a distancia en la formación de futuros profesores de matemáticas. La tarea del artículo puede dividirse condicionalmente en dos etapas: diferenciación de medios y métodos de educación a distancia en las condiciones de las instituciones de educación superior; búsqueda de un modelo (combinación de elementos sociales, pedagógicos y otros) de formación de la competencia profesional mediante una combinación de herramientas y métodos de educación a distancia. La base metodológica del estudio fueron los métodos científicos y pedagógicos. Los resultados del estudio ponen de relieve los elementos de la educación a distancia, capaces en su totalidad de proporcionar una formación completa y de alta calidad a los futuros profesores de matemáticas en el entorno digital de las universidades.

**Palabras clave:** educación moderna, educación matemática, herramientas de aprendizaje a distancia, didáctica digital, formación profesional.

this regard, the improvement of distance learning is possible through the introduction of new tools that can provide solutions to the problems of improving the academic performance of students. Distance learning based on Internet technologies is considered a progressive form of

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professional education, aimed at the personal requirements of students and their qualifications, and also allows you to constantly increase the professional level, taking into account personal qualities. In the process of studying mathematical and pedagogical disciplines, the student of pedagogical HEIs in the online mode without any assistance is mastering learning materials, being tested (Catalano, Torff & Anderson, 2021). One of the directions of the informatization process of modern society is the informatization of the training process of future specialists in the educational sphere. This process consists in the research and provision of the educational sphere with the methodology, practice of development and optimal use of innovative technologies focused on the implementation of psychological and pedagogical goals of professional training of future teachers of mathematics. Among the innovative technologies, based on which the new learning environment should be created in HEIs, there are e-learning technologies, the use of which is able to make the learning process available at any time and in any place, to encourage students to self-education throughout life, while learning will become more attractive, democratic, comfortable. The use of modern technologies in the educational process of future teachers of mathematics promotes the quality of their professional training and competitiveness in the labor market (Karjanto, 2021). Distance learning technologies not only facilitate access to information and open up opportunities for the variability of learning activities, its individualization, and differentiation, but also allow the organizing interaction of subjects of learning at a new level, building an educational system in which students will be active and equal participants of educational activities. Distance learning technologies, based on the use of information and communication technologies, confidently enter the practice of many educational institutions of different forms and levels. Since one of its main features is independence from geographical location, from the distance between the teacher and students, it is called distance learning, that is learning at a distance (Chen, Liu & Tretheway, 2022). The purpose of the article is to update the methods and means of distance educational technologies in the process of forming the professional competence of future teachers of mathematical disciplines. Based on the purpose of the study, the following problems have been identified: 1) Determination of means of distance education in the conditions of higher education institutions. 2) Search for the optimal model of coexistence of innovative and traditional educational

technologies in the conditions of distance education.

### Literature review

The question of the effectiveness of distance education arises against the background of socio-political shifts that have recently engulfed the whole world. The question arises of ensuring the effective training of future specialists in the pedagogical sphere, despite the challenges of an uncertain environment. It is with this duty that distance education facilities are increasingly being introduced to provide unimpeded access to educational services despite the dispersal of students from the educational institution. Tsekhmister (2021) examines the implementation of pedagogical innovation in the educational process. This is necessary to match the education system to the modern challenges of society associated with the development of technology, the emergence of new socio-economic relations. The introduction of pedagogical innovations, according to the author, brings with it the need to revise the existing traditional paradigms of the educational process organization. The new paradigm must take into account the need for asynchronous organization of the educational process by means of computerization and digitalization. Melnychuk (2022) discusses the methodological foundations for organizing teacher training in the conditions of distance education. The author notes the need to introduce innovative technologies as a tool to ensure quality teacher education. Also, the work of Korostianets (2022) should be mentioned. The author considers the effectiveness of the use of modern didactic tools in the process of formation of professional competence of future teachers of mathematics in the conditions of higher education institutions.

In the process of preparing a future teacher of mathematics by means of distance education, special attention should be paid to specialized software for simulation and visualization of phenomena and processes. To this end, special attention needs the work of Karjanto & Husain (2021). The authors considered the peculiarities of using the wxMaxima software package in the process of training future teachers of mathematics. Together with researchers Velychko Stopkin & Fedorenko (2019), the authors of the article try to analyze the importance of computer algebra packages in the process of organizing the training of modern teachers of mathematics in distance education. Nichyshyna and Voinalovich (2022) were interested in the issue of the integrity of the

formation of mathematical knowledge. The authors substantiate the practicality of the application of opposition in the process of the formation of integrated systems of mathematical knowledge. Also, the work of Botuzova, Nichyshina and Rizhnyak (2022) is interesting for this study. The authors devoted their work to studying a complex integrative approach to the study of problem-solving methods by students of higher education institutions. Thus, despite the existence of a large number of studies, there are still a low number of unresolved issues. Firstly, the problem of organizing distance learning for future mathematics teachers by combining several methods and tools is still insufficiently covered. Secondly, the data from existing studies are still insufficient to draw conclusions about the optimal mechanisms and methods of distance learning for future mathematics teachers.

### Materials and methods

The analysis of the integration of methods and means of distance learning in mathematics in the conditions of pedagogical HEIs has historical, didactic, and psychological peculiarities. Therefore, there is a need for a thorough analysis of the existing systems of distance learning organization in pedagogical HEIs taking into account the features of harmonization of the distance education system of training future teachers of mathematics. The methodological means that can provide analysis of the peculiarities of methods and means of teaching mathematics in the Ukrainian educational environment are general scientific methods (analysis, systematization, prediction, comparison) and scientific and pedagogical special methods (pedagogical observation, educational experiment). The didactic practice of introducing distance learning methods of mathematical disciplines in the pedagogical HEIs testifies to the high effectiveness of such a solution. However, there is still a certain lack of data for a full and comprehensive analysis of the effectiveness of popular methods of organizing distance learning of mathematical disciplines in the conditions of pedagogical HEIs. The study uses the methodological principle of systems theory to analyze the diversity of existing distance learning tools for mathematics. These difficulties are associated with the peculiarities of the transfer of theoretical knowledge in the use of computer tools in the educational process in the practice of teaching future teachers of mathematics and are due to the following factors:

- insufficient number of special studies in the training of future teachers of mathematics in

the modern paradigm by means of distance education;

- orientation of digital educational resources not on the specific requirements for the future specialist, but on the implemented private author's concepts and the lack of taking into account their variability in accordance with the curricula of various pedagogical HEIs;
- psychological difficulties faced by future teachers of mathematics in the practice of using new computer tools in the study of mathematics.

The organization of the study was carried out in several stages. At the first stage the analysis of philosophical, psychological and pedagogical, scientific, and methodological literature on the topic of research, the study of the experience of HEIs, the identification of conditions for the formation of future teachers of mathematics readiness for professional activity, the definition of directions, methods of research. At the second stage, the existing models of distance learning for future teachers of mathematics were studied. The organizational and pedagogical conditions for the formation of professional competencies were determined, the criteria and indicators of the effectiveness of the formation of readiness for professional activities of future teachers of mathematics were determined. At the third stage, the processing and analysis of the results of the study were carried out. Conclusions on the results of the study are made.

### Results

Future teachers of mathematics, starting to carry out professional activities, must be prepared to use the entire arsenal of teaching tools that modern didactics possesses. Of course, it is impossible to imagine modern education without innovative educational tools. To understand how important it is to pay attention to the use of a variety of distance learning tools in the professional training of future teachers of mathematics, it is necessary to find out what place of computer tools in the modern educational process. This study should consider their features and advantages over other means of education. By teaching aids (didactic means) we mean teaching and visual aids, demonstration devices, tools, etc. Didactic means are objects that provide students with sensorimotor stimuli that can affect their senses, facilitate their direct and indirect knowledge of reality.

The means of learning include: used in the process of training equipment, machinery, tools

and devices, rooms for classes (classrooms, laboratories), means of communication, means of obtaining and storing information. Modern didactics defines learning tools as instruments of activity of a teacher and students (as material and ideal objects), which are involved in the educational process as carriers of information and activity tools.

Material means of learning - teaching and visual aids (textbooks, didactic material, test material), didactic equipment, educational equipment, technical means of learning. Ideal learning tools - language (oral language), writing (written language), diagrams, drawings, works of art, opinion, training computer programs, etc. Of all the means of learning that have found use in distance education can include the following:

- audiovisual (educational videos, slides, educational films);
- electronic educational resources (multimedia textbooks, educational films on digital media, software for subjects often referred to as educational multimedia, educational and methodological programs);
- online educational resources, interactive whiteboards, etc.

The technical means of education (TTE), which are used in the organization of distance learning of future teachers of mathematics, can include the achievements of new information technology - computers and computer networks, media education, training equipment based on electronic equipment, and specialized software. Modern technical means that provide distance learning, called the means of new information technology. This notion should be understood as software, hardware, and software and technical means and devices that are based on microprocessor technology, modern systems, and means of information transfer, information exchange, providing access to information resources of computer networks (including global). This makes it possible to collect, accumulate, process, store, produce, transmit, use information (Martin, Harbour & Polly, 2022).

Computers as a medium of instruction have many characteristics of traditional teaching tools, but what makes them different is that they allow for a kind of student-computer dialogue, which is an undeniable advantage of this educational tool in terms of organizing and perceiving teaching material and controlling and assessing knowledge.

To achieve the goals of training future teachers of mathematics in a distance learning environment is possible to use such types of computer tools:

- general-purpose service software tools;
- software tools for mathematical and simulation modeling;
- software to control and measure the academic performance of future teachers of mathematics;
- electronic simulators;
- information retrieval and reference systems;
- software for remote access laboratories and virtual laboratories;
- expert learning systems (ELS);
- automated Learning Systems (ALS);
- electronic textbooks (ET);
- means of professional activity automation;
- intellectual learning systems (ILC);
- specialized training web-portals;
- training applications;
- learning forums and chatbots in social networks and messengers (Cano & Lomibao, 2022).

It is impossible to overestimate the benefits of the limitless possibilities of modern multimedia technology. Using computer tools in distance learning, it is possible to change the way visual and audio information is formed. Specificity is important when choosing an object of study to demonstrate with the help of traditional visualization, while the use of distance means provides the possibility of dynamic interpretation of both real objects and theories, scientific regularities, concepts (Sapiński & Ciupka, 2021). All of the above has allowed us to identify the essence of distance learning in the informational and productive approaches. The informational approach of distance education of future teachers of mathematics should be formed based on informational postulates, the method of informational modeling of the essence. The purpose of training is to form an information model of the student's brain with a given volume and quality of the thesaurus, the development of its knowledge as a mechanism for perception and extraction of information from natural and artificial sources. Productive learning is connected with the concept of socially significant result of student's activity. This result can be both internal, manifested in qualitative changes in the nature of the mental activity, and external, expressed in the creation of a product - a material or informational result of human activity. The peculiarities of the process of productive activity and its products can be used in diagnosing the

development of skills, student skills, development of cognitive processes, formation of the ability to plan their activities (Martin, Harbour & Polly, 2021).

For further consideration of the problem of providing distance education for future teachers of mathematics, it is necessary to define the

structure of the concept of professional competence in order to make an idea of the ways of its formation on this basis. Based on the research on the named problem, we can say that competence as a professional quality is defined by the presence of three groups of attributes: technical competencies, subject, and methodological competencies (Table 1).

**Table 1.**  
*The structure of the professional competence of the future teacher of mathematics in distance education*

Components	Competence of a mathematics teacher		
	Technical	Subject	Methodological
Logistical and organizational components	Providing appropriate technology. Providing access to high-speed Internet	Providing e-learning tools	Ability to create work programs, lesson plans, educational-methodical complexes Awareness of methodological principles of teaching in the full-time, distance, and mixed forms of education.
Theoretical component	Awareness of the capabilities of modern digital learning and communication tools	Possessing the subject at a high level	Awareness of the basic sanitary-hygienic and informational safety requirements for the organization of the educational process Mastery of methodological fundamentals of creating and using electronic educational resources
Practical component	Know how to use digital technology and create, edit, and share learning materials remotely.	Using digital materials in their work	Participation in webinars, online courses, electronic conferences for the purpose of methodical qualification improvement
Personality component	Awareness of the capabilities of technology and computer-based learning tools; keep up to date with new tools and opportunities	Prospects for the use of distance methods in work	

Source: Authors' development.

Technical competencies are a prerequisite for working in a remote format, which is the ability to use digital educational technology and techniques, IT-communications to mediate and fully implement the educational process. Subject competencies - the foundation of the professional skill of the teacher, his duty to know well the subject, the field of science in which it belongs, the application of this knowledge to solve professional and other problems. Methodological competencies - mastery of the basics of educational theory and methodology, the ability to "adjust" the methodological system of teaching to work in a remote format in

compliance with appropriate pedagogical principles (Higgins, Huscroft-D'Angelo & Crawford, 2019).

Each of the attributes is defined by a number of descriptors categorized into four groups: logistical and instructional organization, theoretical component, practical component, and personal qualities of the teacher. Let us illustrate the structure of competence of a future teacher of mathematics during distance learning on the example of the subject area "Mathematics". The peculiarities of this field of knowledge are that the use of distance technologies until recently

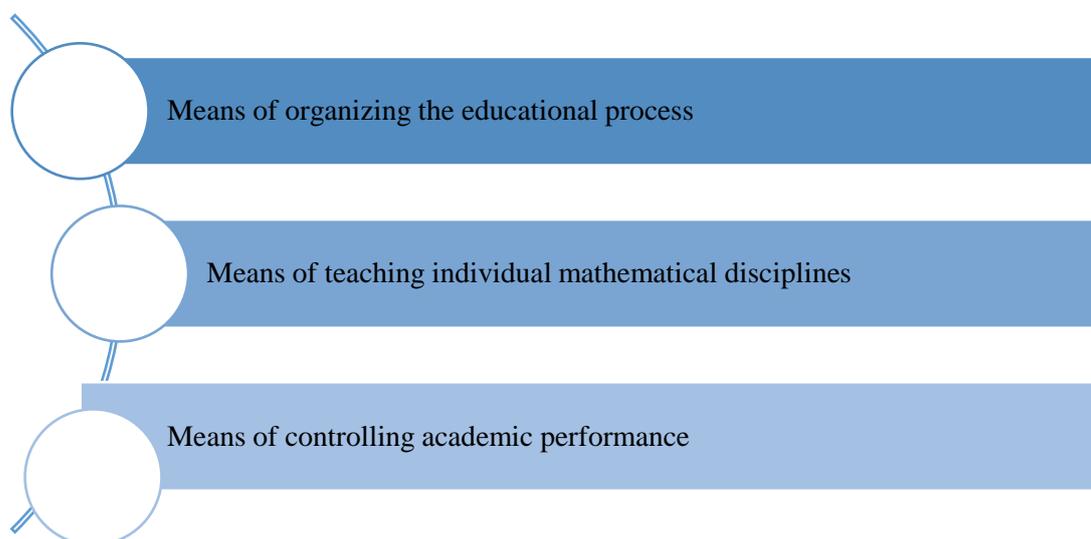
were limited by technical conditions. The situation has changed with the replenishment of the arsenal of digital devices. Logistical support for the learning process should include the necessary technical means and a point of access to high-speed Internet. Technical means should include office computer equipment with installed standard software and video communication means; software packages for mathematical calculations (Excel, Statistica, etc.); graphic tablet (for handwriting input of mathematical information, formulas, drawings). The basis of subject support are the elements of the electronic educational-methodical complex: electronic textbook, work (possibly interactive) workbooks for practical work, electronic lecture notes, visualization tools of educational material (presentations, tables), control tools (tests, cards, individual assignments), etc.).

The creation of a set of teaching and learning materials should be distributed among the teachers of the discipline for sufficient time and constantly maintained. The organizational component of methodological competencies is also formed: course work programs, syllabi, and class schedules are created. These documents, as a rule, are placed in the electronic information

and educational environment of the university. It is also important to decide on ways to communicate with students and administration: social networks, messengers, digital platforms, etc. The teacher needs to be able to inform students quickly and massively about upcoming events, and students need to be able to provide feedback (Martin, Polly & Ritzhaupt, 2020).

### Discussion

Analysis of the works on the topic of research showed that the authors pay much attention to the issues of the distance learning organization, tools, and platforms for distance learning organization, problems of forming mathematical concepts with the support of electronic learning tools, and implementation of visual support of the educational process in mathematics, problems of assessing knowledge in mathematics. in distance learning format (Sherman, Puhovskiy, Kambalova & Kdyrova, 2022). In general, based on the analysis of the results of research literature, personal teaching experience, and accepted practice it is possible to highlight the following tools, especially popular in the organization of distance learning (Fig. 1):



**Fig. 1.** Keyways to support distance learning for future mathematics teachers  
Source: Authors' development.

The remote format of the educational process imposes an obligation on teachers to have a high degree of digital competence. Computer literacy ensures the use of innovative digital technologies and the latest didactic tools in the work. In addition, a high level of digital competence of both students and teachers can ensure a high level

of communication during distance learning. Mastering digital technologies makes it possible to use a wide range of software aimed at organizing the distance learning process. This is especially true for the study of mathematics. (Higgins, Huscroft-D'Angelo & Crawford, 2019).

Today, specialized software for performing special mathematical calculations is gaining popularity. This software is called mathematical processors and is aimed at using both numerical and symbolic calculations. At the same time, such software requires users to have not only special mathematical knowledge, but also to have technical means of sufficient power. Until recently, this problem prevented the use of some special mathematical software in the educational process. It is known that the technical equipment of higher education institutions does not always meet the requirements of modern software, especially the one that requires large RAM resources, a modern powerful video card, a processor of the latest generations, etc. The solution to this problem came naturally. With the advent of cloud computing, the entire computing process, which has been performed on hardware, has now been moved to a cloud server. Thus, a significant technical resource has been saved. Large companies such as Google or Microsoft provide their own cloud computing capacities for educational purposes to universities absolutely free of charge. Thus, the problem of outdated equipment becomes irrelevant (Martin, Polly & Ritzhaupt, 2020).

But since the comfortable use of an online board determines the availability of a touchscreen, and in other cases, its use is less convenient, some additional features have to be sought. In the context of this study, Boiaryshcheva, Herych, Pohoriliak, Syniavska & Tehza (2022) are interesting. Researchers remain committed to traditional methods of education and see the only possibility of using distance learning technologies and methods in combination with face-to-face learning. Hodges, Lockee, Moore, Trust & Bond (2020) cite data fully confirming the full ability of distance education methods in the formation of professional competencies of future educational specialists.

### Conclusions

Analyzed the experience of using distance means of organizing professional training of future teachers of mathematics, investigating the coverage of this topic in the scientific literature, the following conclusions are made. Distance form of education is a response to the challenges of the modern world, its task is to ensure continuous and quality education. In pedagogical practice, there are a large number of methods and means of organizing the educational process through the introduction of distance technology. As evidenced by the results of the study, the optimal result is achieved by a complex

combination of several methods and means. The effectiveness of the distance form of education is determined by the level of formation of professional competence, which is reflected in the indicators of academic success of future teachers of mathematics. We can conclude that the use of distance form of education is a global trend and at this stage of pedagogical science development, we need to look for ways to improve its effectiveness.

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## Internet platforms as alternative sources of information during the Russian-Ukrainian war

### Las plataformas de Internet como fuentes alternativas de información durante la guerra Rusia-Ucrania

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#### Abstract

The deployment of Russian military aggression in Ukraine actualized the search for additional sources of information about hostilities. The war has shown that the official pro-Kremlin media is spreading outright propaganda. So, the demand for independent and operational information about the situation at the front has led to the emergence of individual observers who use available platforms for their activities. The purpose of the article is to analyze Internet platforms as alternative sources of information about the Russian-Ukrainian war. The research used methods of analysis and synthesis, prognostic method, content analysis. The results trace the peculiarities of the use of digital platforms as sources of information about Russian aggression. The main attention is paid to the peculiarities of work in social networks Facebook and Twitter (we are talking about the channels Hromadske.ua, InformNapalm),

#### Resumen

El despliegue de la agresión militar rusa en Ucrania actualizó la búsqueda de fuentes adicionales de información sobre las hostilidades. La guerra ha demostrado que los medios de comunicación oficiales pro-Kremlin difunden una propaganda descarada. Así que la demanda de información independiente y operativa sobre la situación en el frente ha llevado a la aparición de observadores individuales que utilizan las plataformas disponibles para sus actividades. El objetivo del artículo es analizar las plataformas de Internet como fuentes alternativas de información sobre la guerra ruso-ucraniana. La investigación utilizó métodos de análisis y síntesis, método de pronóstico y análisis de contenido. Los resultados trazan las peculiaridades del uso de las plataformas digitales como fuentes de información sobre la agresión rusa. La principal atención se presta a las peculiaridades del trabajo en las redes sociales Facebook y Twitter (estamos hablando de los

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messengers (Telegram pages of the Center for countering disinformation at the NSDC, InformNapalm, DeepState). Attention is also drawn to independent OSINT researchers, whose reports made it possible to detect war crimes committed by the Russian army during the occupation of certain areas of Ukrainian territory. The conclusions emphasize the importance of further research into this vector, as independent groups of analysts actively use Internet platforms for work.

**Keywords:** Russian-Ukrainian war, Internet platforms, OSINT analytics, mass media.

## Introduction

The unfolding of Russian aggression in Ukraine, which began in 2014 with the occupation of Crimea and the organization of separatist quasi-state formations (Sydorova et al., 2022), broke out with a new force in February 2022. In fact, it is possible to follow the conduct of hostilities in real-time, as the breadth of the frontline and the saturation of information transmission facilities ensured that footage from both the Ukrainian and Russian sides was quickly aired. This level of saturation changes the perception of war journalism and journalism in general, which are beginning to “compete” with the latest Internet platforms, where all interested parties post content of interest that quickly spreads across the Web. The use of such a tool can become an instrument of propaganda because there is a desire to present one's achievements in a more favorable light in a hard-fought environment (Dragneva & Wolczuk, 2018). At the same time, the very principle of presenting military actions is quite revolutionary. Moreover, it is not only the political or informational aspect that is being talked about. Thanks to digital technology, there is also surveillance and recording of the commission of war crimes - for example, Russian shelling of Ukrainian settlements with incendiary shells. Some military specialists, thanks to available videos, make detailed analyses of the tactics of troop movements and their actions in combat.

The use of Internet platforms also has negative manifestations. The use of Internet platforms also has negative aspects, most notably the use of provocative or deceptive materials, covert propaganda, sowing discord and intolerance, etc. (Singh, 2021). (Singh, 2021). In the context of

canales Hromadske.ua, InformNapalm), mensajeros (Telegram páginas del Centro para contrarrestar la desinformación en el NSDC, InformNapalm, DeepState). También se llama la atención sobre los investigadores OSINT independientes, cuyos informes permitieron detectar crímenes de guerra cometidos por el ejército ruso durante la ocupación de determinadas zonas del territorio ucraniano. Las conclusiones subrayan la importancia de seguir investigando este vector, ya que grupos independientes de analistas utilizan activamente las plataformas de Internet para trabajar.

**Palabras clave:** Guerra ruso-ucraniana, plataformas de Internet, análisis OSINT, medios de comunicación de masas.

war, these measures will definitely increase in frequency and frequency of use.

The purpose of this article is to analyze Internet platforms as alternative sources of information about the Russian-Ukrainian war.

## Theoretical Framework or Literature Review

The literary basis of the study consists of the works of European and American scholars who have studied the peculiarities of the functioning of Internet journalism. In particular, the American researchers Brooks & Porter (2020) formed a model of media influence on the ideology of content in social networks. They note that many people now rely on social media as their main sources of information, while at the same time, how the dissemination of media information with ideologies in the whole political space is important for the formation of online discussions outside the networks. Norwegian researchers Karlsen & Aalberg (2021), in their pilot study, determined the impact of Internet media on the formation of consumer trust in content. American researchers Warwick et al., (2021) described the problem of the successful use of social media. In addition, Golbeck (2015) investigated the peculiarities of the development of modern Internet journalism, characterized the main features of Twitter.

At the same time, Pavlik (2022), a well-known American researcher of the influence of modern technology on the media, described the key features of the coverage of the Russian-Ukrainian war in the Western media. Hurska (2021) described the main manifestations of

hybrid warfare using the events in Ukraine as an example. Key aspects of the information confrontation between Ukraine and Russia are reflected in the work of Romanian scholars Bină&Dragomir (2020). The Bulgarian researcher Michailova (2022) explored similar issues. Ukrainian researcher Bukina (2022) described the importance of media literacy during Ukraine's hybrid war. On the other hand, Veselkov (2022) investigated the specifics of information warfare since the full-scale invasion of Ukraine by the Russians. Zhabotynska & Ryzhova (2022) analyzed pro-Russian Chinese media and identified the main disinformation facts disseminated by these media. The methodological basis of the article is also based on the findings of researchers who have studied the peculiarities of information security in the conditions of the Russian-Ukrainian war. In particular, Prokopenko (2022) studied the key aspects of information policy formation in the conditions of global challenges of modernity. Hbur (2022) identified the theoretical foundations of information security of Ukraine as a significant part of the national security of the country as a whole.

### Methodology

The study is formed based on analysis and synthesis, by which initially the main subject of research (Internet platforms) is divided into smaller parts (problems): features of the use of Internet journalism in the conditions of military operations, coverage of war events on Twitter, the value of Telegram channels for informing the population is investigated. Later these parts are combined and their own judgments are formed. Based on the predictive method the problem of further use of Internet platforms as sources of coverage of the events of the Russian-Ukrainian war was reflected.

The study analyzed the individual Internet sites talking about the war and their acanthus in social networks, in particular, Facebook and Twitter: Hromadske.ua, InformNapalm, Ukraine Crisis Media Center, etc. At the same time, much attention is paid to the role of modern Telegram channels in informing, for this purpose such channels as the Center for Counteracting Disinformation under the National Security and Defense Council, Spravdi, InformNapalm, DeepState, etc. are studied. Particular attention is paid to the personal channels and pages of famous politicians.

The descriptive method, which was implemented to implement the theoretical basis of the

scientific work and the main theoretical postulates of the functioning of platforming and content; content analysis of the content of the platforms in the period of four months from July to October 2022. The method of surveying 1000 respondents to find out the estimated number of platforms subscribed to by different categories of respondents.

During the survey, respondents were asked to indicate the range of Internet resources and digital channels of information transmission that they used to obtain truthful information about events in Ukraine, in particular, about the unfolding of Russian military aggression. To complete, the survey was divided into age groups, which made it possible to determine the dynamics of the influence of digital journalism on the audience, according to preferences. Based on this, it was possible to generalize about the greater impact of the transmission of digital information on social processes in the future. Such a result could also be obtained thanks to the combination of interviews with the forecast method

### Results and Discussion

#### Digital Platforms as Sources of Information on Russian Aggression: Features of Use

Of particular importance in covering the events of the Russo-Ukrainian war is Twitter, a social network where users can create messages (tweets) with a maximum length of 280 characters and share them with their followers (Golbeck, 2015). In particular, the independent media resource Hromadske.ua is dedicated to news and events in Ukraine. It actively monitors the events of the war in Ukraine and shares information about the consequences of local residents. InformNapalm media platform specializes in tracking Russian aggression in Ukraine and other countries. Their Twitter account distributes all sorts of news about the war in Ukraine and provides comprehensive analysis of Russian propaganda in social networks. A non-profit resource called Ukraine Crisis Media Center was created to implement information analytics regarding various events in Ukraine. The account generates special reports on the war and shares analyses of the situation in certain areas. In general, this resource covers various topical reports related to the war in Ukraine, which cover economic, political, humanitarian and cultural issues. According to a study of Ukraine Crisis Media Center content on their Twitter account, several themes can be identified. First, reporting on the war and

violations of major international conventions by the Russians is important. The platform regularly reports on the situation on the front, including a number of crimes committed by the Russians, analyzes the statistics of attacks on Ukrainian Bpositions, etc. (Center for countering disinformation at the NSDC, 2023, February 20). Second, a separate focus of the account is humanitarian aid and the protection of human rights: the platform provides up-to-date information about humanitarian aid to residents in frontline areas, as well as information about the protection of human rights in the realities of war (Center for countering disinformation at the NSDC, 2023, February 25). On the other hand, the platform characterizes Russian propaganda, analyzes Russian fakes, disinformative messages, and demonstrates how the Russian media falsify the real facts about the events in Ukraine. Also, this resource publishes actual political statements of presidents, governments, politicians of different countries about the events in Ukraine and its support. Their official page has a separate section called Russia attacks Ukraine: live update, where news related to the Russian-Ukrainian war is constantly updated (Ukraine Crisis, 2022), the section links to current updates on Twitter.

Recently, Telegram has become especially popular and is displacing Facebook as a source of communication and information delivery (Bukina, 2022). The key reason for this is that Facebook has not changed at all in recent years (Karpitskaya & Chuyanava, 2021), and the generation that grew up on it, therefore, it does not meet the basic needs and requirements of today's younger generation (Pavlik, 2022). Therefore, Telegram positions itself as a mainstream messenger whose key goal is to provide a safe environment for communication. The main distinguishing feature of this platform is channels that are completely different from those on Twitter or Facebook (Warwick et al., 2021). This platform works in a very different way, it satisfies the demands of society directly through the delivery of short these messages at maximum speed. Consequently, the key features of Telegram are promptness, speed, and accessibility. Ukrainian Telegram functions through so-called nets: channels that display current social and political topics and often distribute materials from one channel to another (Pavlik, 2022). What distinguishes them is their openness and anonymity, i.e., they can be hosted on behalf of a well-known political, cultural, or other figure. In addition, they are formed based on anonymity, that is, no one will know their origin and it is not always easy to establish their

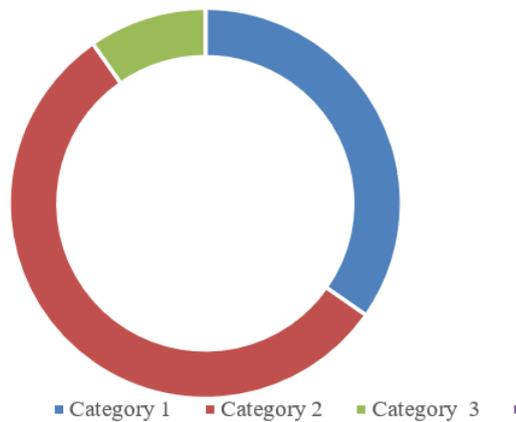
key purpose. These factors often influence the formation of the illusion of freedom in Telegram (Brooks & Porter, 2020).

Since the beginning of Russia's full-scale invasion, the messaging platform has become a digital war news distribution network (Hbur, 2022). Contemporary researchers note that it is a tool for governments and citizens on both sides to share information (Prokopenko, 2022). Many Ukrainian politicians, parties, and officials, including President V. Zelensky, run their own channels. The Russian government does the same. Consequently, the Telegram network has become the main social Internet platform offering an unfiltered view of the events of the Russian-Ukrainian war. It is known that the Ukrainian government quickly repurposed the official channel COVID-19, which had been used in recent years to share news about the spread of the crown virus and to provide official effective information on the fight against it. This project was renamed UkraineNow and now has more than four million readers on Ukrainian and English channels. Minister of Digital Transformation N. Fedorov's team used this program to recruit the so-called "T Army," now consisting of 300,000 cybersecurity volunteers. President V. Zelensky actively uses Telegram to report important news and share personal videos with the world. As of February 2023, his channel had more than 9 million people. At the same time, Ukrainian authorities have found several other practical uses for the platform. Most different cities and towns or local authorities organize their own Telegram channels. In this way, authorities disseminate various air raid warnings, shelter map data, security information, etc. Consequently, since the beginning of the full-scale Russian invasion, this platform has become not only a means of receiving information but also acts as a kind of way to inform the civilian population. There are also special telegram bots through which Ukrainian citizens can report on the movement of Russian troops or equipment (Pace University (n.d.)). The most common Telegram channels in Ukraine are: Center for Countering Disinformation under the CNBO, Spravdi, Inform Napalm, Deep State, Public, etc. A special feature of the DeepState platform is the map of military operations, which reflects in detail all the territorial changes in the war. In addition, the resource maintains detailed daily analytics and a review of events on the front. The Center for Countering Disinformation debunks major propaganda fakes and disinformation messages. In particular, the official website of the Center contains important messages, such as "What is the purpose of the

main Kremlin IPSOs in the war against Ukraine,” “Behind Putin's Address to the Federal Assembly,” “How the Kremlin Altered Entire Wars Against Ukraine,” etc. The International Intelligence Community's InformNapalm channel has over 150,000 subscribers and is a volunteer initiative to disseminate current news and reporting on the Russian-Ukrainian war. DeepState contains important analysis about events on the front in Ukraine. AFU-operational channel, with 450 thousand subscribers, actively disseminates reports on current news regarding

the situation on the front and the successes of the AFU.

Also, the interview was provided. Respondents had the question: "How many platforms and publics are you subscribed to in order to be constantly informed about events in Ukraine?". All respondents were divided into age categories. The first category was Youth (18 to 35). The second category was Middle (35–50 years old). The third group was Old (from 50 to 61 years old). Schematically, it can be represented as follows.



**Fig. 1.** The amount of platforms subscribed to by respondents of different age categories

In results we obtained the following statistic: the first age category receives information systematically from at least 5 to 8 platforms or publics. The second category is from 5-11, but 75% of the respondents of this age category indicate that they have at least 3 publics that they prioritize and trust the most among all subscribers. The third age category subscribes to 3 to 6 telegram channels and media platforms that they trust the most and do not take into account others, because they are authoritative for them. Also, the specified age category informs that they receive news from traditional mass media, which are more authoritative for them than other sources.

As a result, we obtained the following statistics: representatives of the first age group systematically received information from at least 5-8 platforms or online publics. Representatives of the second category indicated that they have at least 3 publics that they consider to be quite authoritative. People in the third age group subscribe to 3-6 telegram channels or other online platforms that they trust. At the same time, these people also consider traditional media reports to be authoritative, which are sometimes trusted much more. Thus, representatives of the

younger generation have more trust in online resources and digital media than older people. This indicates that trust in online journalism and digital information channels will continue to grow.

**OSINT research on the Russian-Ukrainian war**

OSINT platforms became popular during the Russian-Ukrainian war, publishing private investigative information and having high efficiency (Kordan, 2022). Open-source intelligence (OSINT) is a theoretical methodology, concept, and definition of tools for searching and retrieving military, political, and economic information in principle using open sources that are not in violation of law (Hurska, 2021). These analytics are acceptable for use in national defense and security decision-making, operational investigative procedures, etc. (Veselkov, 2022). Typically, OSINT consists of the following elements: finding information resources, registering them, recording and analytic-synthetic parsing of “raw” information, storing the resulting data, disseminating it, and setting up security. Primary data, even from open sources, with the proper level of processing, can

contain a lot of valuable information, which after synthetic parsing can already be secret (if there is a need to have the status of state secrets) (D'Anieri, 2019). In addition to photographs and television footage, the field of analysts includes media publications, scientific publications and conference presentations, open government data, commercial literature, patent information, radio monitoring, and aerial surveys from open sources (e.g., Google Maps).

Such research, due to the development of digital technology, is being done not only by professional analysts and intelligence agencies but also by ordinary users who like to investigate (Pawłowski et al., 2022). Since information is publicly available on the Internet, it is not forbidden by law (Karlsen & Aalberg, 2021). In the realities of the Russian invasion of Ukraine, such analysts have had several notable successes that have become global sensations, unfortunately with a negative flavor.

On July 17, 2014, the Malaysian Boeing 777 was shot down in the sky over the Donetsk region. Bellingcat group of private researchers, based on the analysis of the available material on the web, determined that the perpetrators of the tragedy were pro-Russian separatists, who used Buk SAM of one of the Russian brigades (apparently, under the command of the Russian military) to carry out the attack. The Russian side concealed this crime for a long time, but the case before the Dutch court established the direct involvement of Russian citizens in this act (Inform Napalm, 2023). During the Russian-Ukrainian war, the Russian Ministry of Defense and the official Kremlin attempt to recognize the released photographs and video evidence of Russian brutality and crime as provocations and staging for the European and American media (Bîñă & Dragomir, 2020).

The official Kremlin media have long denied the crimes of Russian troops in Bucha, noting that local residents were not harmed and that exits from the city were not blocked. Such assessments were picked up on pro-Russian Internet platforms, and there were even attempts to disprove the Wikipedia article in question as false. At the same time, OSINT specialists from the U.S. company Maxar Technologies were the first to try to refute the fakes of Kremlin propaganda. Having analyzed satellite photos, they presented pictures of tortured bodies left in Bucha after the Russian military left there. Thanks to this, it is established that civilians began to be killed from March 9-11. They were in the same places where they were found by the

Ukrainian military who liberated Bucha on March 31. Based on OSINT analysis, it was possible to establish that the killed civilians had been in this position for three weeks - the said crime was definitely committed by the Russian military. The information of private OSINT-researchers, when verified, turned out to be true and was published by several well-known American publications on their websites.

A weighty Internet platform for independent experiments was the Dutch project Oryx. It is based on OSINT analytics, a confirmation of combat losses in equipment based on open sources. Initially, this site was focused on the Syrian war. However, since February 2022, the focus has been on Russian aggression. Thanks to the detailed work of this project, the catastrophic losses of the Russian army in Ukraine are now proven. It is primarily about military equipment, as Oryx specialists work with visual sources, collecting information about destroyed, captured, and disabled combat vehicles, tanks, artillery, etc. At the same time, OSINT researchers are functioning, researching personnel losses. For example, the account NecroMancer (which operates on the platform of the social network Twitter) from 2014 calculates losses of pro-Russian separatists and the Russian army in eastern Ukraine. For this purpose, it uses information from open sources - primarily social networks. He supports his calculations and messages not only with messages taken out of context, but also with photos from funeral sites, official reports of the Russian authorities, etc.

So, OSINT analytics looks like an extremely promising independent branch of journalism that posts relevant information on relevant Internet platforms (Bila & Hrytsenko, 2022). Although these studies can spread fakes and propaganda, individual groups of researchers value their renown and report only verified information.

## Conclusions

Internet platforms have become influential alternative sources of information about the course of the Russian-Ukrainian war. The digitalization of society has resulted in information that can be obtained and transmitted instantly. Because of this, the Internet has become an influential field for the emergence of independent research that is not devoid of subjectivity (personal or planned). In particular, the Russian-Ukrainian war is actively represented in social networks that span the entire modern world. For example, there are independent Hromadske.ua, InformNapalm, and

other media researchers on Twitter who specialize in reviewing the consequences and course of Russian aggression in Ukraine. There are also descriptions of military actions and separate information on them on Facebook and other powerful platforms. The resources of messengers are also actively used to disseminate independent information. In Ukraine, Telegram is particularly popular, with individual groups disseminating information about the course of hostilities and other messages. Such groups also have a political bias (pro-Russian, pro-Ukrainian).

The work of OSINT researchers has become an important area of activity, which the Russian-Ukrainian war has brought to the fore. Independent groups of experts and analysts working with open-access information have dispelled several myths of Russian propaganda and attested to the war crimes committed by the Russian army since 2014. For example, Belingcat group was one of the first to provide weighty photo and video evidence of Russian military involvement in Boeing 777 damage in July 2014. Also, other groups of private analysts proved by open source materials the involvement of the Russian military in the mass murder of civilians in Bucha, Kyiv region. Although the OSINT research community is also biased, serious international groups value their own reputations and do not allow doubts about the truthfulness of their own investigations. Further research in this area is quite promising since through the use of Internet platforms private groups of analysts are able to act as a valid alternative to the official media.

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