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Adaptive capabilities of the body and aggressive personality manifestations of modern students at various stages of education in a higher education institution

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The determination of the subsequent comprehensive assessment of the peculiarities of the course of adaptation processes, which are characteristic of modern student youth who acquire a certain profession, are closely related to the establishment of the regularities of the course of numerous adaptive mechanisms in the plane of implementation of psychophysiological, mental, and socio-psychological adaptation. The purpose of the work is to carry out a comprehensive hygienic assessment of the adaptation capabilities of the organism based on the definition of its social and psychological component and aggressive personality manifestations of modern students at various stages of education in a higher education institution. Scientific studies were conducted using questionnaires by Rogers and Diamond and Bass-Darkey. 307 students, including 150 young women and 157 young men, who studied in the first, third and sixth years of the medical faculty were under supervision during the observation period. The analysis of the obtained data involved the application of descriptive statistics procedures based on the application of the statistical analysis program package "Statistica 6.1" (license number BXXR901E245722FA). It was established that the highest level of expression of integral indicators of social and psychological adaptation of students, regardless of the time of study in a higher education institution, is characteristic of the characteristics of adaptation manifestations regarding the desire to dominate and accept others; at the same time, the lowest level of expression is for the characteristics of internality and therefore, determines the presence of pronounced signs of transformations of the adaptive content, which mark the tense course of the processes of social and psychological adaptation of students to the conditions of stay in a medical institution of higher education. It was found that among the overwhelming number of students who were studied, the indicators of aggressive personality manifestations exceed the values typical for normative age-sex indicators. This situation determines the need for the development of methods for a comprehensive assessment of the state of adaptive resources of the body of young men and women studying and scientific substantiation of health-preserving technologies, based on which measures of psychohygienic correction should take the leading place.

Keywords: students, institution of higher education, training, personality traits, psychophysiological adaptation, mental adaptation, socio-psychological adaptation, aggressiveness.

Introduction

Determining the peculiarities of the course of adaptation processes typical for student youth who acquire certain professions in today's conditions is closely related to the assessment of the course of a number of adaptive mechanisms, which are mainly in the plane of psychophysiological, mental, and socio-psychological

adaptation [3]. Thus, the course of psychophysiological adaptation is clearly related to ensuring the optimal organization of numerous psychophysiological relationships that take place (primarily in the structures of the central nervous system, visual-sensory and audio-motor systems, coordination of movements, etc.) and

determine the course of preservation processes favorable for the human body somatic and mental health. It should only be noted that the organization of the relationships of the leading psychophysiological functions is carried out thanks to the construction of certain functional systems, which are characterized by both psychological and physiological mechanisms of regulation [23, 25]. Mental adaptation determines the establishment of an optimal relationship between the individual and the environment during the performance of either usual or unusual daily activities, allowing a person to fully satisfy specific needs and implement related tasks while maintaining a high level of somatic and mental health [7, 32, 34]. After all, socio-psychological adaptation is a concrete result of the individual's direct adaptation to the conditions of the environment based on the use of a wide variety of social means through the use of optimal methods of behavior, which, in fact, determine the social status of the individual [15, 16, 17, 18].

It should be noted that recently the problems of psychophysiological and mental adaptation have often been at the center of a number of scientific studies conducted, in particular, by representatives of the Vinnytsia School of Hygiene [30, 31, 32]. On the other hand, questions of formation and development of socio-psychological adaptation, features of its course, consequences of the implementation of individual components have almost never been the subject of a separate scientific study.

In this context, one cannot fail to note the fact that aggressive personality manifestations are extremely closely related to the processes of social and psychological adaptation [35]. The reason for this phenomenon is quite simple. Unsatisfactory social living conditions are one of the leading (even criterion!) factors in the formation of maladaptive manifestations, dissatisfaction with one's existence, and the development of adverse reactions in response. In general, aggressiveness is a certain situational state, which is characterized by affective outbursts of anger and manifestations of impulsive "destructive" behavior directed at the object of frustration, which is the direct cause of the conflict, realized on a cognitive (ensures a person's orientation in the situation), emotional (appears in certain emotional states (anger, hostility, etc.)) and volitional (ensures the achievement of his goal, which is set for himself by an aggressive subject) levels [34].

The purpose of the work is to carry out a comprehensive hygienic assessment of the adaptation capabilities of the organism based on the determination of its social and psychological component and aggressive personality manifestations of modern students at various stages of education in a higher education institution.

Materials and methods

Scientific studies, which involved the implementation of a comprehensive hygienic assessment of the adaptation

capabilities of the body based on the definition of its socio-psychological component and aggressive personality manifestations of modern students, were conducted at various stages of education in a higher education institution. During the observation period, there were 307 students, including 150 young women and 157 young men, who were studying in 1 (50 young women and 56 young men), 3 (50 young women and 51 young men) and 6 (50 young women and 50 young men) courses, respectively.

In order to objectively determine and hygienically assess the features of social-psychological adaptation as one of the most objective indicators of the state of adaptive capabilities of the students' body and the personal traits clearly related to it, the Rogers and Diamond personality questionnaire was used in the course of the research, which provided determination of both its individual correlates and, first of all, established the degree of expression of such integral indicators as indicators of adaptation, self-acceptance, acceptance of others, internality, as well as the desire for dominance [27].

At the same time, in order to determine the level of distribution among student youth of certain personally significant manifestations of aggressive content, the Bass-Darkey personal questionnaire was used, which allowed to determine the most typical forms of aggressive behavior for the studied persons and to establish the degree of their expression in the range from moderate to high according to with such scales as scales of physical, verbal and indirect aggression, negativism, irritability, suspiciousness, "feeling of resentment" and "feeling of guilt". The level of expression of aggressive manifestations was considered moderate if the level of expression of the achieved indicators did not reach 55 points, on the other hand, high if the level of their expression exceeded 55 points [27].

Further analysis of the received data and their subsequent prognostic assessment required the use of descriptive statistics procedures by using the licensed standardized package of statistical analysis application programs "Statistica 6.1" (license number BXXR901E245722FA).

The work is a fragment of the planned research work of the National Pirogov Memorial Medical University, Vinnytsia: "Physiological and hygienic assessment of the peculiarities of adaptation of children, adolescents and young people to the conditions of learning in modern educational institutions and the scientific basis of university hygiene: career guidance aspects, problems of introducing health-preserving technologies and creation of a preventive educational environment" (state registration number 0116U000038). The conducted research fully complies with the basic bioethical norms of the Helsinki Declaration, the Council of Europe Convention on Human Rights and Biomedicine, the relevant provisions of the WHO and the Ministry of Health of Ukraine, as well as the ethical standards established by the Bioethics Committee of the National Pirogov Memorial Medical University, Vinnytsia

(protocol No. 10 of 26.11.2020). All authors have read the text of the manuscript and have given consent for its publication. There is no conflict of interest.

Results

The key to obtaining informative and valid indicators for determining the degree of adaptability of students to the conditions of being in a medical institution of higher education and, first of all, its social and psychological component, is the use of the personal questionnaire of Rogers and Diamond, the work of the researched persons with which allows you to get a well-founded and quite specific idea of the main prerequisites for creating favorable conditions for ensuring the maximum effectiveness of educational and extracurricular activities of girls and boys under the conditions of achieving such a degree of functional mobilization of the personality of individual representatives of student youth that does not cause overstrain and does not contribute to the development of premature fatigue [26, 27, 31]. It should also be noted that the basis of the article is mainly the previously unpublished data obtained in the research [33], which require in-depth interdisciplinary and interdisciplinary professional interpretation and versatile interpretation by specialists of various directions regarding the prospects for their further wide use in medical industry in general.

Thus, in this context, during the psychohygienic assessment of integral indicators of adaptation, which make it possible to identify the generalized degree of adaptation of students to the conditions of optimal interaction with their peers, friends and just those around them in the system of interpersonal relations that has developed, it was found that their significance among young men, who studied in the 1st year, were 0.587 ± 0.012 points, among young women who studied in the 1st year - 0.561 ± 0.013 points, respectively, among young men who studied in the 3rd year - 0.587 ± 0.011 points, respectively ($p > 0.05$), among young women who studied in the 3rd year - respectively 0.623 ± 0.009 points ($p < 0.01$), among young men who studied in the 6th year - respectively 0.608 ± 0.014 points ($p > 0.05$), among young women who studied in the 6th year - respectively 0.613 ± 0.013 points ($p < 0.05$). It is interesting that the level of expression of the studied indicators at the beginning of the training period was higher among young men, in the middle of it - among young women, and at the end - completely leveled off. However, statistically significant differences were observed when comparing data specific to female students of the 1st and 3rd years ($p < 0.01$) and 1st and 6th years ($p < 0.05$). There were no statistically significant sex-related differences ($p > 0.05$).

The results characterizing the peculiarities of the values of integral indicators of self-acceptance, determining the degree of expression of a positive assessment of one's personal qualities, confidence in one's own attractiveness and interest for others as a person, testified to the fact that their level among young men was 0.590 ± 0.014 points in first-year young men and also 0.587 ± 0.010 points in third-

year young men ($p > 0.05$) and slightly increased to 0.613 ± 0.009 points in graduate young men ($p > 0.05$), among first-year young women it was the lowest, amounting to 0.563 ± 0.013 points, increasing significantly in the following period studying at the medical institution up to 0.624 ± 0.012 points ($p < 0.01$) in third-year young women and to a certain extent decreasing to 0.609 ± 0.013 points ($p > 0.05$) in female graduates. It is interesting that, as in the previous case, the level of expression of the investigated indicators at the beginning of the training period was higher among young men, in the middle of it - among young women, and at the end - completely unambiguous values were registered. Statistically significant discrepancies were observed when comparing the data characteristic of female students of the 1st and 3rd years ($p < 0.01$). There were no statistically significant sex-related differences ($p > 0.05$).

The data related to another component of the leading indicators of social and psychological adaptation of students, namely, indicators regarding the evaluation of the features of the integral indicators of acceptance of others, establishing a certain degree of tolerance to other people, and above all, to their shortcomings, negative traits and actions, were characterized by the following characteristics. Thus, their values among young men who studied in the 1st year were 0.633 ± 0.011 points, among young women who studied in the 1st year - respectively 0.594 ± 0.009 points, among young men who studied in the 3rd year - respectively 0.622 ± 0.008 points ($p > 0.05$), among young women who studied in the 3rd year - respectively 0.644 ± 0.011 points ($p < 0.001$), among young men who studied in the 6th year - respectively 0.658 ± 0.010 points ($p > 0.05$), among young women, who studied in the 6th year - respectively 0.659 ± 0.008 points ($p > 0.05$). As in the two previous cases, the level of expression of the studied indicators at the beginning of the training period was higher in young men, in the middle of it - in young women, and at the end - the same level was registered according to the degree of expression of the value. However, statistically significant differences were observed when comparing the data characteristic of female students of the 1st and 3rd years ($p < 0.001$). Statistically significant sex-related differences were characteristic only for young men and young women studying in the 1st year ($p < 0.05$).

Considering the features of the leading personal adaptation-significant manifestations from the side of integral indicators of emotional comfort, which, first of all, determine the degree of emotionally colored feeling of satisfaction with the surrounding reality, it should be noted that their level among young men was 0.578 ± 0.012 points in first-year young men and also 0.590 ± 0.011 points in third-year young men ($p > 0.05$) and increased to 0.613 ± 0.013 points in graduate young men ($p > 0.05$), among first-year young women - 0.558 ± 0.009 points, significantly increasing during the next period of stay at the medical institution, up to 0.623 ± 0.012 points ($p < 0.01$) in third-year young men and slightly decreasing to 0.614 ± 0.014 points ($p < 0.05$) in female graduates. The level of expression of the studied indicators

at the beginning of the training period was higher among young men, in the middle of it - among young women, and at the end - equivalent values were recorded. Statistically significant discrepancies were observed when comparing data specific to female students of the 1st and 3rd years ($p < 0.01$) and 1st and 6th years ($p < 0.05$). There were no statistically significant sex-related differences ($p > 0.05$).

The results of determining the integral indicators of internality, which indicate the level of superiority of internal motivation over external stimuli and exercise control over one's own actions, testified to the fact that their values among young men who studied in the 1st year were 0.517 ± 0.011 points, among young women who studied in 1st year - respectively 0.488 ± 0.010 points, among young men who studied in the 3rd year - respectively 0.508 ± 0.010 points ($p > 0.05$), among young women who studied in the 3rd year - respectively 0.536 ± 0.014 points ($p < 0.01$), among young men who studied in the 6th year - respectively 0.542 ± 0.012 points ($p > 0.05$), among young women who studied in the 6th year - respectively 0.543 ± 0.012 points ($p > 0.05$). It is important to note the fact that, as in the two previous cases, the level of expression of the studied indicators at the beginning of the training period was higher among young men, in the middle of it - among young women, and at the end - the same was recorded according to the degree of expression of the value. However, no statistically significant differences were observed, nor were there any statistically significant sex-related differences ($p > 0.05$).

In the end, the data regarding the assessment of the features of the integral indicators of the desire for dominance, which establish the degree of expression of the ability to influence others, to defend one's own opinion and one's own position, testified to the fact that their level among young men was 0.740 ± 0.012 points in 1st year young men and also 0.740 ± 0.012 points in third-year young men ($p > 0.05$) and 0.754 ± 0.012 points in young graduates ($p > 0.05$), among first-year young women it was 0.700 ± 0.012 points, significantly increasing during the next period of stay in a medical institution higher education up to 0.763 ± 0.013 points ($p < 0.01$) in third-year young women and slightly decreasing to 0.762 ± 0.089 points ($p < 0.05$) in graduate young women. The level of expression of the investigated indicators at the beginning of the training period was higher among young men, in the middle and at the end - among young women. Statistically significant discrepancies were observed when comparing data specific to female students of the 1st and 3rd years ($p < 0.01$) and 1st and 6th years ($p < 0.05$). Statistically significant sex-related differences were characteristic only for young men and young women studying in the 1st year ($p < 0.05$).

The high level of sincerity of the answers of young women and young men was confirmed by the data on the assessment of the degree of expression of the indicated indicators among students of different courses, which in the dominant number of cases corresponded to the level of average values and was mainly manifested as answers

that should be classified as absolutely frank and frank and only in 8.5-10.0 % of cases of situational frank answers.

Generalized data on the peculiarities of the expression of integral indicators of socio-psychological adaptation of male and female students during the period of obtaining higher education are shown in Figure 1.

An important place in the structure of personal manifestations of student youth, which determine their motivation to carry out certain actions and the implementation of certain behavioral decisions, is occupied by aggressiveness, which is a personality trait, the main feature of which is the presence of pronounced destructive tendencies, and the main personal manifestations: conflict, hostility, lack of necessary respect for others, a pronounced oppositional view of the events taking place, etc. [23, 26, 31].

In the course of research conducted on the basis of the application of the personal questionnaire of Bass-Darkey, which made it possible to determine the forms of aggressive behavior typical for modern students of various courses of a medical institution of higher education and to establish the degree of their expression in a sufficiently large range from low and moderate to elevated and high in accordance with 8 basic scales.

In general, and this fact should be noted as the first when performing a psychohygienic assessment of the characteristics of aggressive manifestations of personal genesis, the level of expression of various forms of aggression that take place in the student environment is quite high, thereby testifying to a significant degree of spread of various forms of aggressive in nature behavioral actions and deeds.

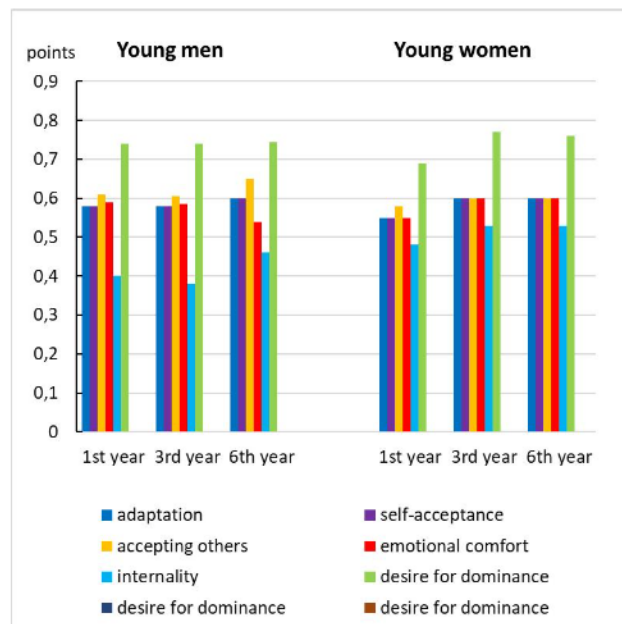


Fig. 1. Integral indicators of social and psychological adaptation of young men and women studying in the conditions of a modern institution of higher medical education according to the personal questionnaire of Rogers and Diamond.

At the same time, considering the level of development of individual manifestations of aggressiveness of the studied students, it was necessary to note that one of the least developed in comparison with other types of aggressive manifestations should be considered indicators on the scale of physical aggression, which reflected the tendency to direct use of physical force by one person against another during the resolution of conflict situations. Thus, the level of the studied indicators among 1st year young men was 43.56 ± 2.68 points, among 1st year young women - 53.82 ± 2.88 points. Somewhat different data were recorded among third-year young men and third-year young women - the level of indicators of physical aggression among them was 55.66 ± 3.41 points ($p < 0.05$) and 47.00 ± 3.22 points ($p > 0.05$), respectively. Almost similar indicators were registered among graduate students - the level of expression of indicators of physical aggression among them was 57.62 ± 3.15 points ($p < 0.001$) in young men and 49.72 ± 2.45 points ($p > 0.05$) in young women. However, statistically significant differences were observed only in case of comparison of data specific to young students of the 1st and 3rd years ($p < 0.05$) and for young students of the 1st and 6th years ($p < 0.001$). Significant sex-related differences were registered only among young men and young women who studied in the 1st year ($p < 0.05$).

It was necessary to consider the level of development of aggressive manifestations among modern students on the scale of verbal aggression to be sufficiently high, which, first of all, consists in an effort to preferentially reveal negative feelings not through actions, but through the form of verbal appeals (quarrels, conversations in raised tones, etc.) to other people. Thus, among young men and young women studying in the 1st year, their values were 47.24 ± 2.06 points and 46.28 ± 2.31 points, respectively, increasing later in both cases to the highest values by the degree of development and amounting to 62.82 ± 0.37 points, respectively ($p < 0.001$) and 61.45 ± 2.49 points ($p < 0.001$) among young men and young women studying in the 3rd year, and slightly decreasing to the level of 55.04 ± 3.08 points ($p > 0.05$) and 45.92 ± 1.86 points ($p < 0.05$) among young men and young women, who studied in the 6th year. Statistically significant differences between the determined indicators were typical for female students of the 1st and 3rd years ($p < 0.001$), as well as for young students of the 1st, 3rd and 6th years ($p < 0.001$ and $p < 0.05$). Sex-related differences in the studied indicators were observed only between the indicators of young men and young women of 6th year students ($p < 0.05$).

The indicators reflecting the degree of expression of aggressive manifestations on the scale of indirect aggression, which attests to the level of spread of negative feelings of an aggressive content through the implementation of indirect actions directed against other persons, should be considered extremely high, and at the same time having a pronounced upward trend. So, among first-year young men and first-year young women, the level

of the studied indicators was 56.16 ± 2.58 points and 66.85 ± 2.46 points, respectively, among third-year young men and third-year young women - it was 66.98 ± 2.69 points ($p < 0.01$) and 66.90 ± 2.46 points, respectively ($p > 0.05$), among young men graduates and young women graduates, it was 64.36 ± 3.12 points ($p < 0.05$) and 60.58 ± 2.79 points ($p > 0.05$), respectively. Statistically significant differences were observed only in the case of comparison of data specific to young students of the 1st and 3rd years ($p < 0.01$) and young students of the 1st and 6th years ($p < 0.05$). Sex-related differences in the studied indicators were recorded between the indicators of young men and young women students of the 1st year ($p < 0.01$).

The degree of expression of the indicators that determined the level of spread in the personality structure of aggressive manifestations on the scale of negativism, the leading manifestations of which should include oppositional forms of behavior, should also be considered quite significant. Among young men and young women who studied in the 1st year, the values of the indicators of negativism were 47.20 ± 3.73 points and 54.14 ± 3.05 points, among young men and young women who studied in the 3rd year - 54.74 ± 3.44 points ($p > 0.05$) and 58.21 ± 3.86 , respectively points ($p > 0.05$), among young men and young women who studied in the 6th year - 59.72 ± 3.25 points ($p < 0.05$) and 50.92 ± 1.98 points ($p > 0.05$), respectively. Statistically significant differences in the values of the determined indicators were observed only between the indicators of 1st year and graduates ($p < 0.05$). Sex differences were registered only among young men and young women studying in the 6th year ($p < 0.05$).

Indicators that determined the level of spread of aggressive manifestations on the scale of irritability, i.e. the tendency to quickly develop irritable reactions in case of the slightest excitement, initially increased during the observation period, and then gradually decreased. Thus, its indicators in first-year young men were 39.90 ± 2.40 points ($p < 0.001$), in first-year young women - 41.78 ± 2.32 points, in third-year young men - 49.78 ± 2.57 points ($p < 0.001$), in third-year young women 49.68 ± 2.46 points ($p < 0.05$), in male graduates - 46.08 ± 2.71 points ($p < 0.05$), in female graduates - 41.40 ± 2.53 points ($p < 0.05$). Statistically significant differences were registered when comparing indicators among young men who studied in the 1st and 3rd year ($p < 0.001$) and 1st and 6th year ($p < 0.05$), as well as among young women who studied in the 1st and 3rd year ($p < 0.05$) and 3rd and 6th years ($p < 0.05$). There were no significant sex differences ($p > 0.05$).

During the psychohygienic assessment of the features of dynamic changes in indicators that determined the level of spread of aggressive manifestations on the scale of suspicion, the distinctive features of which should be considered a tendency to mistrust in relations with others. Thus, its values were 45.36 ± 2.83 points and 42.83 ± 1.91 points among young men and young women who studied in the 1st year, 46.68 ± 2.73 points ($p > 0.05$) and 52.66 ± 3.24

points ($p < 0.01$) among young men and young women who studied in the 3rd year, as well as 48.10 ± 2.73 points ($p > 0.05$) and 44.66 ± 2.27 points ($p < 0.05$) among young men and young women who studied in the 6th year. Statistically significant differences were observed when comparing the indicators of young women who studied in the 1st and 3rd years ($p < 0.01$), as well as young women who studied in the 3rd and 6th years ($p < 0.05$). On the other hand, there were no sex-related ($p > 0.05$) differences between the values of the studied indicators.

Extremely interesting and, in accordance with the content, completely opposite results were obtained during the study of indicators of aggressiveness on the scales "feeling of resentment" and "feeling of guilt". High levels of feelings of resentment indicate the development of envy of others' successes and rejection of others, on the other hand, high levels of "guilt" indicators determine the conscious judgment of the researched persons that they are the cause of numerous negative, conflict situations.

Considering the indicators on the "feeling of resentment" scale, it should be noted that the degree of their manifestation among young men and young women who studied in the 1st year was 54.08 ± 2.47 points ($p > 0.05$) and 46.19 ± 2.68 points ($p > 0.05$), respectively, among young men and young women who studied in the 3rd year - increased to 55.26 ± 3.81 points ($p > 0.05$) and 54.01 ± 2.98 points ($p > 0.05$), respectively, among young men and young women who studied in the 6th year - decreased to 46.66 ± 3.12 points ($p > 0.05$) and 43.98 ± 3.50 points ($p < 0.05$). Statistically significant differences were observed only in the case of comparison of indicators typical for young students of the 1st and 6th years ($p < 0.05$). Sex-related differences in the studied indicators were registered between the indicators of young men and young women of 1st-year students ($p < 0.05$).

Indicators reflecting the degree of expression of aggressive personality traits on the "feeling of guilt" scale were significantly higher, with pronounced upward trends during the first years of study at a medical institution of higher education. In first-year young men, their level was 62.48 ± 2.48 points, in first-year young women - 48.91 ± 2.59 points, in third-year young men - it increased to 58.26 ± 3.35 points ($p > 0.05$), in third-year young women - to 67.11 ± 2.11 points ($p < 0.001$), in young men graduates it decreased to 56.98 ± 2.80 points ($p > 0.05$), in young women graduates it decreased to 43.78 ± 2.87 points ($p > 0.05$). Statistically significant differences in the determined indicators were observed only in young women who studied in the 1st and 3rd courses ($p < 0.001$). Sex-related differences in the studied indicators were typical for young men and young women of all studied groups ($p < 0.001$).

Figures 2 and 3 present the data of a generalized analysis of the characteristics of indicators of aggressive personality manifestations of students during their stay in a medical institution of higher education.

Indicators such as the index of aggressiveness and

the index of hostility are considered integral values of the degree of expression of aggressive personality traits that were studied. If the index of aggressiveness provides an opportunity to carry out a comprehensive assessment of manifestations of physical and verbal aggression and irritability, then the index of hostility is a comprehensive assessment of manifestations of suspicion and "feeling of resentment". Considering the peculiarities of their distribution in the structure of aggressive manifestations according to the values of the aggressiveness index, it was

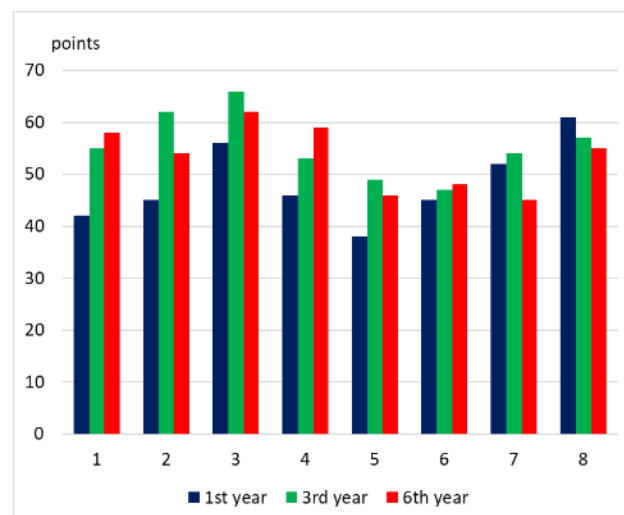


Fig. 2. Indicators of aggressive personality manifestations of young men during the period of study at a medical institution of higher education according to the Bass-Darkey personality questionnaire. Notes: 1 - physical aggression; 2 - verbal aggression; 3 - indirect aggression; 4 - negativism; 5 - irritability; 6 - suspiciousness; 7 - feeling of resentment; 8 - feeling of guilt.

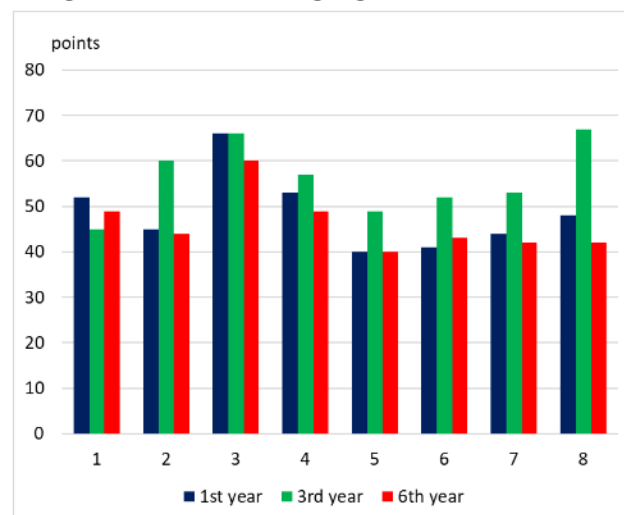


Fig. 3. Indicators of aggressive personality manifestations of young women during the period of study at a medical institution of higher education according to the Bass-Darkey personality questionnaire. Notes: 1 - physical aggression; 2 - verbal aggression; 3 - indirect aggression; 4 - negativism; 5 - irritability; 6 - suspiciousness; 7 - feeling of resentment; 8 - feeling of guilt.

necessary to note a significant advantage, especially in the middle and at the end of the period of obtaining higher education, which are high according to the degree of expression of the indicators. Their specific weight among first-year young men and first-year young women was 44.0 % and 57.2 %, among third-year young men and third-year young women - 76.0 % and 66.7 %, respectively, among young graduates and female graduates - 72.0 % and 56.0 %, respectively. At the same time, the share of indicators that indicated a moderate level of development of the studied indicators was 56.0 % and 42.8 % among young men and young women who studied in the 1st year, 24.0 % and 33.3 % among young men and young women who studied in the 3rd year, as well as 28.0 % and 46.0 % among young men and young women who studied in the 6th year.

The data of the analysis of the features of the distribution of indicators of the hostility index both among young women and among young men also testified to the fact that their structure was dominated by the specific weight of values typical for a high level, the value of which was 80.0 % among 1 year young men and 66.1 % among 1 year young women, 76.0 % among third-year young men and 84.3 % among third-year young women, 68.0 % among male graduates and 64.0 % among female graduates. The specific weight of average normative indicators was, respectively, 20.0 % and 33.9 % among young men and young women who studied in the 1st year, 24.0 % and 15.7 % among young men and young women who studied in the 3rd year, and 32.05 and 36.0 % among young men and young women who studied in the 6th year.

Discussion

In medical and psychological research, socio-psychological adaptation is usually considered as the result of a person's adaptation to a certain social environment, which determines the peculiarities of interaction with it [1, 29]. A practically similar approach is characteristic of preventive medicine, according to which socio-psychological adaptation is a concrete result of direct adaptation of an individual to the conditions of the environment based on the use of a wide variety of social means by implementing optimal ways of behavior, which, in fact, determine the social status of the individual [30, 31, 32].

Therefore, based on these positions, adaptation in general and socio-psychological adaptation in particular constitute the process of adaptation of the organism to the demands of the external environment or changes occurring in the organism [2, 11, 12, 22]. Moreover, the too wide interest in the problem of human adaptation indicates the multifaceted nature of adaptive phenomena, which, according to their meaning, take place and, therefore, should be considered from an interdisciplinary perspective as a multi-level phenomenon of a complex biological, physiological, mental and social nature [4, 5, 8, 21]. In fact, adaptation is a complex multifactorial phenomenon that has

its own mechanisms and regularities, which are studied by representatives of many branches of science [13, 14, 20, 24]. Therefore, according to professional interests, scientists focus on certain types of adaptation: biological, mental, psychophysiological, social-psychological, pedagogical, professional, etc. [9, 10, 19]. Moreover, defining the essence of the concept of "adaptation", researchers proceed from the understanding that it (and above all, social-psychological adaptation) should be considered as a process, state, property or result of activity that occurs under certain conditions and lasts for a certain period, as long as dynamic equilibrium will not be established between systems that adapt [6, 24, 28].

In the course of the conducted research, it was established that in the structure of the leading features of the socio-psychological adaptation of modern students of medical institutions of higher education, which were determined, such characteristics as the desire to dominate (the first place in the rating) and the acceptance of others (the second place in the rating), on the other hand, internality characteristics are the lowest (the last sixth place in the rating). At the same time, the data on integral indicators of adaptation, self-acceptance and emotional comfort, which are essential for the successful acquisition of a future profession, occupied an intermediate position [33]. Such results to a certain extent coincided with the data typical for high school students [23]. However, the level of expression of the first two indicators was somewhat higher. Expressed sex-specific features were not registered either.

In the end, it was impossible not to note that the phenomena that were registered testified to a sufficiently intense course of adaptation processes of a social and psychological content, which is very important, based on the fact that social and psychological adaptation is the adaptation of a specific person to the conditions of existence in a group and in establishing certain relationships with its representatives, developing one's own, completely unique style of behavior. Moreover, this applies to almost all forms of adaptive transformations characteristic of socio-psychological adaptation, namely formal (cognitive and informational adaptation to the new environment, new requirements and responsibilities), social (the process of internal integration (unification) of groups and the integration of these groups as a whole) and didactic (student preparation for new forms and methods of educational work of an educational institution) adaptation [3]. Thus, the time spent in a higher education institution is quite closely related to the breaking of former stereotypes, can cause low academic performance and difficulties in communication, contribute to the formation of a whole range of negative experiences associated with the lack of mutual help and moral support, and lead to a significant the expression of aggressive manifestations of personality and the formation of a whole series of manifestations of depressive content [5, 19, 20].

This fact was confirmed by the results of the conducted

research. Thus, during the assessment of the features of aggressive personality manifestations, first of all, it should be noted that the levels of development of various forms of aggression according to the studied scales exceeded the values of values typical for the average normative indicators of representatives of student age and, therefore, for a significant number of young men and women, typical sufficiently expressed various personal manifestations of aggressive content should have been recognized [33]. In particular, the highest values regarding the degree of development of aggressive personality manifestations were characteristic of third-year young men and third-year young women (it was during this period of student life that the highest results were recorded on the scales of indirect and verbal aggression, "feeling of guilt", physical aggression and "feeling of resentment" in young men, according to the scales of "guilt", indirect and verbal aggression, negativism and "feeling of resentment" in young women. At the same time, among first-year young men and first-year young women, the maximum results in terms of expression were characteristic for indicators of aggressiveness according to the scales "feelings of guilt", indirect aggression, "feeling of resentment", verbal aggression and negativism - in the first case, according to the scales of indirect aggression, negativism, physical aggression, "guilt" and verbal aggression - in the second, on the other hand, among young graduates and young women graduates, the maximum results in terms of the degree of expression were typical for indicators of aggressiveness according to the scales of indirect aggression, negativism, physical aggression, "guilt" and verbal aggression - in the former, according to the scales of indirect aggression, negativism, physical aggression, verbal aggression and suspicion - in the latter.

The fact that, among young men, the lowest level of expression of indicators regarding the degree of development of certain forms of aggressive manifestations was mostly characteristic of first-year students and female graduate students, i.e. opposite trends in terms of content were registered as very interesting [33]. In the end, it should be noted that the lowest indicators in terms of degree of expression in the vast majority, regardless of the period of study at a medical institution of higher education, were registered during the analysis of data that proved the level of expression and the degree of spread of the leading characteristics of aggressive manifestations on the scales of irritability and suspicion.

The data obtained, in the future, on the basis of the interdisciplinary and interdisciplinary professional interpretation and versatile interpretation of specialists of various directions, can be used for the development of methods for the comprehensive assessment of the state of adaptive resources of the students' body and the scientific justification of health-preserving technologies that have significant prospects for effective application in the practical activity of medical institutions of higher education.

Conclusion

1. The highest level of expression of integral indicators of socio-psychological adaptation was characteristic of the characteristics of striving for dominance (first place in the rating) and acceptance of others (second place in the rating), the lowest - for the characteristics of internality (the last sixth place in the rating). The characteristics of integral indicators of adaptation, self-acceptance and emotional comfort occupied an intermediate position. Similar trends were typical for male and female students of different courses. The phenomena that were registered testified to the most intense course of adaptation processes of social and psychological adaptation of students to the conditions of stay in medical institutions of higher education.

2. The levels of development of various forms of aggression according to the studied scales exceeded the values typical for average normative indicators and, therefore, a significant number of representatives of student youth had sufficiently expressed various personal manifestations of aggressive content.

3. The highest values regarding the degree of development of aggressive personality manifestations were typical for young men and young women who studied in the 3rd year - it was at this time that the highest results were recorded, first of all, on the scales of indirect and verbal aggression, "feeling of guilt", physical aggression and "feeling of resentment" among young men and on the scales of "feeling of guilt", indirect and verbal aggression, negativism and "feeling of resentment" among young women. At the same time, among young men and young women who studied in the 1st year, the maximum results in terms of the degree of expression were typical for indicators of aggressiveness according to the scales of "guilt", indirect and verbal aggression, "feeling of resentment" and negativism - among the first, and according to the scales of indirect aggression, negativism, physical aggression, "guilt" and verbal aggression - among others, at the same time, among young men and young women who studied in the 6th year, the maximum results in terms of the degree of expression were typical for indicators of aggressiveness on the scales of indirect aggression, negativism, physical aggression A, "guilt" and verbal aggression - among the first, and according to the scales of indirect aggression, negativism, physical and verbal aggression and suspicion - among the second.

4. In young men, the lowest level of expression of indicators regarding the degree of development of individual forms of aggressive manifestations was mostly characteristic of first-year students and female graduate students, i.e. opposite trends in content were registered. The lowest indicators in terms of the degree of expression in the vast majority, regardless of the period of study at the institution of higher education, were registered during the analysis of data that proved the level of expression of the leading characteristics of aggressive manifestations. on the scales of irritability and suspicion.

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ОСОБЛИВОСТІ АДАПТАЦІЙНИХ МОЖЛИВОСТЕЙ ОРГАНІЗМУ ТА АГРЕСИВНИХ ПРОЯВІВ ОСОБИСТОСТІ СУЧАСНИХ СТУДЕНТІВ НА РІЗНИХ ЕТАПАХ НАВЧАННЯ У ЗАКЛАДІ ВИЩОЇ ОСВІТИ

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Визначення комплексної оцінки особливостей перебігу адаптаційних процесів, котрі властиві для сучасної студентської молоді, що здобуває певний фах, тісно пов'язані зі встановленням закономірностей перебігу численних пристосувальних механізмів у площині реалізації психофізіологічної, психічної та соціально-психологічної адаптації. Метою роботи є здійснення комплексної гігієнічної оцінки особливостей адаптаційних можливостей організму на підставі визначення її соціально-психологічної складової та агресивних проявів особистості сучасних студентів на різних етапах навчання у закладі вищої освіти. Наукові дослідження проводили з використанням опитувальників Роджерса і Даймонда та Басса-Дарки. Під наглядом впродовж періоду спостережень знаходились 307 студентів, в тому числі 150 дівчат і 157 юнаків, які навчалися на першому, третьому та шостому курсах медичного факультету. Аналіз отриманих даних передбачав застосування процедур описової статистики на підставі застосування пакету програм статистичного аналізу "Statistica 6.1" (ліцензійний № ВХХR901E245722FA). Встановлено, що найвищий рівень вираження інтегральних показників соціально-психологічної адаптації студентів, незалежно від часу навчання у закладі вищої освіти, властивий для характеристик адаптаційних проявів щодо прагнення до домінування та прийняття інших; разом із тим, найнижчий рівень вираження - для характеристик інтернальності і, отже, визначає наявність виражених ознак перетворень пристосувального змісту, які відзначають напружений перебіг процесів соціально-психологічної адаптації студентів до умов перебування у медичному закладі вищої освіти. Виявлено, що серед переважної кількості студентів, які досліджувались, показники агресивних проявів особистості перевищують значення, властиві для нормативних віково-статевих показників. Таке становище визначає потребу у розробленні методик комплексної оцінки стану адаптаційних ресурсів організму юнаків і дівчат, що навчаються, та наукового обґрунтування здоров'язберігаючих технологій, в основі яких провідне місце мають займати заходи психогігієнічної корекції.

Ключові слова: студенти, заклад вищої освіти, навчання, особливості особистості, психофізіологічна адаптація, психічна адаптація, соціально-психологічна адаптація, агресивність.