

## SECTION XIX. MEDICAL SCIENCES AND PUBLIC HEALTH

DOI 10.36074/logos-14.10.2022.40

### FEATURES OF PSYCHOPHYSIOLOGICAL ADAPTATION OF STUDENTS UNDER THE CONDITIONS OF THE REMOTE (ON-LINE) FORMAT OF THE ORGANIZATION OF EDUCATIONAL PROCESS

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Determining the features of the processes of psychophysiological adaptation among persons who carry out active educational activity is impossible without establishing the peculiarities of communication and interdependence of characteristics of the level of development of psychophysiological functions and indicators of health of young women and young men [2, 3]. In this context, it should be noted that the use of factor analysis procedures involves quantitative assessment of the features of the studied indicators that are subject to direct definition, based on the analysis of characteristics, the level of expression is established and, therefore, reveals a small set of properties for an essential part of the original features characterizing a clearly defined relationship between groups of these features and generalized factors [1].

Analyzing the data obtained, it should be noted that under the conditions of the remote (on-line) format of the organization of the educational process of the pattern showed the need for allocation of two leading factors to present the following ratios (1–4):

- at the beginning of the academic year:

– among young women:  $y = 0,310f_1 + 0,638f_2$ ; (1)

where the factor  $f_1$  was to be defined as “features of dynamic performance” (the share of variance – 52.21%) and, above all, combined in its structure indicators that reflected the characteristics of dynamic performance in monotony and data on the performance test throughout all intervals; the factor  $f_2$  was to be defined as “features of visual-motor coordination and mobility of nervous processes” (the share of variance – 35.83%) and combined characteristics differentiated visual-motor reaction and mobility of nervous processes;

– among young men:  $y = 0,367f_1 + 0,560 f_2$ ; (2)

where the factor  $f_1$  was to be defined as “features of dynamic performance” (the share of variance – 53.08%) and, above all, combined the indicators that reflected

the characteristics of the dynamic performance in monotony and data on the implementation of the tapping-test during all the intervals under study; factor  $f_2$  should be defined as “features of visual-motor coordination and mobility of nervous processes” (the share of variance – 32.78%) and combined in its structure the characteristics of the speed of simple and differentiated visual-motor reaction and mobility of nervous processes;

- at the end of the academic year:

- among young women:  $y = 0,347f_1 + 0,493f_2$ ; (3)

where the factor  $f_1$  was to be defined as “features of dynamic performance” (the share of variance – 52.21%) and, first of all, combined in its structure indicators that reflected the characteristics of dynamic performance in monotony and data on the performance all the intervals under study; factor  $f_2$  was to be defined as “features of visual-motor coordination and mobility of nervous processes” (the share of variance – 35.83%) and combined the characteristics of the speed of simple and differentiated visual-motor reaction and mobility of nervous processes;

- among young men:  $y = 0,299f_1 + 0,524f_2$ ; (4)

where the factor  $f_1$  was to be defined as “features of dynamic performance” (the share of variance – 53.08%) and, first of all, combined indicators that reflected the characteristics of dynamic performance in monotony and data on the implementation of a heat test during all the intervals under study; the factor  $f_2$  should be defined as “features of visual-motor coordination and mobility of nervous processes” (the share of variance – 32.78%) and combined in its structure the characteristics of the speed of simple and differentiated visual-motor reaction and mobility of nervous processes.

So, during the use of factor analysis procedures, factors were identified that have a pronounced impact on the peculiarities of the course of adaptive transformation processes, and connections were established between a number of indicators of the level of development of psychophysiological functions of student youth and the level of psychophysiological adaptation. It should be recognized as interesting the fact that both under the conditions of the organization of remote (on-line) learning, should be two most essential factors: the “features of dynamic performance”, which reflected the characteristics features of dynamic performance in conditions of monotony and data on the performance of the tapping-test during all studied intervals, and “peculiarities of visual-motor coordination and mobility of nervous processes” should be considered too important, which combined the characteristics of the speed of simple and differentiated visual-motor reaction and mobility of nervous processes.

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