



Sport as a factor in the mental well-being of students with disabilities

UDC 159.9.072.432



Dr. Psych., Professor **N.L. Zakharova**¹

Dr. Psych., Associate Professor **S.V. Kotovskaya**¹

PhD **L.Yu. Belenkova**¹

PhD **A.N. Ostrovskiy**¹

¹Russian State University of Social Technologies, Moscow

Corresponding author: nadlex@mail.ru

Received by the editorial office on 25.07.2024

Abstract

Objective of the study was to identification of the peculiarities of mental states of students with disabilities involved in sports.

Methods and structure of the study. The empirical approach to research was through experimentation. The data analysis was conducted using the IBM SPSS Statistics 27 statistical software and the Excel program. The study included students with disabilities who participated in sports and their peers, students from the 1st to 4th years of the Russian State University of Social Technologies.

Results and conclusions. The disparities in the psychological states of students with disabilities who participate in sports and their peers were identified. Athletes are characterized by a predominance of positive emotions, which are closely linked to the manifestation of their volitional qualities and the ability to focus their attention. Student-athletes, on the other hand, experience negative emotional experiences during periods of inactivity, impulsive actions, and feelings of insecurity. These negative mental states are less likely to occur when mental processes are activated, physiological reactions change, or behavior is modified. The relationship between the mental states and personal characteristics of athletes with disabilities has been empirically demonstrated. The correlations that have been identified reveal the following patterns: as sensitivity to external stimuli and awareness of perception increases, so does the desire for independence; positive emotions enhance a sense of individuality; and as self-confidence grows, so does life satisfaction.; The experience of optimism enhances responsiveness and empathy. The feeling of joy is closely linked to perseverance and enthusiasm. As the number of actions increases, empathy, life satisfaction, and receptivity grow, while the desire to make a good impression diminishes.

Keywords: *students with disabilities, athletes, mental states, positive experiences, self-control.*

Introduction. One of the most important aspects of the life of persons with disabilities is their mental state, which can significantly affect the ability to socially adapt and interact with the outside world. In this context, it is necessary to determine the characteristics of mental states in students with disabilities involved and not involved in sports activities. The theoretical basis for the study was the provisions on the nature of the occurrence [1, 2], changes [3] of mental states and their regulation [4, 5]. In connection with the need to develop technologies for the adaptation of persons with disabilities, special attention is required to issues about the specifics of the mental states of athletes with disabilities [6]. Currently, research is being conducted in the field of emotional regulation of disabled athletes [7], assessment and correction of functional states [8], social and psychological support of athletes with disabilities [9].

Analysis of mental states shows that they are complex, multidimensional phenomena that include emotional, cognitive, behavioral and physiological components [10]. Mental states of individuals with various nosologies, such as musculoskeletal disorders, sensory deficiencies, etc., have a number of specific features. Thus, they are characterized by increased anxiety, depressive experiences, a feeling of helplessness, social isolation, and other negative mental states. Therefore, it is important to consider sports as an activity that allows compensating for physical deficiencies by changing the mental states of the individual.

Objective of the study was to identification of the peculiarities of mental states of students with disabilities involved in sports.

Methods and structure of the study. The empirical method of the study was testing using the "Relief



of the Mental State” technique (A.O. Prokhorov); the California Psychological Inventory CPI as adapted by N.V. Tarabrina, N.A. Grafinina. Data was calculated using the IBM SPSS Statistics 27 statistical package and Excel. Statistical methods: Mann-Whitney U-test, Spearman correlation coefficient. The Russian State University of Social Technologies served as the basis for the empirical study. The study involved 60 people with disabilities aged 17-21, 30 of whom were students involved in sports (Group 1), 30 students not involved in sports (Group 2).

Results of the study and discussion. By analyzing empirical data, it was found that the physiological response scale scores differed in both groups of individuals, with the exception of the temperature score (Table 1). This means that students who do not play sports are more prone to muscle tension and stiffness.

The analysis of self-examination of students who do not play sports showed that low levels of physical activity and apathy predominate among this group. In addition to the problems mentioned above, students often experience discomfort associated with unpleasant sensations in the heart, oral mucosa, breathing and digestion.

According to the Behavior scale, there are significant differences in all indicators (Table 2), which means that athletes are more active, consistent, confident and open than their peers who do not play sports. Students in Group 2 most often show signs of passivity, insecurity and isolation. These signs indicate their insufficient development in the area of volitional self-control, independence and purposefulness. They often experience a feeling of fear, es-

pecially when making a decision, have a tendency to isolation and secrecy in communication, and experience negative experiences about the lack of communicative competence. Respondents in this group experience an increased degree of drowsiness and lethargy, which may be associated with immersion in their own experiences.

They also tend to experience emotional heaviness and tension, which affects their overall mental state. Athletes are less likely to develop negative mental states compared to their peers. Differences were found in all indicators of the experience scale in the two groups of students. Respondents of Group 2 were more likely to experience intense negative emotions, such as sadness, sorrow, tension, emotional heaviness and stiffness. A complex of negative emotions can provoke changes in the personality structure, which is manifested in the form of character accentuations, phobias, personal anxiety and low self-esteem. Correlations were found between the indicators of the mental processes scale and the personal characteristics of students involved in sports. With the ease of emergence of images and clarity of ideas, athletes show increased activity, assertiveness and enthusiasm ($r = 0,466, p \leq 0,01$). The emergence of a feeling of joy is associated with the awareness of one's uniqueness ($r = -0,599, p \leq 0,01$). Increased self-confidence gives athletes a feeling of comfort and satisfaction with themselves and their lives ($r = 0,640, p \leq 0,01$). Correlation analysis showed the presence of close connections between states associated with physiological processes: the feeling of increased cardiac activity directly correlates with a sense of respon-

Table 1. Results of the study of mental states on the scale of physiological reactions of students with disabilities involved in sports and their peers

Physiological response scale indices	\bar{X}		$U_{emp.}$	Level of significance
	Group 1	Group 2		
Temperature	6,7	6,5	420	0,644
Muscle tone	7,7	6,5	307	0,031
Movement coordination	7,6	5,8	137	0,000
Motor activity	7,7	5,8	142	0,000
Cardiovascular system	7,3	6	303	0,028
Respiratory system	7,7	6	234	0,001
Sweating	7,9	6,5	273	0,007
Gastrointestinal tract	7,7	5,9	244	0,002
Oral mucosa	7,1	6,2	312	0,030
Skin	7,1	5,7	224	0,000

Note: \bar{X} – mean value (points); $U_{emp.}$ – Mann-Whitney criterion.



Table 2. Results of the study of mental states on the scale "Behavior" of students with disabilities involved in sports and their peers

Behavior scale indicators	\bar{X}		U _{emp.}	Level of significance
	Group 1	Group 2		
Activity	8,8	5	121	0,000
Sequence	8,4	6,1	221	0,001
Measuredness	8,1	4,6	124	0,000
Thoughtfulness	8,2	5,3	167	0,000
Controllability	8,6	5,5	152	0,000
Adequacy	8,8	5,3	175,5	0,000
Tension	5,8	6,4	411	0,559
Stability	8,9	5,8	121	0,000
Confidence	8,9	4,7	126	0,000
Openness	8	5,3	199,5	0,000

Note: \bar{X} – mean value (points); U_{emp.} – Mann–Whitney criterion.

sibility ($r=0,511$, $p\leq 0,01$) and tolerance ($r=0,594$, $p\leq 0,01$); a decrease in efficiency and performance is accompanied by an increase in the depth and frequency of breathing ($r= -0,502$, $p\leq 0,01$). The state of optimism is closely associated with the ability to understand the feelings and attitudes of other people ($r=0,473$, $p\leq 0,01$). Positive experiences increase the desire for competition ($r=0,667$, $p\leq 0,01$), self-acceptance and self-confidence ($r=0,693$, $p\leq 0,01$), sensitivity and attunement to other people ($r=0,510$, $p\leq 0,01$). Consistency in behavior in athletes with disabilities contributes to the development of empathy, the ability to understand and empathize with the feelings of others ($r=0,491$, $p\leq 0,01$), and gives a sense of their uniqueness ($r=0,607$, $p\leq 0,01$).

Conclusions. Significant differences in mental states were revealed in students with disabilities involved in sports and their peers who do not play sports. The revealed correlations between the intensity of mental states and personal characteristics of athletes with disabilities indicate the following patterns.

In the sphere of mental processes: with increased sensitivity to external stimuli and awareness of perception, the desire for independence and susceptibility also increases; with the ease of emergence of images, energy and enthusiasm increase; positive emotions of joy reduce the feeling of one's ordinariness; with increased self-confidence, satisfaction with oneself and one's life increases; increased attention is associated with an increased desire for change.

In the sphere of physiological reactions: increased cardiac activity is associated with increased

responsibility and increased diligence; rapid breathing accompanies manifestations of self-sufficiency and independence; increased sweating is closely associated with the manifestation of empathy and intellectual activity; a feeling of slight hunger intensifies with an increase in empathy and responsiveness to others; In the sphere of experiences: the experience of optimism increases responsiveness and empathy; the feeling of cheerfulness is closely connected with persistence and enthusiasm, the positive direction of experiences increases rivalry, competition and self-acceptance. In the sphere of behavior: with an increase in the consistency of actions, empathy and life satisfaction increase; the thoughtfulness of one's actions increases understanding of others, an increase in tension reduces the manifestation of empathy and assertiveness, increases the feeling of mediocrity, dependence and sensitivity to the opinions of others.

References

1. Levitov N.D. O psikhicheskikh sostoyaniyakh cheloveka. Moscow: Prosveshcheniye publ., 1964. 344 p.
2. Ilin E.P. Psikhofiziologiya sostoyaniy cheloveka. St. Petersburg: Piter publ., 2005. 416 p.
3. Shipilova O.A. Osobennosti izmeneniya psikhicheskikh protsessov i sostoyaniy invalidov. Projektnaya deyatelnost i nauchnyye issledovaniya studentov. Voronezh: «Sreda» publ., 2018. pp. 44-47.
4. Kotelevtsev N.A. Psikhicheskaya samoregulyatsiya. Textbook for universities. Moscow:



- Yurayt publ., 2024. 213 p.
5. Reshetnikov M.M. Psikhicheskaya samoregulyatsiya. Izbrannyye trudy. Moscow: Yurayt publ., 2024. Vol. 1. 240 p.
 6. Stadnik E.G., Tyuchkalov R.K., Evseeva O.S., Sysoeva E.Yu. Problemy razvitiya inklyuzivnogo sporta kak faktora sotsialnoy adaptatsii lyudey s ogranichennymi vozmozhnostyami zdorovya. Uchenyye zapiski universiteta im. P.F. Lesgafta. 2021. No. 11 (201). pp. 426-432.
 7. Mukhin V.N., Kobzev V.A., Makarenko O.I., Masanova F.M. Otsenka psikhoemotsionalnogo sostoyaniya sportsmenov-invalidov. «Chelovek i yego zdorovye». Russian National Congress. St. Petersburg, November 21-25, 2006. Available at: https://www.researchgate.net/publication/288003065_Ocenka_psihoemotsionalnogo_sostoyaniya_sportsmenov-invalidov
 8. Linde E.V., Pavlov V.I., Maryasova D.A. Kompleksnyy podkhod k otsenke i korrektsii funktsionalnogo sostoyaniya sportsmenov. Proceedings of the X Moscow Assembly «Health of the Capital». Moscow, 2011. pp. 174-175.
 9. Gaydamashko I.V., Babichev I.V. Osobennosti psikhologicheskogo soprovozhdeniya sportsmenov s ogranichennymi vozmozhnostyami. Chelovecheskiy kapital. 2023. No. 12(180). Part. 1. pp. 233-239.
 10. Prokhorov A.O. Metodiki diagnostiki i izmeneniya psikhicheskikh sostoyaniy lichnosti. Moscow: PER SE publ., 2004. 176 p.