of children. Although, statokinetic stability and almost all other physical qualities were low before the pedagogical experiment. All the physical qualities of sportsmen, both girls and boys, significantly improved after a six-month experiment. All beginning sportsmen showed good and excellent results, both statokinetic stability, and other physical qualities, except the speed and physical qualities of boys who showed average (satisfactory) estimates, according to state standards. It is also important that sportsmen who systematically attended training stopped being sick. The results of the study may be useful for coaches of primary school sportsmen and physical education teachers in general schools.

Keywords: beginning sportsmen of 6-7 years, statokinetic stability, physical qualities.

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# SELF-ESTEEM OF EMOTIONAL STATE AND ANXIETY LEVEL OF MEDICAL STUDENT'S PERSONALITY

The ecological environment, which includes the psychological sphere, is one of the key factors in the study of the social and professional maturity of the modern student. This study highlights the monitoring of student's self-esteem of emotional state and anxiety level. The methods "Self-esteem of Emotional State" of Wessman A. & Rix D. and Taylor G. "Manifest Anxiety Scale" (with modification Norakidze V.), theoretical, empirical and statistical methods of research were used. The coefficient of determination showed that the model is suitable for practical application, as the resultant property is explained by the influence of the factor's characteristic. The high student's self-esteem of emotional state influenced by the external factors, was followed by certain anxiety level. The research indicated the empirical connection between self-esteem of emotional state, anxiety level and influence of social factors. That's created a background for further studying of this psychological circle.

Keywords: self-esteem, emotional state, anxiety level, student.

# Introduction

Student's life is associated with the development and expression of various emotions, the most severe manifestation of which can cause a complex physiological response. Such reaction as a stress includes a wide range of issues related to the causes of its occurrence, developmental mechanisms, as well as features of detection. Individual differences in the response to stress and the formation of stress resistance determine the increasing interest to studying the connection between emotional sphere and the level of anxiety of young people. It is important for understanding their social and professional maturity since emotional states influence on the success of educational activities and students' awareness of their role in profession in general.

The emotional state as an indicator of social and professional maturity is a reflection of the internal human condition. Studies of this type could become an active addition to not only Psychology, but also both Physiology and Sociology, both Neurology and Endocrinology, etc. The current directions include simulating situations that stimulate and excite emotions (Cacioppo & Gardner, 1999), also studying influence under endo- and exogenous factors on a person. "Emotions can be defined as positive or negative experiences associated with certain means of physiological activity". The emotions produce various vital processes, behavioral and cognitive changes. Initially, their role was to motivate adaptive behavior that in the past could contribute to the survival of people. This is a reaction to significant internal and external events (Schacter, 2011).

### Aim and Tasks

To the main tasks of the Medical Ecology it is necessary to add the study of emotional state that is formed under the influence of the interaction between environment and a certain individual and is an important regulator of person's behavior. Assimilation of the first professional knowledge, practical skills begins to develop stu-

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dent's emotions and help them to find themselves in social interaction. In view of the current trends in relationships, the interconnection of people with the environment and their constant interchange, self-esteem of the emotional state is actual and necessary for further understanding of person's social and professional maturity. The peculiarity of medical students is their orientation towards the activity in the man-man system. Their main task is to acquire knowledge and skills to help people with their health and life. This profession, in order to avoid professional burnout, is more suitable for emotionally stable and psychologically mature people. In addition, the attitude of the medical students depends on chosen profession, on the state of the emotional sphere, awareness of their responsible role of the future doctor profession influence the efficiency and quality of the medical care of people after graduation.

The social and professional maturity in the wide sense is the conformity of human behavior to social criteria and norms. In the narrow sense, the social and professional student's maturity is the ability of a young person to be in the professional community of health workers, carrying out educational theoretical and practical activities with readiness to cope with their own emotional state that may arise under different positions in the life. Monitoring and research of emotional states under the influence of anxiety level of medical student's personality is necessary to understand its structure and ways of development. It will give the opportunity to increase a stress resistance grade, to improve the relationship and realize personal emotional processes. Therefore, the main purpose of the article is monitoring self-esteem emotional state and anxiety level in medical students at the end of the first year of study during modules. The next tasks were carried out to achieve a purpose: determined self-esteem of emotional state, anxiety level and correlated the results.

### **Research methods**

The theoretical, empirical and statistical methods of research were used.

The basis of the empirical analysis method of "Selfesteem of emotional state" by A. Wessman and D. Rix was used. In the process of diagnosis 75 respondents of 17-20 years old took part in this study.

The questionnaire consists of four blocks; each has 10 statements. The respondent is asked to choose in pairs of assertions, what is currently the most appropriate for himself/herself. Measurement is carried out on a 10-point scale. The method identifies the following indicators: "calmness - anxiety", "energetic – exhaustion", "elevation - depression", "confidence – helplessness". Such diagnosis can be used for both teenagers and adults (Karelin, 2007).

The processing of the results and their interpretation was carried out by determining the following indicators:

A1 - "calmness - anxiety" (individual self-esteem - A1 - is equal to the number of assertions chosen by the testees from this scale. Similarly, individual values are obtained for the indicators A2-A4).

A 2 – "energetic – exhaustion"

A 3 - "elevation - depression"

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A 4 – "confidence – helplessness"

A 5 - Total (on four scale) status assessment:

A5 = A 1 + A 2 + A 3 + A 4, where

A 1, A 2, A 3, A 4 - individual values for the respective scales.

From 26 to 40 points – high rate, from 15 to 25 points – the average rate, from 4 to 14 points - low rate of emotional state.

Scale "energetic – exhaustion"

- above 5-6 points the respondent feels himself/herself as a personality: initiative, enterprising, obsessive, directed, active, pushful, intelligent.

- 5-6 points show the average figures on the scale "energetic – exhaustion" without obvious dominance of one of the poles.

- 1-4 points indicate passivity, inertia, lack of initiative, lethargy, apathy, indifference, slowness.

Scale "elevation-depression"

- above 5-6 points the respondent considers himself/herself to be inflammatory, temperamental, persistent, impulsive, energetic, freedom-loving, loose, alive, mobile, and lively.

- 5-6 points show the average figures on the "elevation-depression" scale without obvious dominance of one of the poles.

- 1-4 points indicate shyness, timidity, indecision, timidity, intimidation, shyness, oppression, frustration, depression, suppression.

Scale "calmness - anxiety":

- above 5-6 points show the predominance of "calmness": sustainability, restraint, patience, progressiveness, prudence, balance, tolerance.

- 5-6 points indicate the average figures on the scale "calmness – anxiety" without obvious dominance of one of the poles.

- 1-4 points indicate passivity, inertia, intimidation, complexity, indecision, drowsiness, nervousness, uncertainty, tension.

Scale "confidence – helplessness"

- above 5-6 points show restraint, determination, perseverance, heroism, work ability, strength, willful qualities, fearlessness, courage, independence.

- 6 points convince about the average indicators on the scale of "Confidence-helplessness" without the obvious dominance of one of the poles.

- 1-4 points indicate weak character, irretrievability, weakness.

A summary assessment indicates the degree of emotional lift or exhaustion (Karelin, 2007).

The Taylor Manifest Anxiety Scale (with V. Norakidze modification) was applied to measure the anxiety level. Norakidze added the questionnaire with a lie scale, which allows for judging demonstration and insincerity in responses. The questionnaire consists of 50 statements, which should be answered yes or no. The evaluation of the results of the study from the questionnaire is carried out by counting the number of responses, indicated anxiety. The overall score 40-50 points is considered a very high level of anxiety; 25-40 points indicated a high level of anxiety; 15-25 points – the average (with a tendency to a high level); 5-15 points – the average (with a tendency to low) levels and 0-5 points – the low level of anxiety.

The coefficient of variation was calculated to see the variation of the variability of the sign. A correlation-regression analysis was conducted (Medic, 2000).

#### **Research results**

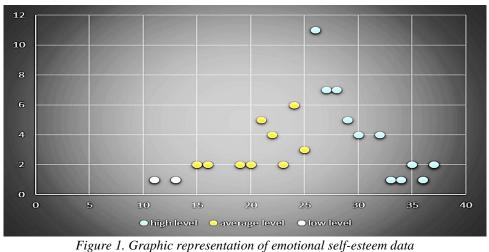
As a result of self-esteem of emotional state monitoring were found that 60% of the testees had a high degree of emotional state, 37% had an average and only 2,6% had a low level of emotional state. This situation is a regulator of modifications to environmental changes. It means that most respondents are adapted to their tasks in society (Table 1).

Table 1

self-esteem of emotional state	Scale of self-esteem	Number of respondents
low	11	1
	13	1
Total		2
	15	2
	16	2
	19	2
average	20	2
	21	5
	22	4
	23	2
	24	6
	25	3
Total		28
	26	11
	27	7
	28	7
high	29	5
	30	4
	32	4
	33	1
	34	1
	35	2
	36	1
	37	2
Total		45

Indicators of self-esteem of emotional states under the influence of anxiety level

The points of allocation of data indicates that the highest value of the high self-esteem state is close to the average. This means that the respondents' emotions, due to the influence of some social factors, can move from one state to another (Figure 1).



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The variation of statistical calculations also shows it (Table 2). The coefficient of variation is characterized by relatively average values of 14,03% and 11,01% in both

cases, which demonstrate human's presence under the influence of various emotions from simple to more complex, having a range of psychological characteristics and external manifestations.

Table 2

self-esteem	Medium quadratic	Medium quadratic	Variation coeficient,
of emotional state	deviation, $\sigma$	error, <i>m</i>	CV
low average	3.0	±0,56	14.03%
high	3,21	$\pm 0,30$ $\pm 0,48$	11,01%

Statistical indicators of the diagnosis of self-esteem of emotional state

Correlation and regression analysis of the relationship between the two variables (high and overage) indicates the statistical significance of the studied indicators of self-esteem of emotional state (Table 3). The correlation between the two signs is not equivalent, close to the unit, indicating a close relationship between the investigated indicators. In the first case, the affinity is straight, the strength of the connection on the Chadok scale - is noticeable. At high self-

The number of degrees of freedom

Student's t-distribution

Determination coefficient

esteem, the correspondence between the established properties is negative, the strength of the connection on the Chadok scale is high. The probability of error with these degrees of freedom is 5%. The determination coefficient indicates that the used model is suitable for practical application since the productive property is explained by the influence of the factor characteristic.

f=9

t=2,26

 $R^2=0,802$ 

Table 3

The degree of statistical dependence between two variables				
Statistical indicator	Average	High		
	self-esteem	self-esteem		
Correlation coefficient	r=0,532	r=-0,896		

f=7

t=2,36

R<sup>2</sup>=0,283

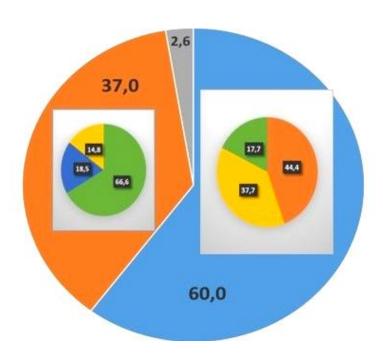


Figure 2. Anxiety level in correlation to emotional state

It's showed in correlation to emotional state that all personalities had some anxiety level with different manifestation (figure 2).

Only 44,4% high anxiety, 37,7% – overage with tendency to high and 17,7% – overage with tendency to low among High level of emotional state.

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The overage level of emotional state showed 66,6% – high anxiety, 18,5% – overage with tendency to high and 14,8% – overage with tendency to low.

The comparing of anxiety levels between emotional states points to not big difference (table 4).

Table 4

Difference between anxiety levels				
High level of emotional state,	Difference,	Overage level of emotional		
%	%	state, %		
44,4	< на 22,2	66,6		
37,7	> на 19,2	18,5		
17,7	> на 2,9	14,8		

# Discussion

Hypotheses about influence of variation factors on the emotional state of a person in any profession are confirmed. In particular, student's self-esteem of emotional state monitoring with different levels of emotional intelligence indicates the prevalence of the overage and low values of A. Wessman and D. Rix scale. The correlations revealed by the Spirman rank confirm the influence of emotional intelligence on the student's selfesteem in pedagogical specialty (Dolgova, 2017).

The study of the relationship between the four signs of self-esteem and satisfaction with work is quite interesting. The results indicate that self-sustainability, control location, neuroticism and generalized self-realization are important predictors of both satisfaction and performance (Timothy, 2001). The relatively high self-esteem of medical students was also found (Dahlin, 2007). The selfesteem was evaluated on the PBSA scale (PBSS). In the Caroline Institute, the results of self-confidence are associated with the exhaustion of the authors. Abouserie 1994 notes a significant negative correlation between selfesteem and academic load, which suggests that students with a high degree of self-esteem are less stressed than those with a low level. Such data is consistent with ours, as monitoring at the Ivano-Frankivsk National Medical University was conducted last weeks during modules. This may indicate about protective mechanisms of the body against stress by lifting the level of self-esteem.

The connection of social factors, student's emotional state of self-esteem and anxiety level confirmed by other literary sources that no single factor or set of them (for instance demographic, academic, social, emotional), provide individual student success (Pritchard, 2003). An apparent increase in seriously disturbed students consulting student health services in the UK has led to concern that increasing financial difficulties and other outside pressures may affect student mental health and academic performance. Acording to mid-course 9% of previously symptom-free students became depressed and 20% became anxious at a clinically significant level. The financial difficulties made a significant independent contribution to depression and relationship difficulties independently predicted anxiety after adjusting for pre-entry symptoms. Depression and financial difficulties mid-course predicted a decrease in exam performance from first to second year (Bernice Andrews, 2010).

#### Conclusion

The student's self-esteem of emotional state increases with social pressure, which is psychologically notional for adaptive human potential and points to the significant role of self-perfection in the student's social and professional maturity.

Any emotional state created conditions for anxiety. The most anxiety was under overage level of emotional state, but high emotional state express more overage anxiety.

The results of research indicate the empirical connection of student's self-esteem of emotional state, anxiety level and influence of social factors. That's served a background for further studying of this psychological circle.

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# САМООЦІНКА ЕМОЦІЙНОГО СТАНУ ТА РІВЕНЬ ТРИВОГИ У СТУДЕНТА МЕДИЧНОГО СПРЯМУВАННЯ

Екологічне середовище, в яке входить і психологічна сфера, є одним із ключових факторів у вивченні соціально-професійної зрілості сучасного студента. Тому метою даного дослідження став моніторинг самооцінки емоційного стану і рівня тривоги студента медичного спрямування. Було застосовано методики «Самооцінка емоційних станів» А. Уессмана і Д. Рікса, шкалу тривоги Г. Тейлора (з модифікацією В. Норакідзе), теоретичні, емпіричні та статистичні методи. Встановлено коефіцієнт детермінації, який свідчить, що використана модель придатна для практичного застосування оскільки результативна властивість пояснюється впливом факторної ознаки. Висока самооцінка емоційного стану сформована під впливом зовнішніх чинників супроводжувалася певним рівнем тривоги. Дослідження вказує на емпіричний зв'язок між самооцінкою емоційного стану, рівнем тривоги і впливом соціальних факторів. Виявлені результати можуть стати основою для подальших досліджень даного психологічного кола.

Ключові слова: самооцінка, емоційний стан, рівень тривоги, студент.

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