Students’ healthy lifestyle formation in English classes (using materials of Polish and Ukrainian authors)

Формування здорового способу життя студентів на заняттях англійської мови (із використанням матеріалів польських та українських авторів)

Kształtowanie zdrowego trybu życia studentów na lekcjach języka angielskiego (z wykorzystaniem materiałów autorów polskich i ukraińskich)

Abstract

The article aims to present the comparative results of a study of the formation of a healthy lifestyle among students of some pedagogical specialties; to analyze the content of the students’ healthy lifestyle formation in English lessons, and to present materials on health issues from the works of Ukrainian and Polish authors which could be integrated into the content of English lessons. The following research methods were used: analysis of scientific literature, surveys, quantitative and qualitative analysis of the obtained results. Motivational-value, cognitive and behavioral-activity criteria for the formation of a healthy lifestyle for students are determined. The participants of the study were first-year students majoring in “Biology” (n=34, the experimental group – EG) and “Primary Education” (n=86, control group – CG) at Vasyl Stefanyk Precarpathian National University (Ukraine). The pedagogical possibilities for solving the outlined tasks through teaching English are proved. It was found that “health improvement” is possible under the following

Anotация

Мета статті – представити порівняльні результати дослідження сформованості здорового способу життя студентів деяких педагогічних спеціальностей; проаналізувати зміст формування здорового способу життя студентів на заняттях з англійської мови; репрезентувати матеріали здоров'ябережувальної тематики з творчості українських і польських авторів, які доцільно інтегруються у зміст занять з англійської мови. Застосовано такі методи дослідження: аналіз наукової літератури, опитування, кількісний та якісний аналіз отриманих результатів. Визначено мотиваційно-ціннісний, когнітивно-пізнавальний і поведінково-діяльнісний критерії сформованості здорового способу життя студентів. До експерименту були залучені першокурсники спеціальностей “Біологія” (n = 34; експериментальна група – ЕГ) і “Початкова освіта” (n = 86; контрольна група – КГ) Прикарпатського національного університету імені Василя Стефаника (Україна). Доведено педагогічні можливості щодо вирішення окреслених завдань при викладанні англійської мови. З’ясовано, що “здоров’ябережувальне

129 PhD in Pedagogical Sciences, Associate Professor, Vasyl Stefanyk Precarpathian National University, Ukraine.
130 PhD in Pedagogical Sciences, Associate Professor, Vasyl Stefanyk Precarpathian National University, Ukraine.
131 Doctor of Pedagogical Sciences, Professor, Vasyl Stefanyk Precarpathian National University, Ukraine.
132 PhD in Pedagogical Sciences, Associate Professor, Vasyl Stefanyk Precarpathian National University, Ukraine.
133 PhD in Pedagogical Sciences, Associate Professor, Vasyl Stefanyk Precarpathian National University, Ukraine.
pedagogical conditions: systematic and purposeful inclusion of healthy lifestyle issues in the content of education, use of additional literary works, especially by Ukrainian and Polish authors, and writing effective teaching aids on techniques for the use of additional literature in the process of healthy lifestyle formation in both classroom and extracurricular work.

**Keywords:** Healthy lifestyle (HLS) formation, English lessons, Polish and Ukrainian authors.

**Streszczenie**

Cel artykułu – przedstawić porównawcze wyniki badań kształtowania się zdrowego trybu życia studentów niektórych specjalności pedagogicznych; zanalizować treści kształtowania zdrowego trybu życia studentów na lekcjach języka angielskiego; zreprezentować materiały prozdrowotne z dziedzic autorów ukraińskich i polskich, które docelowo można wkomponować do treści zajęć z języka angielskiego. Zastosowano następujące metody badawcze: analiza literatury naukowej, ankietowanie, analiza ilościowo i jakościowo uzyskanych wyników. Zdefiniowane są kryteria kształtowania zdrowego trybu życia studentów: motywacyjne, wartościowe, poznawcze, behawioralne i czynnościowe. W eksperyencie brał udział studenci pierwszego roku kierunku “Biologia” (n=34; grupa eksperymentalna – GE) i “Oświata podstawowa” (n=86; grupa kontrolna – GK) Prykarpackiego Uniwersytetu Narodowego imienia Wasyla Stefanyka (Ukraina). Uudowodniono możliwości pedagogiczne w rozwiązywaniu określonych zadań pod czas prowadzenia lekcji języka angielskiego. Stwierdzono, że wypełnienie tej dyscypliny treścią prozdrowotną jest możliwe w następujących warunkach pedagogicznych: systematyczne i celowe dołączanie tematów, dotyczących zdrowego trybu życia, do treści kształcenia; właściwe wykorzystanie dodatkowej literatury, w szczególności materiałów autorów ukraińskich i polskich; tworzenie podręczników edukacyjnych i metodycznych dotyczących technologii korzystania z dodatkowej literatury w kształtowaniu zdrowego trybu życia w procesie edukacji i pracy pozalekcyjnej.

**Słowa kluczowe:** kształtowanie zdrowego tryb życia (ZTŻ), zajęcia z języka angielskiego, autorzy polscy i ukraińscy.

**Introduction**

The health of the younger generation has been and should remain a priority investment in the welfare of every nation (Al-Shehri, 2002). Due to the influence of bad ecological and social situations in many countries of the world, there is a deterioration in health, an increasing number of chronic diseases, and declining indicators of physiological and mental development of modern youth. At the same time, the effectiveness of students’ education is determined by their ability to work, and their health in general. Experiences of loneliness, frustration and so-called stress diseases (cardiovascular diseases, hypertension, stomach diseases, visual impairment) can be observed in students’ environments. Hyper dynamic due to the priority of “digital life” and excessive use of gadgets caused an informational impact on the minds of the young by means of the media, which often impose bad habits, promote the consumption of fast food, etc.

In the context of the study, we will consider another aspect of the problem, namely, Russia’s large-scale military invasion of Ukraine in February 2022, which has led to a significant deterioration in the physical, mental, social, and spiritual health of most citizens. Periodic (and in some regions of the country systematic) shelling of civilian objects as well as the sounds of air alerts have a negative impact on the moral and emotional being of people. Ukrainians feel great support from all over the world, including Poles, who are close neighbors. Therefore, the study focuses on the works of scientists from Ukraine and Poland, dealing with the problems of forming healthy lifestyle habits.

It is extremely important to determine the main directions of the university’s work on updating the content of education in the context of the introduction of healthy lifestyle technologies (St Leger, 1997). As we are convinced that the life and health of children and youth are the highest...
values and indicators of a civilized society (Budnyk & Mazur, 2017). Therefore, students’ healthy lifestyle (HLS) formation is an important component of the educational process at any institution of higher education. This allows students to preserve and strengthen their own health and prepares them for health promotion in their forthcoming professional activity (Smolinska et al., 2020).

The authors identify some aspects of applying the potential of the content of the humanities (in particular, English) for the development of healthy lifestyle habits in university students (on the example of an educational institution in Ukraine).

The purpose of the article is to present the comparative results of the study of the formation of a healthy lifestyle among students majoring in “Biology” and “Primary Education”, to analyze the technologies of students’ HLF formation in English lessons and to present health-preserving works of Ukrainian and Polish authors which could be integrated into the content of English language classes.

Literature Review

The issue of HLS formation of children and young people is within the scope of many scientists’ research. In our paper, we address some of the most influential ideas. Thus the works of O. Svyyrydenko (2010), who analyzed the pedagogical conditions for healthy lifestyle education of teenagers at sports centers for children and youth, are of great value. O. Danyysko (2015) summarizes the latest scientific approaches to the problem of healthy lifestyle formation among the young generation and specifies methodological and theoretical approaches to the formation of a healthy lifestyle among schoolchildren by means of physical education and sports. P. Mazur et al. (2018) devoted their work to promoting a healthy lifestyle among schoolchildren (comparative study between Poland and Ukraine).

Some papers are dedicated to various aspects of teaching the students of higher education institutions (HEIs) the fundamentals of a healthy lifestyle. V. Blanchard (2006) studied the health knowledge of student teachers. V. Bobrytska devoted her doctoral dissertation to theoretical and methodological basics of pre-service teachers’ healthy lifestyle formation in the course of learning Natural Sciences. The author noted that the process of HLF involves the implementation by every student of their professionally motivated, conscious, long-term activities aimed at improving their inherited health reserves and correcting their individual lifestyle (Bobrytska, 2006, p. 11–12). The same ideas are presented by O. Bondarenko (2008), who researched the formation of valeological competencies of pedagogical university students in the process of their professional training, and L. Bezlugu (2009) who considered the issue of self-directed work organization in the field of health culture formation among HEI students. W. El Ansari et al. (2011) assessed health promoting behaviours and lifestyle characteristics of students at seven universities in the UK, and compared differences in these parameters between males and females.

O. Sokolenko (2008) highlighted the role of HEIs in the formation of the students’ healthy lifestyle. The scholar notes that good health and a high-level health culture are prerequisites for the effective performance of future professional health-promoting educational activities (Sokolenko, 2008, p. 3–4). L. Dudorova (2009) characterized the educational conditions for the formation of pre-service teachers’ need in HLS in the process of Physical Education. T. Ivanenko (2011) studied the semantic-methodical aspects of the formation of female university students’ positive evaluative attitude to health-improving activities. V. Yefimova (2013) analyzed the content of pre-service Natural Science teacher training as regards the performance of health-promoting techniques.

O. Martyniv (2015) defines the essence of the content and structure of health care culture, theoretically substantiates and experimentally verifies the effectiveness of the implementation of a set of pedagogical conditions and models of students’ health care culture on the basis of interdisciplinary integration. V. Llorent-Bedmar & V. Cobano-Delgado (2019) studied the health education training of university students taking a degree in early childhood education. Many scholars have found out that keeping a healthy lifestyle and a responsible attitude toward their own health positively affect students’ behaviour and actions. The research of N. Kravchuk (2017) is in line with I. Mardarova (2019) who emphasized the importance of efficient educational strategies and application of techniques in the formation of students’ HLS. Therefore, the problem of the formation of students’ HLS is of great scientific interest. At the same time, there are few works presenting the comparative analysis of the techniques of forming students’ health-preserving competencies. And this area of the research is, in
our opinion, quite promising. Among the surveys of this format, the article by M. Oliiar et al. (2020) takes a special place, as it highlights the comparative results of a study of the readiness of pre-service primary school teachers’ and physical education teachers’ for health promotion in educational institutions. H. Sivkovich et al. (2020) devoted their work to the comparative results of the study of the readiness of students majoring in “Primary Education” and “Preschool Education” to carry out health work in professional activities.

Despite the significant contribution of modern scholars to the development of study of the problem of students’ HLS formation, we should admit a lack of works presenting a comparative analysis of the relevant pedagogical process and suggest constructive ways of improving it. In addition, the potential contribution of the so-called “unhealthy” subjects to students’ HLF is poorly understood.

Methods

Research Design

Choosing between quantitative and qualitative methods, which are very popular in designing research and data analysis (Eyisi, 2016), we focused in our study on a mixed approach. The quantitative data (developed questions), enabled us to determine students’ attitude to the issue of a healthy lifestyle and to assess the amount of their knowledge. We also employed qualitative methods to interpret students’ opinions on the problem and summarise their experience. Descriptive statistics were used to summarise and systematise the survey data, to transform their qualitative characteristics into quantitative (numerical) ones. Visual methods (tables) were used in the process of data description. Traditional quantitative methodology (Shyroka, 2011) was applied to obtain reliable and valid results of the analysis of students’ answers which were passed through the developed scaling procedure and given numerical values, after which the results were processed in the same way as quantitative ones, statistically.

Sample

The study involved randomly selected first-year students majoring in “Biology” (n=34, experimental group – EG) and “Primary Education” (n=86, control group – CG) at Vasyl Stefanyk Precarpathian National University. The initial survey was conducted in September-October 2020. We developed questionnaires for the students and performed statistical analysis of survey data. The study traced the motivational-value, intellectual-cognitive and behavioral criteria for the formation of a healthy lifestyle among students. To achieve the aims, the authors of the paper used a set of research methods: theoretical (summarisation; analysis and synthesis), empirical (observation, questionnaire, and interview), and visual (tables, diagrams).

Instruments and Procedure

The data collection included the use of a questionnaire that contained closed-ended and open-ended questions.

Data Analysis

The data analysis process was divided into several stages. At the first one, the students completed questionnaires and we conducted conversations and observation. After that, the authors of this research discussed the results of students’ responses to open-ended questions. They collected quantitative data from the questionnaire surveys in the form of an excel sheet and analysed them statistically, providing percentages. At the final stage, all qualitative data obtained from the respondents (in the process of observation and conversation) were interpreted using a comparative method of analysis and coding techniques.

Ethical issue

In accordance with the ethical principles of scientific research, we informed the students majoring in “Biology” and “Primary Education” about the purpose of our survey, moreover we stressed that they had the right to refuse to participate in the experiment at any time. The questionnaire, to which the consent form was attached, did not contain any identifying information.

Results

Ukrainian scientists V. Bobrytska (2006), L. Dudorova (2009), N. Kravchuk (2017), V. Yefimova (2013), L. Slyvka (2014) identified the following criteria for the formation of students’ HLS: motivational-value, cognitive and behavioral. The motivational-value indicator reflected students’ awareness of their needs, interests, values regarding health and a HLS. In other words, it determined the students’ views on the value of health, their desire to get social-hygienic knowledge and master healthy lifestyle skills, to succeed in life and professional activity.
as well as their ability to abandon pernicious habits. The cognitive component highlighted the accumulated intellectual potential of students in the field of healthy lifestyle organization, that is, a combination of psychological, pedagogical and special knowledge necessary for strengthening and preserving one’s own and other people’s health. The behavioral criterion combined students’ gnostic, prognostic, evaluative, design, communicative etc. skills and abilities, focused on a healthy lifestyle. It monitored the students’ capacity for the implementation of a healthy lifestyle, their awareness of educational and preventive techniques, participation in health initiatives in their social environments, and their desire to fill their own leisure time with physical activities, useful things, work, creativity etc. This criterion showed the level of students’ involvement in the holistic system of HLS or its elements, as well as their readiness for the preservation and promotion of health.

The initial survey was conducted in September-October 2020. Its results showed that the level of HLS formation among the first year students of both majors was almost the same by all criteria. Thus, the majority of students in both groups (92% in EG and 94% in CG) recognized the importance of keeping a healthy lifestyle in maintaining and strengthening their health (Table 1). The respondents’ opinions on the close connection between a person’s quality of life and a healthy or unhealthy lifestyle were also unanimous. 86% of the students in EG and 82% of the students in CG gave positive responses to this question. Almost all respondents gave negative answers “Would you like your children’s future teacher to smoke (92% in EG, 94% in CG) or drink alcohol (100% in EG, 100% in CG)?” Only 8% of the students majoring in “Biology” and 6% of “Primary Education” students wrote that smoking was not a problem for them. These results show that their future children’s health is a value for the students, they are prejudiced against a potential mentor of their own children who has bad habits and would be a “negative example” for them.

### Table 1. The results of the survey according to the motivational-value criterion.

<table>
<thead>
<tr>
<th>Question option</th>
<th>EG, %</th>
<th>CG, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think that keeping a healthy lifestyle is important for maintaining and strengthening one’s health?</td>
<td>92</td>
<td>94</td>
</tr>
<tr>
<td>Do you believe that a healthy (unhealthy) lifestyle affects a person’s quality of life?</td>
<td>86</td>
<td>82</td>
</tr>
<tr>
<td>Would you like your own children’s future teacher to smoke?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– yes, I would</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>– no, I wouldn’t</td>
<td>92</td>
<td>94</td>
</tr>
<tr>
<td>– the teacher’s smoking is not a problem for me</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Would you like your own children’s future teacher to drink alcohol?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– yes, I would</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>– no, I wouldn’t</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>– the teacher’s drinking alcohol is not a problem for me</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: The survey was conducted by the authors of the article

The “cognitive” dimension of the formation of students’ healthy lifestyle was determined by their responses to the questions presented in Table 2. 100% of the students from both groups proved the necessity of knowledge about a healthy lifestyle. 42% of the respondents from EG and 38% from CG understood the concept of a “healthy lifestyle” and knew its components. 36% of the participants from EG and 34% from CG were able to name the important forms of sport and healthy behaviour. When discussing the arguments against smoking and alcohol use, we received the following answers: “smoking causes disrespect to tobacco users” (12% from EG and 10% from CG), “smokers and alcohol drinkers often suffer from headaches” (14% from EG and 8% from CG), “smokers and alcoholics do not form strong families” (6% from EG and 8% from CG). Less than a third of the students from both groups were able to describe such concepts as “adequate nutrition” (24% from EG and 18% from CG), “health reserves” (12% from EG and 14% from CG), “risk behavior” (16% from EG and 18% from CG), “responsive behaviour” (20% from EG and 14% from CG), “ways of resisting social pressure” (12% from EG and 10% of CG). The students named the following negative effects of smoking: high blood pressure (20% from EG and 16% from CG), laryngeal tissue irritation (22% from EG and 12% from CG), eye irritation (16% from EG and 18% from CG), vascular disease (28% from EG and 30% from CG), and respiratory disorders (16% from EG and 14% from CG).
Table 2.
The results of the survey according to the cognitive criterion.

<table>
<thead>
<tr>
<th>Question option</th>
<th>EG %</th>
<th>CG %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do we need knowledge about a healthy lifestyle?</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>How do you understand the concept of a “healthy lifestyle?” Name its components.</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>What are the important forms of sport and healthy behaviour?</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>Name harmful factors affecting human health:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– smoking causes disrespect to tobacco users</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>– smokers and alcohol drinkers often suffer from headaches</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>– smokers and alcoholics do not form strong families</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Describe the concepts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– adequate nutrition</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>– health reserves</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>– risky behavior</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>– responsible behaviour</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>– ways of social pressure resistance</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>What negative effects of smoking do you know?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– high blood pressure</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>– laryngeal tissue irritation</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>– eye irritation</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>– vascular disease</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>– respiratory disorders</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Source: The survey was conducted by the authors of the article</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The next set of questions met the behavioral criterion (Table 3). The students had to choose between the healthy lifestyle components they performed in everyday life. The results of our study show that personal hygiene skills (skin-, teeth-, hair care, etc.) received high and medium levels of formation (76% from EG and 82% from CG), while only half of the students (52% from EG and 51% from CG) kept work and rest regimes – they altered their mental and work activities, ate regularly, and had sufficient rest. 34% of the students from EG and 36% of the teachers from CG mastered nutrition skills – healthy eating, the ability to determine and maintain the quality of food etc. 36% and 32% of the “Biology” students and 40% and 32% of the “Primary Education” students did their morning exercises regularly and were engaged in physical culture and health activities.

Table 3.
The comparative data on the formation of students’ healthy lifestyle skills.

| Healthy lifestyle skills                                                                 | Percentage of students according to the levels (%) | | | | |
|-----------------------------------------------------------------------------------------|---------------------------------------------------|---|---|---|
|                                                                                       | EG High | Sufficient | Low | CG High | Sufficient | Low |
| – I do my morning exercises                                                           | 14      | 22          | 64  | 20      | 20          | 60  |
| – I regularly go in for sports, play games, do physical work                           | 12      | 20          | 68  | 14      | 18          | 60  |
| – I alter my mental and work activities, eat regularly and have sufficient rest       | 16      | 36          | 48  | 17      | 34          | 49  |
| – I’m aware of healthy eating, can determine and maintain the quality of food         | 14      | 20          | 66  | 14      | 22          | 64  |
| – I understand the basics of personal hygiene, take care of my skin, teeth, hair, etc.| 36      | 40          | 24  | 42      | 40          | 24  |
| Source: The survey was conducted by the authors of the article                        |      |      | | | | |

We also note that among the respondents there were students who did not identify themselves with the role of a teacher and “a model of healthy lifestyle” for their future schoolchildren. 6% of the students surveyed from EG and 4% from CG wrote that they smoke a few cigarettes a day, 20% from EG and 16% from CG replied that they smoke a few cigarettes a week. 12% from EG and...
14% from CG confessed that they sometimes drank alcohol with their friends; the number of those who drank alcohol at celebrations was 46% and 48% respectively. Only 2% of the students from each group were interested in health-promoting literature, none of the respondents could remember a book or an article highlighting the educational principles of healthy lifestyle formation.

Analysis of the state of the respondents’ healthy lifestyle formation showed that, on the one hand, they understood the value of health and adequately assessed the impact of people’s lifestyle on their quality of life. The motivational value set of answers proved this fact. On the other hand, students’ knowledge of a healthy lifestyle and ways of maintaining it was fragmental and insufficient. Besides, many students did not keep a healthy lifestyle.

We explain this fact with insufficient attention to the problem of healthy lifestyle formation among university students, and a traditional approach to teaching and education. Besides, health issues are included in the content of studies of some special disciplines. These are: Anatomy, Physiology of Children with the Basics of Genetics and Valeology; Life Safety, Civil Protection; The Basics of Medicine; Valeological Education etc. (Sivkovich et al., 2020, p. 90), – their potential for the formation of a healthy lifestyle among students is limited. The results of the study prompted us to make some changes in the content of the studies of students majoring in “Biology”. We decided to fill the content of the English language studies with health-preserving information. At English classes the students received health-promoting knowledge from various sources (textbooks, manuals, scientific research) written by Ukrainian and Polish authors. The students majoring in “Primary Education” studied English according to the traditional program.

Later, in April-May 2021, we conducted the final stage of the survey and conversations, which showed that the number of EG students with a high level of healthy lifestyle formation reached 52%, while in the CG such students accounted for only 24% (Table 4). These students understood the importance of a healthy lifestyle, had deep knowledge of the relevant conceptual and terminological apparatus, developed positive motivational and value orientation to keeping a healthy lifestyle. The students with an average level of healthy lifestyle formation did not have clear ideas of health-preserving behaviour, did not fully realize the importance of sufficient knowledge of ways of maintaining, strengthening and forming health. There were 36% of the first-year students in EG and 32% in CG who indicated an average level of healthy lifestyle formation. 12% of the respondents from the experimental group and 44% of the respondents from the control group were enrolled in the group with a low level of HLS formation. These students showed little interest in health-related problems, had fragmentary and one-sided knowledge of how to maintain and enhance health, and developed unhealthy lifestyle skills.

Table 4.
Comparative data on the healthy lifestyle formation of students according to the results of the final survey (%).

<table>
<thead>
<tr>
<th></th>
<th>EG</th>
<th></th>
<th></th>
<th>CG</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Average</td>
<td>Low</td>
<td>High</td>
<td>Average</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>36</td>
<td>12</td>
<td>24</td>
<td>32</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: The results of the study were obtained by the authors of the article

Thus, in the result of our experimental work we found out that EG students showed higher indicators of healthy lifestyle formation when compared to the students from the control group.

Discussion

O. Sokolenko notes that first-year students’ awareness of health as a value is very often insufficiently formed and they do not know how to assess their own health adequately (Sokolenko, 2008, p. 11). Thus, low indicators of students’ HLS formation according to the motivational value criterion (Table 1) at the ascertaining stage of the research were, to some extent, predictable. During their studies at the university, the students form a different active attitude to life, differing from that of the schoolchildren: the students assess their capabilities in a different way, they have a desire for self-education and self-improvement. Ultimately, this leads to the understanding of health as a value and develops a sense of responsibility for its maintenance (Sokolenko, 2008, pp. 3–4). Our work, focused
on the formation of Biology students’ ideas about health as a value, culminated in the ascertainment of positive dynamics of the formation of HLS on the motivational value criterion, as evidenced by Table 4.

The results of the study presented in Table 2 showed that only 10–25% of the students in both groups had some knowledge in the field of health preservation. The low level of the cognitive criterion on the formation of students’ healthy lifestyle at the initial stage of their studies at university is explained by the fact, that the content of school curricula presents interdisciplinary integration of the relevant educational vector very sporadically (Martyniv, 2015, p. 6).

The low rates of formation of students’ HLS by behavioral criteria, presented in Table 3, confirmed the conclusions of some scientists (Sivkovich et al., 2020, p. 94) that even a certain level of knowledge about the appropriateness of diet, nutrition, the harmful health effects of smoking or alcohol consumption etc., does not always result in sufficient individual activity for a healthy lifestyle.

Thus, we can conclude that the above differences in the levels of healthy lifestyle formation of students of EG and CG, which were identified by the results of the final questionnaire, are not accidental – they are a consequence of the implementation in the experimental group of certain educational prerequisites for healthy lifestyle formation.

One of these prerequisites concerns the integrity and continuity of the process of forming a system of knowledge, skills and abilities to organize students’ HLS. In their works many scientists constantly emphasize the need to comply with this educational precondition. L. Dudorova believes that HLS formation is an interdisciplinary problem. Therefore, institutions of higher education should ensure this process takes place by implementing the interaction of many academic disciplines and students’ activities (Dudorova, 2009, p. 32). The use of interdisciplinary integration techniques to deepen students’ knowledge and skills about health and a healthy lifestyle is effective (Martyniv, 2015, p. 3).

The English language course has great potential for the students’ healthy lifestyle formation. Scientific works by I. Avdienko and O. Skryl (2012), and by I. Gribkova (2013) indicate this. The researchers emphasize that in English classes, alongside the formation of language and speech competencies, students can consolidate or deepen their knowledge of the basic principles of health maintenance, get acquainted with the world’s latest studies in this field and, by means of communication, share the acquired health-preserving experience. Therefore, a student’s work with health-preserving texts can be a starting point for the formation of his motivation for his own health improvement. Another educational precondition for students’ healthy lifestyle formation is, according to L. Slyvka (2019), the introduction of high quality health maintenance information into the training courses and use of additional literature that would contribute to the “diversification” of the content of education. Adhering to this prerequisite, in English language classes we used the works by K. Bargiel-Matusiewicz & R. Dziurla (2019), A. Bogacz (2009), J. Drabik & M. Resiak (2009), S. Palamar et al. (2020), J. Szymborski et al. (2009), T. Vorontsova & V. Pohonarenko (2011), B. Woynarowska (2011) and K. Zajączkowski (2005). We should add that English classes for the students majoring in Biology were conducted according to the content of the English language course “Speakout” by A. Clare & J. J. Wilson (2015). The health topics of the above literature were logically integrated in the topics of the sections of this publication.

Thus, while studying the topic “Free time”, the students spoke about their leisure time activities. Music fans gave examples of the impact of music on health and well-being. The content of the dictation which we conducted during the study of the topic “Rest”, was filled with information about safe and dangerous situations during active rest. While studying the topics “Transport” and “Travelling”, the students discussed traffic rules. The topic “Health” covered the issue of making decisions about having a responsible attitude to their own and other people’s health. During round table discussions, which we organized to study the topic “Healthy Food”, the students shared experiences of choosing healthy goods, gave examples of buying products for healthy eating and announced different ways of cooking healthy food. The topic “Diseases” provided the students with knowledge of the rules of personal hygiene, told them about the impact of healthy behaviour and good habits on people’s health, about the positive impact of an active lifestyle on the quality and duration of human life, about the risks and dangers of alcohol, tobacco, and drug addiction, about alternatives to bad habits – games with friends, playing sports, pursuing hobbies etc. When studying the topic “Living in
a big city”, the first-year students learned to make decisions about their own safe behaviour in view of situations involving strangers, simulated appeals for help to various services in case of dangerous situations. The topics “Mass Media” and “The Internet” served to form students’ ideas about the rules of online communication safety, the consequences of reckless behaviour on the Internet etc.

The study of these topics contributed to the fact that students majoring in Biology, when compared to the students majoring in Primary Education, showed a higher rate of knowledge of health preserving content by almost 30% (Table 4). This positive result was also due to the fact that we tried to ensure the cognitive activity of EG students, introducing into the content of English classes discussions, debates, role-playing games, work with authentic scientific and popular science sources etc. These activities, as noted by scientists, stimulate creative and critical thinking of students and their ability to analyze, summarize and compare different points of view (Avdieienko & Skryl, 2012, p. 10–11).

As a result, the EG students proved that the information they had received and the format of its representation helped them perceive the concept of a healthy lifestyle more consciously, and developed in them a responsible attitude to their own health. About 50% of the students from this group said they were interested in finding the information they needed to stay healthy. Our observations are consistent with the study of S. Palamar et al. (2020), who believes that properly organized educational activities on the formation of a healthy lifestyle motivate students of higher education institutions to pursue self-education and self-improvement.

**Conclusions**

Students’ healthy lifestyle formation is an important issue that needs to be properly implemented in higher education institutions (Tsependa & Budnyk, 2021). However, it is carried out mainly during the study of the so-called “health-preserving” disciplines. Their number in university educational programs is small. Besides, the objectives of these courses are not focused on the formation of a HLS among students. As a result, the formation of a HLS among students is very low, as evidenced by the results of the initial survey.

Motivation is the basis for students to acquire knowledge about maintaining and strengthening their own and other people’s health. Appropriate knowledge is a means with which to form the intellectual potential of the individual regarding the organization of healthy living and the foundation of a healthy lifestyle.

To fill the gaps in students’ knowledge, it is necessary to saturate as many educational courses as possible with health-preserving content. This makes it possible to expand the boundaries of the educational environment, which would increase the desire of preservice teachers to gain more knowledge about health and its preservation and lead a healthy lifestyle. Learning English takes a special place in the implementation of these tasks, as students’ language and speech competence can be developed by means of topics with health maintenance content. The positive dimension of using the opportunities of this course is further enhanced by the fact that the content of English classes can be filled with information from additional literature. It “diversifies” the content of learning.

Texts by Ukrainian and Polish authors used during English lessons (K. Bargiel-Matusiewicz & R. Dziurla; A. Bogacz; J. Drabik & M. Resiak; S. Palamar et al.; J. Szymborski et al.; T. Vorontsova & V. Ponomarenko; B. Woynarowska; K. Zajęczkowski) helped to increase the level of knowledge and skills of students from the experimental group in the context of having a responsible attitude to their own and other people’s health, traffic rules and safe and dangerous situations during active rest, to healthy food and a balanced diet, personal hygiene, the risks and dangers of alcohol, tobacco, drug use, safety rules for online communication etc.

It is proved that the effectiveness of HLS formation of students depends on compliance with the following educational conditions: systematic and purposeful inclusion of health-preserving topics in the content of education, filling the content of academic disciplines with interesting, diverse, health-oriented information, use of additional literature by Ukrainian and Polish authors and lastly the creation of educational and methodical manuals about the techniques for the use of additional literature on HLS formation during the educational process and in extracurricular work.

**Conflict of interest** – The authors declare that there is no conflict of interest.
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