AFAPTIVE ABILITIES AS AN INDICATOR OF STUDENTS' HEALTH

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Abstract

Successful adaptation of students to studying in a higher educational establishment largely depends not only on the functional state of organs and systems, life activity organization, but also on their psychosocial wellbeing. The paper presents an analysis of first-year students' stress resistance according to the psychological well-being scale and shows the presence of students that have a negative level of well-being. We found that students have a reduced level of psychological well-being, the indicator of pronounced ill-being of emotional sphere manifests itself more frequently, and adaptation mechanisms are lowered. In this paper an assumption was made that the level of compensative and adaptive mechanisms in first-year students will increase due to such factors as stress resistance, axiological orientation on health and, eventually, formation of «life» competencies.

Keywords: adaptation, well-being, health, stress resistance, cardio-respiratory reserve.

1. INTRODUCTION

The definition of health is largely based on the «well-being» concept which implies the implementation of a person's physical and spiritual capabilities (Belinskaya, 2001, Mukhina, 2014). It underlies mental health which is a base phenomenon of a person's health and safety. The key indicator, which determines the country's potential, is health of children and adolescents (Mukhina, 2015).

Psychological well-being and education are mutually deterministic processes. Specialists note that children study better when they are psychologically trouble-free. The reasons of psychological and pedagogical nature, making it difficult for students to acquire specific learning activity, as well as the conditions ensuring social and psychological adaptation of students to education/bringing-up process are not fairly well covered [Ershova, 2000].

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The investigators determine student's adaptation as adaptation to a higher educational establishment, or the whole learning process is regarded as adaptation to a future profession. The following additivity criteria are used: successful learning, proper interaction in the «teacher-student» system, relative stability of psychophysiological systems and other factors. Throughout the whole learning period students are under constant mental stress which is much higher in students than in young people of other social groups. The state of mental and emotional stress becomes more acute during exam sessions and is accompanied by intense emotional impacts and stresses. Besides an academic load, the following factors have their impact: hygienic conditions (a large amount of time spent in front of the computer monitor, presence in poorly ventilated room, a great number of students in class rooms, etc.), problems of interpersonal relationships, constant shortage of time, low physical activity, disturbance of rational life activity. This problem is most urgent for first-year students (Sokolov 2005, Razumnikova, 2002).

2. OPINIONS AND DISCUSSION

Successful adaptation to training in a higher educational establishment largely depends not only on the functional state of organs and systems, life activity organization, but also on their psychosocial well-being (Lakhtin, 2014).

The study presented was conducted at the premises of the Mari State University, covering first-year students specializing in pedagogic disciplines. To conduct an empirical study, the following methods were used: C. Ryff's questionnaire «Psychological well-being scales»; WBAM methodology (well-being, activity, mood); cardio-respiratory system's state indicators (heart rate, Stange's test, adaptive potential).

The stress resistance analysis was assessed by the level of well-being, activity, and mood (WBAM). The degree of these parameters' correlation according to the WBAM methodology shows the presence of students that have a negative level of well-being. The girls showed low and mean values (22% and 33%, respectively), and a high level was shown in 44%. In a group of young men the low level has not been detected, in 20% an average level was shown, and 80% demonstrated a high level. This indicator adequately reflects life orientations of young people, and is a key factor in the process of adaptation to new conditions.

The manifestation of social mood is greatly influenced by psychological motivation. The wish and readiness to take an active part in educational and social life is an essential condition for success and good mood. The determination of the activity significance allows us to discover students' potential capabilities related to the ability to withstand adverse stress events in new conditions of existence. The investigation of the degree of correlation of first-year students' activity also demonstrates the presence of students having negative indicators. With respect to this criterion only low and average levels were detected in young men.

Mood is defined as emotional state putting a complexion on a person's feelings and activity, the reason for which is not always realized. Low levels of mood were only detected in a group of girls.

In general, the mood indicators in a group of girls are at the same level as the activity indicators, and the level of well-being is lower. In young men the activity indicators are less positive compared to well-being and mood.

The level of psychological well-being was assessed according to C. Ryff's scale. Among young men, according to most direct scales, the values above the standard are only typical of 20%, i.e. they have reasonable self-esteem, have aims in life, are able to make independent decisions and control their circumstances, give a high rating to psychological well-being. The high degree of independence among male first-year students was found in 60%. According to the «Self-acceptance» scale, the positive attitude to oneself is typical of 40% of respondents, others are not pleased with their qualities and cannot experience psychological well-being.

The study showed that 60-80% of respondents are able to make independent decisions and control their circumstances, perceive themselves as «advancing and self-fulfilling», present themselves as goal-oriented people, are open to new experience and information; 40-50% have trust-based relations with people around them, have aims in life and give a rather high rating to their psychological well-being; and only 30% of girls have reasonable self-esteem.

According to the cumulative reverse scale «Affect balance», a somewhat different result is noted. Positive evaluation of all sides of their own personality, self-confidence and assertiveness is typical of 40% of female first-year students, others are not satisfied with the circumstances of their own life, feel their own helplessness, and their ability to maintain positive relations with people around them and acquire new skills

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is underdeveloped.

The mean values obtained according to the individual scales of C. Ryff's methodology (positive relations with other people, autonomy, environment management, personal development, aims in life, self-acceptance) are below the mean normal values which can in aggregate indicate the low degree of psychological well-being and which confirms an aggregate indicator of psychological well-being which is much lower than normal values.

A rather universal indicator of adaptive activity is the state of the cardio-respiratory system.

The study of the adaptive potential value demonstrates that this indicator is within the normal range (1.91 in girls and 1.75 in young men). The cardio-respiratory reserve determination detected unsatisfactory and satisfactory indicators in 40% of girls and in 12.5% of young men.

To determine adaptability and fatigue symptoms, we used an «individual minute» test: in 70% of girls and in 37.5% of young men «individual minute» acceleration is recorded which is indicative of low adaptive abilities. And only 30% of girls and 62.5% of young men show no fatigue symptoms.

When analyzing the heart rate indicators in female first-year students, we found that in 55.6% this parameter is within the limits of a physiological standard, however, 44.5% of female students have a faster pulse (exceeding 85 bpm). At the same time, the mean pulse value in girls is within the upper limits of a physiological standard. In young men, practically all heart rate indicators are within the normal range.

3. CONCLUSION

As a result of the study it has been discovered that students' adaptation mechanisms are reduced which is confirmed by the following:

- 1) Low level of psychological well-being in both groups;
- 2) Lowering of cardio-respiratory reserve indicators;
- 3) Pronounced acceleration of the «individual minute» value in most girls;
- 4) Low stress resistance of young men mediated by the decrease in the activity level.

Thus, the level of compensative and adaptive mechanisms in first-year students should be increased based on improvement of living conditions and educational health-saving environment.

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