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Specialists' basic behavioural coping strategies when handling stressful situations

Базисні копінг-стратегії поведінки фахівців під час вирішення стресових ситуацій

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Abstract

The professional activity of a modern specialist is significantly impacted by various stressful situations. Professional stress causes specialists' anxiety, which negatively affects their well-being. The choice of adaptive strategies for handling stressful situations is the key to successful professional activity and emotional stability. The ability to choose the most productive coping strategies enables a specialist to quickly handle any stressful situations.

The aim of this study is to identify the anxiety level and prevailing coping strategies of specialists with different stress levels.

Methods. The research involved the method of analytical information processing and methods of empirical diagnostics. The following statistical methods were used: the Kruskal-Wallis test and the Spearman correlation coefficient.

Results. The obtained results revealed that specialists with a high stress level have high personal and situational anxiety, the prevailing coping strategies are confrontation, escape,

Анотація

Професійна діяльність сучасного фахівця супроводжується значним впливом різних стресових ситуацій. Професійний стрес викликає тривожність фахівців, що негативно позначається на їх благополуччі. Вибір адаптивних стратегій вирішення стресових ситуацій є запорукою успішної професійної діяльності та емоційної стабільності. Здатність обирати найбільш конструктивні копінг-стратегії дозволяє фахівця вирішувати оперативно будь-які стресові ситуації

Метою дослідження виступає виявлення рівня тривожності та домінуючих копінг-стратегій фахівців із різним рівнем стресу.

Методи. Для дослідження застосовано метод аналітичної обробки інформації та методи емпіричної діагностики. Використано статистичні методи: критерій Крускала-Уолеса та коефіцієнт кореляції Спірмена.

Результати. Отримані результати дозволили виявити, що фахівці із високим рівнем стресу мають високу особистісну та ситуативну тривожність, домінуючі копінг-стратегії

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seeking social support and distancing ($p \leq 0.001$). Specialists with a low stress level showed low anxiety and coping strategies of self-control, problem solving, and positive reappraisal ($p \leq 0.001$).

Conclusions. It was empirically proved that the stress level affects the choice of coping strategy. Specialists with high stress levels have high anxiety and maladaptive coping strategies.

Prospects. The obtained results can be implemented in the creation of a programme for the development of adaptive coping strategies of specialists in order to productively handle stressful situations.

Keywords: adaptive behaviour, anxiety, behavioural strategies, professional stress, psychological well-being.

Introduction

In modern society, the professional activity of specialists of different fields is quite stressful. Rapid economic and socio-political transformations inevitably affect the labour market. In turn, this enables employees to fully control their professional activities. As a result, specialists may experience a state of nervous and mental overstrain, anxiety and stress. Professional stress is specific human reactions to the external negative effects of the professional environment, which are psychological and physiological in nature (de Los Santos et al., 2018; Tsekhmister et al., 2019). According to the World Health Organization, work-related stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge. Such stress can be exacerbated by unproductive interactions with colleagues and management.

That is why the problem of preparing competitive specialists capable of effectively performing their professional tasks is one of the urgent problems of modern research. Such a specialist must have not only personal qualities and professional skills, but also must be emotionally stable, ready to make effective decisions in stressful situations. In other words, specialists should have persistent basic coping strategies that enable them to use their own resources in the most useful way.

Coping strategies are certain types of behavioural reactions that have the ability to accumulate and form permanent types of behaviour (Maghan, 2017). The main goal of coping is to ensure the well-being of the individual, his/her stability and

конфронтація, втеча, пошук соціальної підтримки та дистанціювання ($p \leq 0,001$). Фахівці із низьким рівнем стресу виявили низьку тривожність та копінг-стратегії самоконтролю, вирішення проблем, позитивної переоцінки ($p \leq 0,001$).

Висновки. Емпірично доведено, що рівень стресу впливає на вибір копінг-стратегії. Фахівці із високим рівнем стресу мають високу тривожність та неадаптивні копінг-стратегії.

Перспективи. Отримані результати можуть бути втілені у розробці програми розвитку адаптивних копінг-стратегій фахівців з метою конструктивного вирішення стресових ситуацій.

Ключові слова: професійний стрес, адаптивна поведінка, тривожність, психологічне благополуччя, стратегії поведінки.

satisfaction with life. Coping becomes especially important in the professional activities, as it ensures adaptability of employees, their productivity and professional growth. Specialists who are able to act optimally in any situation, quickly resolve complex problem situations and make operational decisions that always bring success to the company.

So, the problem of coping strategies is studied quite well and scientifically grounded. However, the dependence of the type of coping on the specialist's stress level, as well as the manifestation of anxiety in specialists with different stress levels, is still insufficiently studied. So, the aim of the research is to study the impact of the stress level on the anxiety of specialists and their choice of different coping strategies.

The aim involved the following research objectives:

- develop methodological research tools;
- diagnose the stress level of pharmaceutical specialists;
- identify statistically significant differences in the manifestations of anxiety and coping strategies of specialists with different stress levels;
- study the relationship between the stress level and coping strategies.

Research hypothesis: the coping strategies of avoidance, escape, and distancing prevail among specialists with a high stress level, while positive reappraisal, self-control, and problem solving are

characteristic coping strategies for specialists with a low stress level.

Literature Review

Stress is considered as an imbalance between the resource capabilities of the individual and the demands of the external environment. There are many interpretations among the scientific definitions of the concept of stress. Some researchers believe that stress is the body's reaction to an emerging environmental threat (Cheval et al., 2021; Suni et al., 2017). Others consider this concept from the perspective of physiology as a protective mechanism under the influence of negative stimuli (Fernandes et al., 2019), or as a non-specific reaction to external influences (Leghari et al., 2020).

It is appropriate to define stress in the professional activity, which occupies a significant part of a person's life. Occupational stress is a reaction to events that are directly related to professional activity (Ebrahimi et al., 2016; Goel & Verma, 2021). Occupational stress can contribute to problems such as headaches, sleep disturbances, decreased concentration, irritability, etc. (Kawale et al., 2022). Excessive long-term stress can lead to anxiety, depression and weakening of the immune system (Alifanovienè et al., 2018). Professional stress provokes a decreasing quality of a specialist's professional activity and an increasing number of occupational mistakes (Białek & Sadowski, 2020; Napryeyenko et al., 2019).

Stress is always accompanied by negative emotional experiences, in particular, feelings of anxiety. Anxiety is a peculiar reaction of the body to a stressful event. Depending on the significance of the event or on the way of response, anxiety can manifest itself at varying degrees (Fernandes et al., 2019; Isikhan et al., 2004). In most cases, stress is a short-term reaction to a certain danger. Anxiety, on the other hand, can continue for a long time, even after the stressful situation is resolved.

Stressful situations in the professional activity can arise as a result of the impact of many factors, both external and internal. Most often, the following factors cause stressful situations at work: unsuccessful arrangement of the workplace and working conditions (Cordeiro et al., 2020); lack of control over the work process, poor planning of activities and low management level, negative interaction with colleagues and management (Almogbel, 2021); lack of career growth and inadequate salary (Hai-Yen et al.,

2021). Other studies indicate that the main factors of professional stress are the pressure to increase productivity, dangerous working conditions, and poor relations with management (Fernandes et al., 2019).

There is an opinion that a certain pressure that a specialist feels in his/her professional activity can even be useful. Under such conditions, it performs a stimulating and motivating function, provides the ability to work effectively (Cordeiro et al., 2020). This is accompanied by the violations in the psycho-emotional, psychophysiological state of the individual and in his/her activity. Research results prove that occupational stress reduces job satisfaction and desire to work (Ji-Soo, 2018; Vasan, 2018). The length of service of employees has a significant impact on the occupational stress level, as it is limited by control over work. This means that the longer a person works, the less occupational stress he/she experiences (de Los Santos et al., 2018).

Coping with stressful situations is possible by using conscious strategies of behaviour — coping. Coping is a way a person overcomes certain stressful situations (Freire et al., 2020). In other words, this is adaptive behaviour aimed at adapting to the environment in order to function optimally. According to the concept of Rus et al., (2022), coping is an individual's efforts aimed at solving a significant problem situation. According to Lazarus and Folkman (1987), regardless of whether the situation is positive (expectation of success) or negative (stressful), identified efforts activate a person's adaptive capabilities. In other words, coping ensures psychosocial adaptation of the individual to the external environment. Two main types of response can be distinguished with a view to the variability of different behavioural forms of response to stressful situations determined by Lazarus and Folkman (1987): problem-oriented and subjective-oriented. The first involves a rational resolution to a problem situation by finding alternative forms of behaviour. The second type is characterized by detachment from the problem through emotional devaluation.

The basic strategies of “problem solving”, “seeking social support” and “avoidance” are distinguished in the concept of coping behaviour. Problem solving is the most adaptive strategy aimed at resolving a problem situation. This strategy implies assessing the situation and elimination of the stressor's impact. Specialists with this strategy do not seek to avoid the stressor's impact, but on the contrary, resolve the

situation in order to avoid its repetition in the future. This enables the development of a certain response style and also contributes to the development of adaptive strategies (Thelwell et al., 2007). The strategy for resolving stressful problems increases the motivation of professional activity, job satisfaction, and promotes career growth (Białek & Sadowski, 2020). Seeking social support is a coping strategy aimed at overcoming a stressful situation by seeking other people's help (Meško et al., 2013). This strategy enables maintaining emotional well-being, but does not lead to a solution to the problem. The "avoidance" coping strategy involves the use of any attempt to solve the problem. Constant avoidance leads to the aggravation of the problem and the failure to support its solution by any arguments (Manzoor et al., 2022).

Coping in professional activity can be defined as a set of certain internal efforts of a specialist to overcome a stressful situation that exceeds his/her resources (Maresca et al., 2022). The specialist's lack of necessary resources to overcome a stressful situation makes him/her emotionally and psychologically vulnerable. As a result, the specialist will pay excessive attention to the external threats of the stressful situation instead of finding ways to overcome it (Maresca et al., 2022). Coping strategies for occupational stress depend on the accurate identification of risk factors, the correct selection of coping strategies and change control (Welbourne et al., 2007).

Studies prove the significant influence of the age factor on the choice of coping strategies. In particular, it is indicated that older workers with more work experience better overcome stressful situations (Bonneville-Roussy et al., 2017). It is also noted that overcoming stress is facilitated by professional skills and self-control (Leghari et al., 2020), which are also more developed in older specialists. Alosaimi et al., (2018) found that people are more likely to use adaptive problem-solving strategies with age. Some studies reveal the relationship between adaptive behavioural strategies and cognitive abilities (Vachet, 2022). This can be explained by the fact that real awareness of a stressful situation enables drawing logical conclusions about the consequences of its resolution.

The conducted literature review proves the appropriateness of an empirical study of the problem of using coping strategies by specialists when handling stressful situations. The specialists' use of adaptive coping strategies to

handle stressful situations can contribute to their productivity and efficient professional activity.

Methods

Research Design

The design of the procedure consisted in the organization of a diagnostic study, which enabled a thorough study of the basic coping strategies of specialists with different manifestations of stress. The respondents were divided into three groups according to their level of stress: participants with a high level of stress (n=29) were assigned to Group 1; participants with a medium level of stress (n=114) were assigned to Group 2; participants with a low level of stress (n=73) were assigned to Group 3. It was followed by the comparison of the indicators of prevailing coping strategies and the level of anxiety in these groups.

Sampling

The sample population included 216 specialists employed at YURiA-PHARM. The subjects were selected by age: the employees from 30 to 40 years old were selected in order to reduce the influence of the age factor on the survey results. The quantitative composition of the sample is complete and sufficient to reflect the characteristics of the entire population. The gender composition of the sample is as follows: 88 (41%) women and 128 (59%) men.

The respondents gave their informed consent for their voluntary participation before the study, which ensured the ethics of the study.

Methods

Standardized psychological tests were used to achieve the aim and fulfil the objectives of the research. The subjects' stress levels were diagnosed in order to determine whether there were any stressful situations for the subjects. The stress levels were diagnosed using the Psychological Stress Scale (PSM-25). The PSM25 Scale by Lemyr-Tessier-Fillion is aimed at detecting the level of stress in the subjects. The main goal of the technique is to measure a sense of stress. The questions of the test are formulated for the normal population aged 18 to 65 and can be applied to various professional groups. This makes the technique universal in the study of different age and professional samples in the normal population. The structure of the methodology includes 25 statements that assess the mental state of the subject. The results are

processed by counting all the points and comparing them with the key.

To diagnose the level of anxiety of specialists, the Spielberger's State-Trait Anxiety Inventory (STAI) adapted by Yu. L. Khanin was chosen. The technique detects two levels of anxiety: reactive (situational) anxiety as a state, and personal anxiety as a human property. The questionnaire consists of 20 statements that indicate a state of anxiety or anxiety as a property. This technique is one of the most valid and reliable in the differential diagnosis of anxiety. The analysis and processing of the results are carried out based on the calculation of the points scores. The interpretation is based on the following levels: scores from 0 to 30 indicate low anxiety; scores from 31 to 44 indicate moderate anxiety; scores of 45 or more indicate high anxiety.

The specialists' coping strategies were diagnosed using the Lazarus Ways of Coping Questionnaire, WCQ. Among all questionnaires of coping strategies, this technique allows the most complete identification of dominant coping strategies and their characteristics. This questionnaire is considered the first standardized technique in the diagnosis of coping. The technique enables revealing the dominance of 8 types of response in stressful situations: confrontation; self-control; acceptance of responsibility; problem solving planning; seeking social support; distancing; avoidance; positive reassessment. The structure of the test

involves 50 statements, each describing stressful situations. One position describes one of the 8 types of human response. The interpretation of the results is based on finding the number of points for each behaviour strategy. The more points scored for a particular behaviour style, the more often the subject uses this type of coping when difficulties arise.

The research results were analysed using Microsoft Excel and SPSS 22.0. The non-parametric Kruskal-Wallis test was used to identify distinctive features of the anxiety level and dominant coping strategies among specialists with different levels of stress.

The correlation coefficient between stress, anxiety and prevailing coping strategies was identified using correlation analysis. Pearson's correlation coefficient was used. The identified correlation coefficients were analysed as follows: coefficients from 0.1 to 0.3 indicate a weak relationship, coefficients from 0.3 to 0.5 indicate a moderate relationship, coefficients from 0.5 to 0.7 indicate a significant correlation, coefficients from 0.7 to 0.9 demonstrate a high correlation between features, and coefficients from 0.9 to 0.99 reflect a very strong correlation between the studied features.

Results

The data that reflect the stress levels among the surveyed pharmaceutical specialists were obtained in the course of the study (Figure 1).

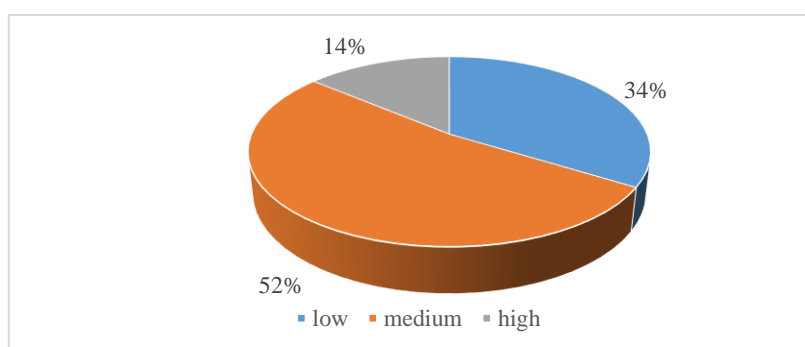


Figure 1. Correlation of stress levels of the surveyed pharmaceutical specialists

According to the data, 34% of specialists have a low level of stress, which indicates its minor manifestations. There were 52% of the surveyed specialists with a medium stress level, which indicates a partial experience of a stressful event.

A high level of stress was found in 14% of the subjects, which indicates the inability of such

specialists to effectively handle a conflict situation.

Accordingly, indicators of situational and personal anxiety of the subjects were revealed based on these levels. As the Kruskal-Wallis test showed, those with high anxiety prevail among the respondents with a high level of stress (Table 1).

Table 1.

Average indicators of situational and personal anxiety of pharmaceutical specialists with different stress levels

		n	T	H
Situational anxiety	Group 1 (low stress level)	73	55.97	
	Group 2 (medium stress level)	114	120.63	109.09
	Group 3 (high stress level)	29	193.05	p≤0.001
	N	216		
Personal anxiety	Group 1 (low stress level)	73	93.58	
	Group 2 (medium stress level)	114	106.94	18.45
	Group 3 (high stress level)	29	152.19	p≤0.001
	N	216		

According to the data in the table 1, situational anxiety in the group of subjects with a low stress level is the least manifested (55.97, n=73), situational anxiety is medium in the group with a medium stress level (120.63, n=114), while it is the largest in the group with a high stress level (193.05, n=29). Therefore, the statistical analysis revealed significant differences between the groups in the situational anxiety level (H=109.09 p≤0.001).

According to the obtained results, personal anxiety is low in the group of specialists with a low stress level (T=93.58, n=73). A medium rank

of personal anxiety is observed (T=106.94, n=114) in the group with a medium stress level. A high level of stress in the subjects corresponds to high personal anxiety (T=152.19, n=29). In this case, significant differences in the level of personal anxiety between groups of subjects with different stress levels (H=18.45 p≤0.001) should be noted.

The data obtained by the Kruskal-Wallis test indicate the statistical significance of differences in coping strategies among specialists with different stress levels (Table 2).

Table 2

Average indicators of coping strategies of pharmaceutical specialists with different stress levels

Types of coping strategies	Groups of subjects	n	T	H
confrontation	Group 1 (low stress level)	73	88.55	
	Group 2 (medium stress level)	114	109.52	33.81 p≤0.001
	Group 3 (high stress level)	29	114.83	
	N	216		
distancing	Group 1 (low stress level)	73	80.58	
	Group 2 (medium stress level)	114	104.88	69.09 p≤0.001
	Group 3 (high stress level)	29	193.03	
	N	216		
self-control	Group 1 (low stress level)	73	142.05	
	Group 2 (medium stress level)	114	103.88	54.82 p≤0.001
	Group 3 (high stress level)	29	42.19	
	N	216		
seeking social support	Group 1 (low stress level)	73	84.51	
	Group 2 (medium stress level)	114	108.96	37.01 p≤0.001
	Group 3 (high stress level)	29	167.09	
	N	216		
acceptance of responsibility	Group 1 (low stress level)	73	141.14	
	Group 2 (medium stress level)	114	103.80	51.17 p≤0.001
	Group 3 (high stress level)	29	44.83	
	N	216		
Escape	Group 1 (low stress level)	73	50.51	
	Group 2 (medium stress level)	114	126.27	116.49 p≤0.001
	Group 3 (high stress level)	29	184.62	
	N	216		
problem solving	Group 1 (low stress level)	73	138.04	
	Group 2 (medium stress level)	114	105.99	48.07 p≤0.001
	Group 3 (high stress level)	29	44.02	
	N	216		
positive reappraisal	Group 1 (low stress level)	73	138.39	
	Group 2 (medium stress level)	114	106.45	50.81 p≤0.001
	Group 3 (high stress level)	29	41.33	
	N	216		

The revealed results show that confrontational coping is most manifested in the group of specialists with a high stress level ($T=114.83$, $n=29$). It is manifested at a medium level in the group with a medium stress level ($T=109.52$, $n=114$). This coping is least manifested in the group of specialists with a low stress level ($T=88.55$, $n=73$).

Distancing as a coping strategy is most represented in the group of specialists with a high stress level ($T=193.03$, $n=29$). It is represented at a medium level in the group with a medium stress level ($T=104.88$, $n=114$). This coping strategy is least represented in the group of specialists with a low stress level ($T=80.58$, $n=73$).

The self-control strategy is manifested in the group of specialists with a low stress level ($T=142.05$, $n=73$). It is manifested at a medium level in the group with a medium stress level ($T=103.88$, $n=114$). This coping strategy is the least manifested in the group of specialists with a low level of stress ($T=42.19$, $n=29$).

Seeking social support prevails among specialists with a high stress level ($T=167.09$, $n=29$). The medium level is manifested in the group with a medium stress level ($T=108.96$, $n=114$). This coping strategy is least represented in a group of specialists with a low stress level ($T=84.51$, $n=73$).

The self-control strategy is expressed in the group of specialists with a low stress level ($T=142.05$, $n=73$). It is expressed at a medium level in the group with a medium stress level ($T=103.88$, $n=114$). This coping strategy is the least represented in the group of specialists with a low stress level ($T=42.19$, $n=29$).

Seeking social support dominates among specialists with a high stress level ($T=167.09$, $n=29$). The medium level is expressed in the group with a medium stress level ($T=108.96$, $n=114$). This coping strategy is least represented in group of specialists with a low stress level ($T=84.51$, $n=73$).

The acceptance of responsibility as a coping strategy has the highest level of manifestation in the group of specialists with a low stress level ($T=141.14$, $n=73$). It is expressed at a medium level in the group with a medium stress level ($T=103.80$, $n=114$). This coping strategy is least represented in the group of specialists with a high stress level ($T=44.83$, $n=29$).

Escape as a coping strategy is presented in subjects with a high level of stress ($T=184.62$, $n=29$). It dominates at a medium level among specialists with a medium stress level ($T=126.27$, $n=114$). This coping strategy is least expressed in the group with a low stress level ($T=50.51$, $n=73$).

Problem solving coping dominates in specialists with a low stress level ($T=138.04$, $n=73$). The medium level of is expressed in specialists with a medium level of stress ($T=105.99$, $n=114$). Low dominance of this coping strategy is expressed in the group of specialists with a low stress level ($T=44.02$, $n=29$).

The positive reappraisal strategy is quite clearly expressed in specialists who have a low stress level ($T=138.39$, $n=73$). The medium level of positive reappraisal dominates in specialists who have a medium stress level ($T=106.45$, $n=114$). A low level of this coping strategy was found in the group with a high stress level ($T=41.33$, $n=29$).

Therefore, specialists with a high stress level have pronounced coping strategies such as confrontation ($H=33.81$ $p\leq 0.001$), distancing ($H=69.09$ $p\leq 0.001$), seeking social support ($H=37.01$ $p\leq 0.001$), escape ($H=116.49$ $p\leq 0.001$). Specialists with a low stress level are characterized by such coping strategies as self-control ($H=54.82$ $p\leq 0.001$), "acceptance of responsibility ($H=51.17$ $p\leq 0.001$), problem solving ($H=48.07$, $p\leq 0.001$) and positive reappraisal ($H=50.81$ $p\leq 0.001$).

The correlation coefficients revealed in the study ($p\leq 0.001$) demonstrate the relationship between stress and anxiety of the surveyed specialists (Table 3).

Table 3
Correlational analysis of the relationship between stress and anxiety of pharmaceutical specialists

	Situational anxiety	Personal anxiety
Stress (r)	0.662**	0.310**
Significance level (p)	0.000	0.006

Note: ** - correlation coefficient for $p\leq 0.001$

A direct relationship between the stress level of the surveyed specialists and situational anxiety was revealed ($r=0.662, p\leq 0.01$). This relationship indicates that the higher the stress level, the higher the situational anxiety. A slightly lower correlation coefficient was found between the

respondents' stress level and their personal anxiety ($r=0.310, p\leq 0.01$).

The correlation analysis revealed relationships between stress and coping strategies of pharmaceutical specialists at a high level of significance ($p\leq 0.001$) (Table 4).

Table 4
Indicators of the correlation coefficient of stress and coping strategies of pharmaceutical specialists

	Components of social and psychological adaptation of the specialists							
	confrontation	distancing	self-control	seeking social support	acceptance of responsibility	escape	problem solving	positive reassessment
Stress (<i>r</i>)	-0.093	0.393**	-0.452**	0.317**	-0.399**	0.690**	-0.388**	-0.402**
Significance level (<i>p</i>)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: ** - correlation coefficient for $p\leq 0.001$

Based on the data presented in the table 4, a direct relationship between the stress level of pharmaceutical specialists and distancing ($r=0.393, p\leq 0.01$), seeking social support ($r=0.317, p\leq 0.01$), escape ($r=0.690, p\leq 0.01$) coping strategies was found. Feedback is observed for such coping strategies as self-control ($r=-0.452, p\leq 0.01$), acceptance of responsibility ($r=-0.399, p\leq 0.01$), problem solving ($r=-0.388, p\leq 0.01$).

situations. A medium stress level among specialists is an expression of personal resilience, but such employees do not strive to resolve the problem situation, do not show excessive activity. A high level of stress is a sign of strong emotional stress, exhaustion, and partial disorientation. Specialists with this level are not able to fully perform their professional duties, their productivity is significantly reduced, relations with colleagues and management get worse (Kawale et al., 2022).

The results of the study show that in stressful situations, pharmaceutical specialists tend to experience anxiety, in particular, more situational anxiety than personal anxiety. Specialists with a high level of stress are characterized by such basic coping strategies as confrontation, distancing, seeking social support, and escape. Coping strategies of self-control, acceptance of responsibility, problem solving, and positive reappraisal prevail among specialists with a low stress levels.

The analysis of the research results showed that the experience of stress is accompanied by anxiety among pharmaceutical specialists. The study also found that respondents with a low-stress level have affected situational and personal anxiety. The respondents with a high-stress level were found to have a high level of personal and situational anxiety. Situational anxiety is a kind of mobilizing factor that, in some instances, stimulates goal achievement by overcoming obstacles. Some studies prove the importance of stress as an integral part of professional activity (Bialek & Sadowski, 2020), thereby concluding the need for skills to handle stressful situations. Specialists with highly pronounced personal anxiety were also identified. Anxiety as a personality trait interferes with the productive resolution of problem situations blocks the paths

Discussion

Specialists with three levels of stress were identified based on the obtained results: low, medium and high. A low stress level is characterized by the absence of nervous tension, the ability to act productively in difficult stressful

of optimal behavioural reactions, and reduces adaptability (Fernandes et al., 2019; Yaribeygi et al., 2017). Lack of behavioural skills in stressful situations, low psychological readiness, and adaptability to stress can negatively affect mental and physical health (Ebrahimi et al., 2016).

The study revealed statistically significant differences in the manifestations of basic coping strategies of specialists. Specialists with a high stress level are characterized by coping strategies such as confrontation, distancing, seeking social support, and escape. Choosing such strategies of behaviour in stressful situations, specialists do not seek to solve the problem, but avoid it, distance themselves from it. Such behaviour contributes to the accumulation of a negative emotional background, in particular anxiety. The above coping strategies can have a destructive effect on the performance of professional duties, reduce work capacity and adaptability (Freire et al., 2020).

Specialists with a low stress level use such coping strategies as self-control, acceptance of responsibility, problem solving, and positive reappraisal. This type of behaviour is adaptive, constructive, and professionally productive. When those specialists face with a stressful situation, they are able to quickly make important decisions, overcome stressors, and bear personal responsibility. Based on the research conducted by Maresca et al., (2022), it can be stated that specialists use the most optimal problem-solving and cognitive reappraisal strategies to overcome stressful situations at the workplace.

The identified correlations between the stress level and anxiety show the destructive effect of stress on the specialist's personality. The greater the stress, the greater the anxiety, which can develop into a personality trait. This reduces the adaptability of specialists. In their study, Lukasik et al., (2019) showed a direct correlation between the level of anxiety and stress. Moreover, the authors prove the negative impact of stress and anxiety on professional activity.

The work statistically proves the relationship between coping strategies and stress of pharmaceutical specialists. According to the obtained data, the lower the stress level, the more self-control, acceptance of responsibility, problem solving and positive reappraisal coping strategies prevail. The higher the level of stress, the more coping strategies such as confrontation, distancing, escape, and seeking social support prevail. The obtained results can be compared with the findings of de Los Santos et al., (2018),

who proved that the level of professional stress of specialists is interrelated with the type of basic coping strategies. The authors determined that specialists use types of adaptive coping depending on the severity of the stressful situation. At the same time, the study conducted by de Los Santos et al., (2018) provided an additional factor of "work experience", which, as the study showed, affects the choice of the type of coping strategy. This factor and its influence on the choice of coping strategy is worth paying attention in further studies.

According to Leghari et al., (2020) the stress levels of specialists who use adaptive coping decrease. Conversely, the more specialists use maladaptive coping, the more stress increases. At the same time, an additional factor is the level of qualification of specialists, which contributes to the more frequent use of adaptive coping strategies.

Summarizing the obtained results, we state that in stressful situations specialists experience a sense of situational and personal anxiety, while choosing maladaptive coping strategies. At the same time, the absence of stress contributes to more adaptive coping strategies that provide effective solutions to problematic situations.

Conclusions

The conducted research emphasises the importance of studying the basic coping strategies that the specialists use in their professional activity, since the emotional state of the specialist depends on the type of coping. Professional stress is a complex psychological state that combines the significance of a stressful situation and its cognitive assessment by the individual. Stress is a factor that affects the reduction of work capacity and productivity of a specialist. Each specialist experiences stressful situations differently, as well as chooses different coping strategies. Therefore, it is very important that specialists have adaptive coping skills for handling stressful situations, which will ensure the success of the organization as a whole in the future.

The limitations of the study include the unpredictability of the occurrence of stressful situations due to random situatedness. The emergence of a stressful situation is possible immediately before the diagnostics, or the diagnostics itself can be stressful for someone. Therefore, the findings of this research require additional longitudinal studies using psychometric tools and expanding the range of

diagnosed parameters. The age characteristics of the subjects remains an equally important issue. Many researchers established that with age specialists have the ability to adapt to the professional environment, and their stress level decreases accordingly. On this basis, it is appropriate to further expand the age range and take into account length of service for an objective assessment of the results.

The creation of a programme for the development of adaptive coping strategies for specialists is considered to be promising, as it would enable building up response skills in stressful situations in a certain period of time. It is considered optimal to create a basic programme that could be used in various areas of professional activity with the possibility of making adjustments to adapt it to narrow specialization.

Bibliographic references

- Alifanovienė, D., Gerulaitis, D., Kepalaitė, A., Sapelyte, O., Vaitkeviciene, A., Universitetas, Š., & Lietuva. (2018). Comparative analysis of strategies for coping with professional stress of educational specialists. *Special Education*, 2, 11-38. Doi: 10.21277/se.v2i37.347
- Almogbel, Y. (2021). The Effect of Occupational Stress on the Quality of Life of Pharmacists in Saudi Arabia. *Risk Management and Healthcare Policy*, 14, 643-654. <https://doi.org/10.2147/RMHP.S281317>
- Alosaimi, F. D., Alawad, H. S., Alamri, A. K., Saeed, A. I., Aljuaydi, K. A., Alotaibi, A. S., Alotaibi, K. M., & Alfari, E. A. (2018). Stress and coping among consultant physicians working in Saudi Arabia. *Annals of Saudi Medicine*, 38(3), 214-224. <https://doi.org/10.5144/0256-4947.2018.214>
- Białek, K., & Sadowski, M. (2020). Level of stress and strategies used to cope with stress by physicians working in intensive care units. *Anaesthesiology Intensive Therapy*, 51(5), 361–369. <https://doi.org/10.5114/ait.2019.90473>
- Bonneville-Roussy, A., Evans, P., Verner-Filion, J., Vallerand, R., & Bouffard, T. (2017). Motivation and coping with the stress of assessment: Gender differences in outcomes for university students. *Contemporary Educational Psychology*, 48, 28-42. <https://doi.org/10.1016/j.cedpsych.2016.08.003>
- Cheval, B., Mongin, D., Cullati, S., Uribe, A., Pihl-Thingvad, J., Chopard, P., & Courvoisier, D. S. (2021). Associations of emotional burden and coping strategies with sick leave among healthcare professionals: A longitudinal observational study. *International Journal of Nursing Studies*, 115, 103869. <https://doi.org/10.1016/j.ijnurstu.2021.103869>
- Cordeiro, R., Calha, A., Mourão, C., & Camões, F. (2020). Stress and coping strategies in health professionals. *Revista Portuguesa de Enfermagem de Saúde Mental*, 7, 09-16. <https://doi.org/10.19131/rpasm.0241>
- de Los Santos, J. R., Albasin-Lacaba, M., & Gem, I. (2018). Coping Strategies among Employees towards Occupational Stress. *Health Notions*, 2(12), 1238-1245. Retrieved from https://www.researchgate.net/publication/333200851_Coping_Strategies_among_Employees_towards_Occupational_Stress
- Ebrahimi, M. H., Poursadeghiyan, M., Abbasi, M., Mehri, A., Hami, M., & Raei, M. (2016). Relationship between job stress and anxiety, depression and job satisfaction in Nurses in Iran. *Medical Science Nursing*, 11, 2349-2355.
- Fernandes, I. M., Ribeiro, A. M., Gomes, R. L., Lopes, J. S. S., Vanderlei, L. C. M., & Lorençoni, R. M. R. (2019). Anxiety, depression and stress among employees of a public higher education institution in São Paulo, Brazil. *Revista Brasileira de Medicina do Trabalho*, 17(4), 530-536. <https://doi.org/10.5327/Z1679443520190472>
- Freire, C., Ferradás, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., & Núñez, J. C. (2020). Coping strategies and self-efficacy in university students: A person-centered approach. *Frontiers in Psychology*, 11, 841-862.
- Goel, M., & Verma, J. P. (2021). Workplace stress and coping mechanism in a cohort of Indian service industry. *Asia Pacific Management Review*, 26(3), 113-119. <https://doi.org/10.1016/j.apmr.2020.10.001>
- Hai-Yen, N.-T., Minh-Thu, D.-T., Thuy-Tram, N.-N., Van, D. D., Dinh, P. L., & Tu, L. N. D. (2021). Assessment of Job Stress of Clinical Pharmacists in Ho Chi Minh City, Vietnam: A Cross-Sectional Study, 12. <https://doi.org/10.3389/fpsyg.2021.635595>
- Isikhan, V., Comez, T., & Danis, M. Z. (2004). Job stress and coping strategies in health care professionals working with cancer patients. *European Journal of Oncology Nursing*, 8(3), 234-244. <https://doi.org/10.1016/j.ejon.2003.11.004>

- Ji-Soo, K. (2018). Relationship between incivility experiences and nursing professional values among nursing students: Moderating effects of coping strategies. *Nurse Education Today*, 65, 187-191. <https://doi.org/10.1016/j.nedt.2018.03.007>
- Kawale, N., Rahate, V., & Ijmtst, E. (2022). Stress and Coping Strategies of Students in Professional Courses. *International Journal for Modern Trends in Science and Technology*, 8, 81-83. Doi: 10.46501/IJMTST0806009
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1, 141-169.
- Leghari, S. Y., Mukhtar, M., & Arshad, S. (2020). The Stress and Coping Strategies in Nurses of a Tertiary Hospital, Punjab. *Basic and Applied Nursing Research Journal*, 1(1), 1-6. <https://doi.org/10.11594/banrj.01.01.01>
- Lukasik, K. M., Waris, O., Soveri, A., Lehtonen, M., & Laine, M. (2019). The Relationship of Anxiety and Stress With Working Memory Performance in a Large Non-depressed Sample. *Frontiers in Psychology*, 10(4). <https://doi.org/10.3389/fpsyg.2019.00004>
- Maghan, M. (2017). Problem Solving Style and Coping Strategies: Effects of Perceived Stress. *Creative Education*, 8, 2332-2351. <https://doi.org/10.4236/ce.2017.814160>
- Manzoor, S., Sajjad, M., Anwar, I., & Rafi, A. (2022). Coping strategies adopted by medical residents in dealing with work-related stress: a mixed-methods study. *BMC Medical Education*, 22, 449 (2022). <https://doi.org/10.1186/s12909-022-03520-6>
- Maresca, G., Corallo, F., Catanese, G., Formica, C., & Lo Buono, V. (2022). Coping Strategies of Healthcare Professionals with Burnout Syndrome: A Systematic Review. *Medicina (Kaunas)*, 58(2), 327. <https://doi.org/10.3390/medicina58020327>
- Meško, M., Erenda, I., Videmšek, M., Karpljuk, D., Štihec, J., & Roblek, V. (2013). Relationship between stress coping strategies and absenteeism among middle level managers. *Management Journal of Contemporary Management*, 18, 1846-3363.
- Napryeyenko, O., Napryeyenko, N., Marazziti, D., Loganovskaja, T., & Tsekhmister, Y. (2019). Depressive syndromes associated with alcohol dependence. *Clinical Neuropsychiatry*, 16(5-6), 174-180. <https://doi.org/10.36131/clinicalnpsych2019050603>
- Rus, M., Sandu, M., Mănescu, M., & Stănescu, N. (2022). Relationship between burnouts, coping strategies and stress management in health care professionals. *Technium Social Sciences Journal*, 31, 480-488. <https://doi.org/10.47577/tssj.v31i1.6469>
- Suni, M. S., Nirmala, V., & Sikkandar, S. (2017). Stress and Job Satisfaction among Staff Nurses. *Asian Journal of Nursing Education and Research*, 7(1), 31-34.
- Thelwell, R. C., Weston, N. J. V., & Greenlees, I. A. (2007). Batting on a sticky wicket: Identifying sources of stress and associated coping strategies for professional cricket batsmen. *Psychology of Sport and Exercise*, 8(2), 219-232. <https://doi.org/10.1016/j.psychsport.2006.04.002>
- Tsekhmister, I. V., Daniliuk, I. V., Rodina, N. V., Biron, B. V., & Semeniuk, N. S. (2019). Developing a stress reaction inventory for eye care workers. *Journal of Ophthalmology*, 1, 39-45. <https://doi.org/10.31288/oftalmolzh201913945>
- Vachet, J. (2022). Coping Strategies and Defence Mechanisms. In *Fantasy, Neoliberalism and Precariousness (Digital Activism and Society: Politics, Economy And Culture In Network Communication)*. Bingley: Emerald Publishing Limited, 67-91. <https://doi.org/10.1108/978-1-80382-307-220221003>
- Vasan, M. (2018). Impact of Job Stress on Job Satisfaction among the Pharmaceutical Sales Representatives. *Research Journal of Pharmacy and Technology*, 11, 3759-3764. 10.5958/0974-360X.2018.00688.1
- Welbourne, J. L., Eggerth, D., Hartley, T. A., Andrew, M. E., & Sanchez, F. (2007). Coping strategies in the workplace: Relationships with attributional style and job satisfaction. *Journal of Vocational Behavior*, 70, 312-325.
- Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review. *EXCLI Journal*, 16, 1057-1072. <https://doi.org/10.17179/excli2017-480>

