

HEALTH, ENVIRONMENT, DEVELOPMENT**ASSESSMENT OF ANXIETY AND STRESS RESISTANCE
OF PHARMACISTS DURING THE PREPARATION FOR THE FIRST STAGE
OF THE UNIFIED STATE QUALIFICATION EXAM****Iryna Yaremii**

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Summary

An emotionally vulnerable student begins to lag behind in studies, is constantly in a state of fear and anxiety, apathy, his/her general and social activity decreases, and the state of health deteriorates.

Materials and Methods. The article assesses the level of anxiety and stress resistance of pharmacy students during the period of preparation for the first stage of the Unified State Qualification Examination (USQE) – the Integrated Test Exam "Step 1" and the Professional English Language Exam for the specialty "Pharmacy, Industrial Pharmacy" (full-time form of education).

Results. It was established that high levels of situational and personal anxiety are characteristic of the majority of pharmacist students, who are characterized by insufficiently developed self-control and lack of confidence in their abilities, and for 73.8% of students during the period of preparation for the 1st stage of USQE, it is impossible to reduce the threshold of sensitivity to stress without processing the psychological component of exam stress.

Conclusions. Students of the full-time Faculty of Pharmacy have low stress resistance and a high level of situational and personal anxiety. Pharmacist students prone to high levels of situational and personal anxiety are characterized by stiffness, tension, and excitement in extreme situations, which proves empirical dependence – young people who are unsure of their abilities have low stress resistance and are more anxious.

Key words: anxiety, stress resistance, pharmacy students, exam.

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1. Introduction

A significant volume of information, high demands and the modern pace of life have always been and remain factors that determine the growth of neuropsychological stress, the number of disturbing behavioral manifestations, the dominance of which can lead to the emergence of a state of anxiety, and subsequently to the development of stress (*Hubert Suszek, 2015*).

Today, there are changes in Ukraine that lead to the emergence of stressful situations, especially for people with a low level of stress resistance. In addition to the above-mentioned factors, the state of psychological well-being of students of the 3rd year, majoring in "Pharmacy, Industrial Pharmacy", who are studying at the second (master's) level and will take the 1st stage of the USQE in June of this year, was first significantly affected by the epidemic of COVID-19, and starting from 24 February 2022 due to a full-scale military invasion of russia.

A general regularity is known (*Streletska I. I., 2017*), which consists in the fact that the level of stress resistance is formed in the dynamics of professional formation, increasing with the increase in the level of professional competence (experience).

Anxiety is an increased tendency of a person to experience a state of emotional and personal anxiety in any life situations, in particular when there is no reason for this and it is not just a personal trait of a large number of people, but a characteristic of modern society, an integral feature of the present. "Anxiety" in psychology is defined as an individual property or character trait of a person with an increased tendency of a person to excessive excitement in any life situations, which "has a subjective nature and does not manifest itself as a physical danger" (*Khalik O.O., 2010*). Most often, manifestations of anxiety can occur at the psychological and physiological levels. Manifestation of anxiety at the psychological level is tension, preoccupation, restlessness, fear, apprehension, nervousness and manifests itself in the form of uncertainty, helplessness, powerlessness, insecurity, loneliness and is the trigger for disorders of the emotional sphere (*Andreeva I.N. 2007*). At the physiological level, anxiety reactions are manifested by increased heartbeat, faster breathing, an increase in minute blood volume, an increase in blood pressure, and an increase in general excitability. Anxiety is a factor in the regulation of behavior in society, which interferes with productive interaction. Experts often associate anxiety with a decrease in self-esteem and self-confidence (*Vasylenko Yu. O., 2021*), which, of course, affects the success of a young person. An emotionally vulnerable student begins to lag behind in studies, is constantly in a state of fear and anxiety, apathy, his/her general and social activity decreases, and the state of health deteriorates. Unlike fear, the causes of anxiety, as a natural reaction to a stressful situation, are not realized by the student, but over time can lead to the emergence of diseases of stress etiology, so-called "stress diseases" (*Stelmaschuk H.R., 2015*). In addition, emotional excitement is an obstacle to successfully passing exams.

The most popular theory of stress is the theory of H. Selye, according to which the body reacts to strong external stimuli with a protective reaction aimed at adapting to the stimulus, which is considered a state of stress. In contrast to the state of physiological stress described by H. Selye, psychological stress can also occur as a reaction to predicted events, the onset of which a person is anxiously awaiting (*Perepelitsa O.O., Yaremiy I.M., Kupchanko K.P., Trufen L.I., 2018*). Modern Ukrainian students are constantly under stress not only because of the large amount of educational material that needs to be mastered, but also because of the difficult situation in Ukraine – because of the danger of shelling or the onset of a blackout.

Therefore, the assessment of the level of anxiety and stress resistance among students in the pre-examination period is relevant, and the problem of predicting the stress states of one or another student for the exam procedure is significant, especially when the question concerns the

1st stage of the USQE, because whether the student will receive a diploma depends on the results of the student's passing of this exam a specialist in his dream specialty. In addition, the result of third-year students passing the 1st stage of the USQE is one of the indicators that determines the rating of higher medical and pharmaceutical educational institutions of Ukraine, and therefore, good results of students passing this exam contribute to the formation of the prestige of the educational institution and to some extent ensure the competitiveness of the students of education.

The goal of this study to determine the level of anxiety of students of the 3rd year, majoring in "Pharmacy, Industrial Pharmacy", who study at the second (master's) level (form of education: full-time) in the process of their preparation for the first stage of the Unified State Qualification Examination (USQE) – Integrated test exam "Step 1" and the Professional English Language Exam.

2. Materials and methods

The experimental base of the research was a group of 46 respondents – students of the 3rd year of the full-time Faculty of Pharmacy of the higher education institution of Ukraine "Bukovyn State Medical University" aged 19-22. The research program covered a complex of theoretical (analysis, systematization, generalization of scientific literature on the subject of research), empirical (testing of the "Situational and Personal Anxiety Scale" by Ch. Spielberg and testing of the "Stress Resistance Assessment" of Boston University), statistical (Excel computer program package) and interpretive methods. To assess the level of students' readiness for the exam, the results of complex control tests, which cover the test base of the license integrated exam, were used.

3. Results

According to the obtained results, 70% of persons with a high level of situational anxiety were found among pharmacist students of the 3rd year of full-time education. This contingent of students, constantly reminded of the importance and responsibility of passing the license integrated exam, is in a state of emotional tension. For individual students, this anxiety gradually transforms into a state of fear that the young person is unable to cope with on his own. Students with a low level of situational anxiety are self-confident, able to quickly adapt to a stressful situation, while students with a high level of situational anxiety are characterized by stiffness, agitation, excessive worry and tension.

Situational or reactive anxiety as a condition is characterized by subjectively experienced emotions: tension, anxiety, preoccupation, nervousness. This state occurs as an emotional reaction to a stressful situation and can vary in intensity and dynamics over time (Spielberger's State-Trait Anxiety Inventory (STAI)).

It should be noted that this year's third-year students, compared to a similar contingent of students in previous years, demonstrate a higher level of situational anxiety, which is characteristic mainly of students with increased stiffness, excitement, anxiety and tension.

One of the important reasons, in our opinion, which affected the psychological state in the lives of Ukrainian pharmaceutical students in their third year of study was that, starting from the 1st year, they had to study online due to quarantine restrictions due to the COVID-19 epidemic, and a real challenge for them became a full-scale invasion of Russia. Due to the invasion of the Russian aggressor, the training process can be suddenly interrupted at any moment by the "air alarm" signal. Students whose relatives are defending Ukraine at the front or remained living in the territories near the front line, besides, are constantly in a state of stress because they worry about their relatives.

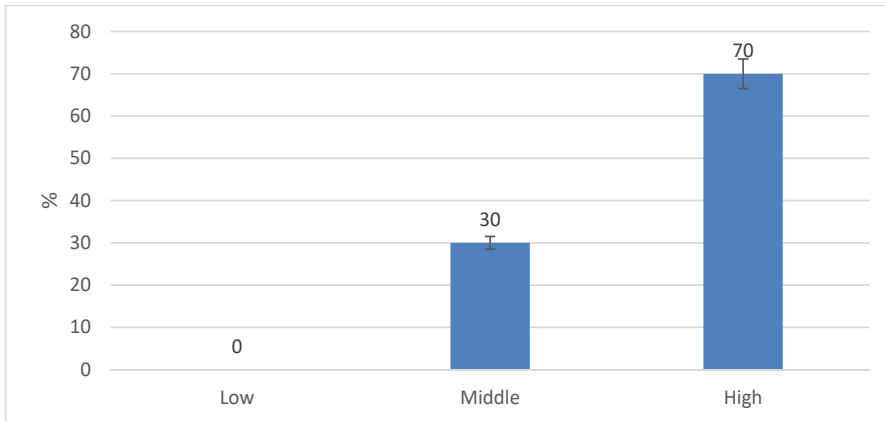


Fig. 1. Situational anxiety of pharmacy students

Personal anxiety is a constitutional limit that determines the tendency to perceive a threat in a wide range of situations. With high personal anxiety, each of these situations is stressful for the individual and causes him severe anxiety (Spielberger's State-Trait Anxiety Inventory (STAI)).

A high level of personal anxiety (59%) was found for the majority of respondents among full-time students. The results of the analysis of the questionnaires proved that respondents with persistent personal anxiety are characterized by increased mistrust, alertness and emotional inflexibility, inability to manage their emotions.

Experts claim that the level of personal anxiety is related to the past experience of the individual, with his frequent feeling of situational anxiety. In this context, 6 groups were distinguished among students according to the levels of situational and personal anxiety (Fig. 3). At the same time, the group with high situational and high personal anxiety turned out to be the most numerous, and the group with medium situational and high personal anxiety ranked second. The group with an average level of situational and personal anxiety is even smaller.

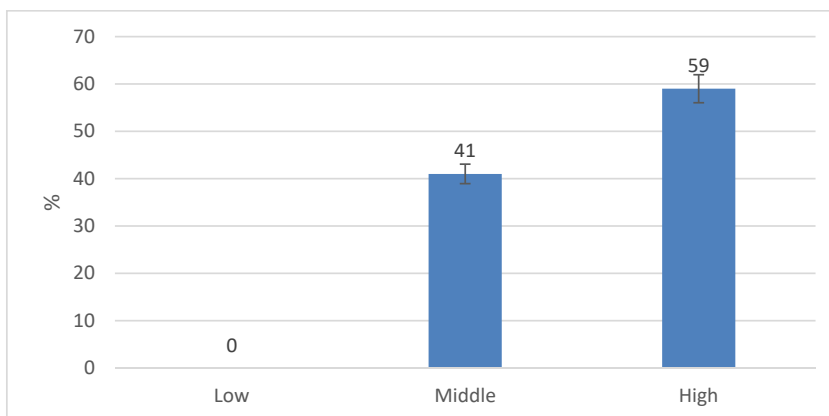


Fig. 2. Personal anxiety of pharmacy students

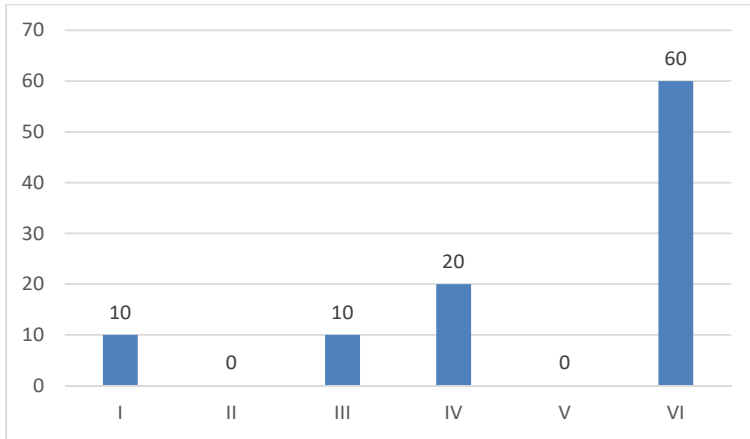


Fig. 3. Groups of students according to different levels of situational and personal anxiety:

I – low situational, medium personal; II – low situational, high personal;
 III – average situational, average personal; IV – medium situational, high personal;
 V – high situational, average personal; VI – high situational, high personal

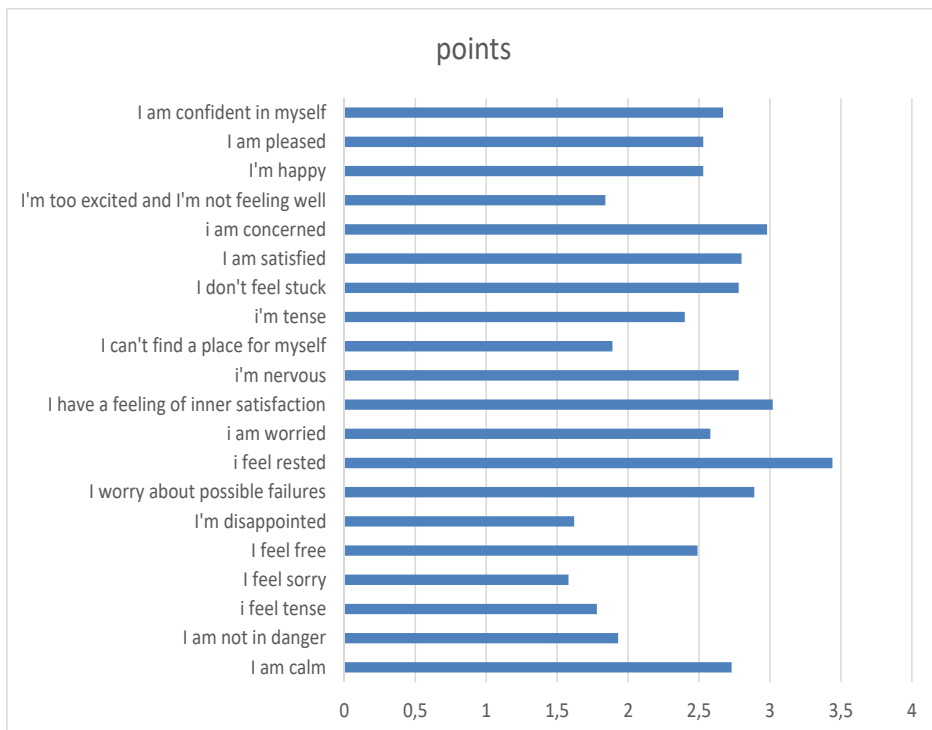


Fig. 4. The average number of points of respondents according to the statements of the questionnaire for determining situational anxiety

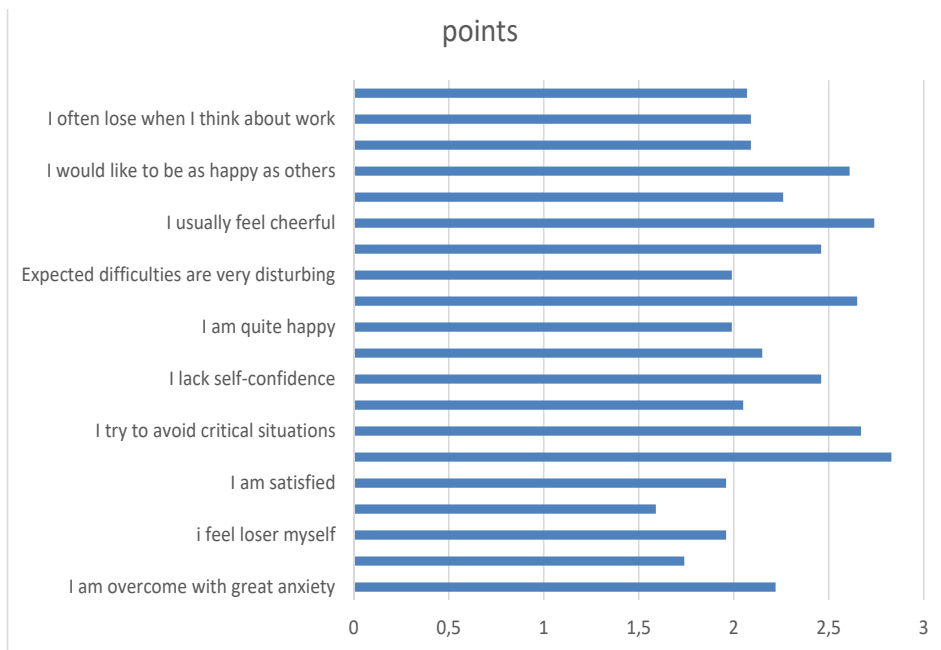


Fig. 5. The average number of points of respondents according to the statements of the questionnaire for determining personal anxiety

Therefore, about 80% of respondents are prone to high levels of personal anxiety. Since the levels of personal anxiety affect the level of stress resistance, the obtained results regarding the situational and personal anxiety of pharmacy students require the use of measures to stabilize the psychological state of students to ensure their successful completion of the 1st stage of the USQE. In addition, the analysis of the results of the success of pharmacy students on pre-tests in preparation for the exam showed a trend towards lower levels of anxiety in students who, as a result, received a higher score.

Among the interviewed 3rd-year pharmacy students, less than a third are stress-resistant, and in the pre-examination period, the group of students with a low and very low level of stress resistance predominates.

Solving the problem of predicting stressful situations is "impossible without studying the physiological and psychological components of exam stress" (Kulish O.V., 2017, Haldorsen H., et al. 2014).

Emotional stress is an obstacle to successfully passing state licensing exams, in particular the first stage of the USQE, because it does not pass without a trace for the health of students. The duration of night sleep during exam preparation is reduced for at least half of the students, which leads to chronic fatigue and emotional burnout. During this period, they begin to consume

| High | Sufficient | Low | Very low |
|------|------------|-------|----------|
| 1,2% | 25% | 55,1% | 18,7% |

Fig. 6. Groups of students according to the level of stress resistance

significantly more coffee, and many of them become exhausted several weeks before the exam. To reduce emotional stress, the percentage of students who smoked cigarettes and drank alcohol in an attempt to relieve stress increased. At the same time, less than 10% of surveyed students practice healthy methods of stress relief through hiking and active sports. A third of respondents claim that they need the support of friends and/or relatives at this time. In general, the results indicate that a significant number of students cannot independently cope with stress in ways that do not harm their health, and therefore need psychological support.

Therefore, the task of the educational institution is to improve the program of preparing students for the first stage of the Unified State Qualification Exam through systematic training and the application of techniques for reducing the level of anxiety and improving their stress resistance. In this context, teachers should work in tandem with psychologists.

4. Conclusions

Students of the full-time Faculty of Pharmacy have low stress resistance and a high level of situational and personal anxiety. Pharmacist students prone to high levels of situational and personal anxiety are characterized by stiffness, tension, and excitement in extreme situations, which proves empirical dependence – young people who are unsure of their abilities have low stress resistance and are more anxious.

Recommendations. To reduce the level of a high tendency to develop stress and increase one's own stress resistance, we recommend attending stress resistance training, self-training, relaxation, self-analysis, developing the skills of adequate assessment of the situation and balanced response to life's difficulties.

Prospects for further research. Appropriate programs for psychological correction of anxiety levels and ensuring stress resistance in students for the period of preparation for exams need further improvement.

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