

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Features Of Motivation Of Disabled People With Affection Of The Musculoskeletal System To Adaptive Sports.

Makhov AS, and Medvedev IN*.

Russian State Social University, st. V. Pika, 4, Moscow, Russia, 129226.

ABSTRACT

Recently, the study of the development of adaptive sports and the training of athletes with disabilities has been increasingly being studied. It is very important to identify the factors that shape motivation to engage in adaptive sports. Previously, observations were made on the motivation of athletes with visual and hearing impairments. Features of sports specialization are able to determine to some extent individual motives or their combinations. The logical continuation of the previously performed work was the conducted study of the motivation of athletes with the defeat of the musculoskeletal system to engage in adaptive sports. It was revealed that these athletes with disabilities are motivated by the motives for realizing the need for new impressions, self-affirmation and socialization. Comparison of their motivation to sports activities and healthy athletes, as well as athletes with disabilities of other nosological groups showed that the degree of importance of specific motives is determined by the lifestyle of disabled athletes associated with the pathology they have.

Keywords: motivation, pathology, athletes, defeat of the musculoskeletal system.

**Corresponding author*

INTRODUCTION

The emergence in the human body of various dysfunctions and pathologies with persistent loss of capacity for work inevitably leads to the onset of disability [1,2,3]. Science is actively searching for new approaches and improving the available for healing various categories of severe patients and disabled people [4,5,6]. It becomes clear that it is possible to achieve significant success in this issue by including non-medicinal products in the rehabilitation measures [7,8]. A special place in terms of effectiveness is occupied by physical culture and sports [9,10]. They earlier helped to improve various categories of patients with non-infectious pathology [11,12]. In this regard, it seems important to involve the disabled as much as possible in adaptive sports [13,14]. For this, a timely and competent system of forming their motivation for this is needed [15, 16].

The features of motivation for sports in healthy people have been studied quite deeply [17,18]. Studies of the motivation of athletes in certain sports, of different ages, various institutions of secondary and higher vocational education, and various professions have been carried out [19]. The accumulated knowledge is constantly refined and supplemented taking into account the development of modern science and practice [20,21,22]. Attempts have been made to classify the motives of a person's sports activity, and the priorities of motivation in various sports have been determined [23]. Approaches to the formation of motivation at various stages of training athletes have been developed [24].

Recently, the development of adaptive sports and the training of athletes with disabilities is increasingly being studied. It is very important to identify the factors that shape motivation to engage in adaptive sports. Previously, observations were made on the motivation of athletes with visual and hearing impairments [25,26]. Researchers consider the motivation of disabled people to engage in sports, indicating that the features of sports specialization are able to determine individual motives or their combination.

The purpose of this work is to analyze the motivation of athletes with the defeat of the musculoskeletal system to engage in adaptive sports.

MATERIALS AND METHODS

The study was approved by the local ethics committee of the Russian State Social University on September 15, 2016 (protocol No. 9). The research was conducted on the basis of the Russian State Social University.

The identification of the list of motives for adaptive sports was carried out by interviewing and questioning athletes with disabilities with musculoskeletal injuries. As a result of the polls, a list of motives was compiled: 1) getting new impressions (feeling of excitement, struggle, victory); 2) to develop moral and volitional qualities; 3) the desire to find friends, comrades; 4) the desire to show their abilities; 5) the desire to find a job outside the home; 6) form a need for regular physical exercise and sports; 7) the desire to lead a healthy lifestyle; 8) improve the state of health; 9) the opportunity to get out of the "4 walls"; 10) the desire to prove that you are capable of more ("overtake yourself"); 11) the desire for self-assertion (obtaining a discharge, rank); 12) the desire to be useful to society; 13) adaptive sports are activities where I can show myself. Based on the list obtained, a questionnaire was developed, with the help of which the priority of the motives and the structure of the motivation of the disabled athletes were further evaluated. Respondents were asked to assess the significance of motives on a 10-point scale (1 point - minimum, 10 points - maximum). The answers were divided into groups: 9-10 points - "extremely important", 7-8 points - "very important", 5-6 points - "quite important", 3-4 points - "not very important", 1-2 score - "absolutely not important". The study involved disabled athletes and team coaches from Moscow and the Moscow region, St. Petersburg, Omsk, Rostov-on-Don, Volgograd, Chelyabinsk, Krasnoyarsk, Perm Krai, Naberezhnye Chelny, Saratov, Kazan, Sevastopol, Ivanovo region. 54 respondents took part in the survey.

The data obtained were statistically processed using the mean value method [27] (calculations were performed using the standard Microsoft Excel for Windows software package).

RESULTS OF INVESTIGATION AND DISCUSSION

The results of mathematical and statistical processing of data on the degree of significance of motives for employment for athletes with disabilities with musculoskeletal injuries are given in the table (Table 1).

The analysis of the obtained data showed that none of the motives mentioned was not classified as "not very important" by athletes with disabilities - 3-4 points, and "absolutely unimportant" - 1-2 points.

The assessment is "quite important" - the motive "adaptive sport is an activity where I can show myself" received a score of 5-6 points (6.93 ± 0.456 points). It should be noted that the values of the median ($Me = 8$ points) and the mode ($Mo = 10$ points) exceed the mean values, which indicates the great importance of this motive for many respondents. High coefficient of variation ($V = 48\%$), negative kurtosis (Ex) and asymmetry (As) indicate the existence of opposing opinions on this issue, and most estimates significantly exceed the arithmetic mean (\bar{X}). Some of the respondents, who seem to be engaged in other sports, note this motive as insignificant, the other, most of the respondents classify it as "very important" and "extremely important".

The motives №№4-12 formed the category of "very important", the arithmetic mean (\bar{X}) values are in the range of 8.07 ± 0.380 points to 8.96 ± 0.229 points. "The most important" are the motives №№1-3, the values of the arithmetic mean (\bar{X}) - from 9.19 ± 0.210 points to 9.41 ± 0.186 points. For both categories, there is a median and a mode that exceed the arithmetic mean (\bar{X}). They are 10 points for each of the motives. In addition, all the motives in question have a positive kurtosis (Ex) and a negative asymmetry (As), therefore, the opinions of the respondents are homogeneous, and most of the indices are much higher than the arithmetic mean.

The results can be explained on the basis of the characteristics of adaptive sports and the characteristics of athletes with musculoskeletal injuries. Adaptive sports for people with severe motor dysfunction in all the limbs of cerebral or non-cerebral origin are activities that help them in their daily lives.

It is obvious that people who have a defeat of the musculoskeletal system experience difficulties related to movement in space. As a consequence, they rarely leave the house, receive fewer new impressions, and may experience a lack of communication compared to healthy people or people with disabilities from other nosological groups. In addition, they are often dependent on the assistant, and this causes the desire to do something on their own, to overcome the limitations imposed by their pathology. From this, in our opinion, it is necessary to classify the most important motives as "getting new impressions (feeling of excitement, struggle, victory)", "cultivate the moral-willed qualities", "the desire to find friends, comrades", "the desire to show their abilities", "the desire to find employment outside the home", that is, the motives for self-affirmation, socialization and communication.

The results obtained in our study are somewhat consistent with the data of the study of motivation for sports activity in healthy athletes.

It is noticed, who is engaged in game kinds of sports, have higher "motivation of dialogue", in comparison with representatives of other kinds [28]. Athletes with disabilities also attributed the motive "the desire to find friends, comrades" to the category of very important.

Comparison of our results with the data of a similar study conducted with athletes suffering from musculoskeletal disorders engaged in power sports showed that the motivation for sports activities of disabled persons of one nosological group, but different groups of sports is very close. It is shown that disabled athletes consider employment by the chosen sport "as a real way to self-affirmation, social adaptation and integration into society, a way of obtaining new impressions ..." [29].

CONCLUSION

As a result of the study, the motives that motivate people with disabilities to engage in adaptive sports have been clarified. It is established that the motivation of athletes with the defeat of the

musculoskeletal system to exercise is determined not by the specifics of the type of adaptive sport, but by the lifestyle peculiarities associated with their pathology. The basis of motivation that motivates athletes with disabilities to play sports is the realization of the need for new impressions, self-affirmation, socialization and communication. The data obtained can be used to improve the effectiveness of the training process of athletes with disabilities of various ages, as well as to attract people with musculoskeletal injuries to exercise.

REFERENCES

- [1] Apanasyuk LA, Soldatov AA. (2017) Socio-Psychological Conditions for Optimizing Intercultural Interaction in the Educational Space of the University. *Scientific Notes of Russian State Social University*. 16(5-144) : 143-150. doi: 10.17922/2071-5323- 2017-16-5-143-150.
- [2] ZavalishinaSYu, Nagibina EV. (2012) Dynamics of microrheology characteristics of erythrocyte in children 7-8 years with scoliosis with therapeutic physical training and massage. *Technologies of Living Systems*. 9(4) : 29-34.
- [3] Skorjatina IA. (2018) Therapeutic Possibilities Of Rosuvastatin In The Medical Complex In Relation To Disaggregation Vascular Control Over Erythrocytes In Persons With Arterial Hypertension And Dyslipidemia. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(2) : 977-983.
- [4] Bikbulatova AA. (2018) Restoration Of Microcirculatory Processes In Persons Of The Second Mature Age With Osteochondrosis Of Lumbar Spine In The Course Of Daily Wearing Of Medicinal Prophylactic Clothes For Half A Year. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(2) : 620-630.
- [5] Bikbulatova AA. (2018) Comparative analysis of rehabilitation efficiency in persons of the second mature age with spinal column osteochondrosis with the help of regular medicinal physical trainings and daily wearing of medicinal prophylactic clothes. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(2) : 997-1007.
- [6] Bikbulatova AA. (2018) The Impact of Daily Wearing of Medicinal-Prophylactic Clothes on The Evidence of Clinical Manifestations of Osteochondrosis Of The 2nd Degree and Platelet Activity in Persons Of The Second Mature Age. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(1) : 677-683.
- [7] VatnikovYuA, ZavalishinaSYu, Kulikov EV, Vilkovskiy IF, Nikishov AA. (2017) Correctional abilities of regular muscle activity in relation to erythrocytes' microrheological features of rats with experimentally developed hypertension. *Bali Medical Journal*. 6(3):449–456. doi:10.15562/bmj.v6i3.586
- [8] VatnikovYuA, ZavalishinaSYu, Pliushchikov VG, Kuznetsov VI, Seleznev SB. (2017) Early-changes diagnostics of erythrocytes microrheological features in the model of dyslipidemia development in rats at the late stages of ontogenesis. *Bali Medical Journal*. 6(1): 216–222. doi:10.15562/bmj.v6i1.483
- [9] Skoryatina IA, ZavalishinaSYu. (2017) Ability to aggregation of basic regular blood elements of patients with hypertension and dyslipidemia receiving non-medication and simvastatin. *Bali Medical Journal*. 6(3) : 514-520. doi:10.15562/bmj.v6i3.553
- [10] Bikbulatova AA. (2018) The Impact Of Medicinal-Prophylactic Trousers' Daily Wearing On Pregnancy Course In The Third Term Of Women With Habitual Miscarriage Of Fetus. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(3) : 663-671.
- [11] Bikbulatova AA. (2018) Formation Of Psychological Comfort In Women With Habitual Miscarriage Of Pregnancy Against The Background Of Their Daily Wearing Of Medicinal Prophylactic Trousers. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(3) : 1417-1427.
- [12] Vorobyeva NV, Skripleva EV, Makurina ON, Mal GS. (2018) Physiological Reaction of The Ability of Erythrocytes to Aggregate to Cessation of Prolonged Hypodynamia. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(2) : 389-395.
- [13] Kotova OV, ZavalishinaSYu, Makurina ON, KipermanYaV, Savchenko AP. (2017) Impact estimation of long regular exercise on hemostasis and blood rheological features of patients with incipient hypertension. *Bali Medical Journal*. 6(3) : 514-520. doi:10.15562/bmj.v6i3.552
- [14] Skripleva EV, Vorobyeva NV, KipermanYaV, Kotova OV, Zatsepin VI, Ukolova GB. (2018) The Effect Of Metered Exercise On Platelet Activity In Adolescents. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 9(3) : 1150-1154.
- [15] Kirillov AV, Ushakov DS, Vinichenko MV, Makuchkin SA, Melnichuk AV. (2017). Career Opportunities for the Management's Personnel Reserve. *Eurasian Journal of Analytical Chemistry*. 12(5B) : 723-733. doi: <https://doi.org/10.12973/ejac.2017.00205a>

- [16] Vinichenko MV, Ridho TK, Kirillov AV, Makushkin SA, Melnichuk AV. (2017). Development Of Skills Management In The System Management Of Talents. *Modern Journal of Language Teaching Methods*. 7(9) : 50-57.
- [17] Sheregi FE, Kirillov AV. (2017). Higher education teacher's labor: creativity or "survival"? Source: *Sotsiologicheskiesledovaniya*. 11 : 87-98. doi: 10.7868/S0132162517110101
- [18] Ryabova TM, Frolova EV, Rogach OV, Kirillov AV. (2018). Status and Role Transformations of the Elderly in Modern Russia. *Journal of History Culture and Art Research*. 7(1), 132-141. doi: 10.7596/taksad.v7i1.1462
- [19] Frolova EV, Ryabova TM, Rogach OV, Kirillov AV, Kuznetsov YV. (2018). Motivation Of Physical Culture And Sports Teachers At University: Main Dysfunctions And Efficiency Improvement Factors. *Modern Journal of Language Teaching Methods*. 8(3) : 452-462.
- [20] Zavalishina SYu, Vatnikov YuA, Kulikov EV, Yagnikov SA, Karamyan AS. (2017) Diagnostics of erythrocytes' microrheological features and early abnormalities of rats in the model of experimental hypertension development. *Bali Medical Journal*. 6(3) : 470-475. doi:10.15562/bmj.v6i3.589
- [21] Maloletko AN, Yudina TN. (2017) (Un)Making Europe: Capitalism, Solidarities, Subjectivities. *Contemporary problems of social work*. 3 (3-11) : 4-5.
- [22] Pozdnyakova ML, Soldatov AA. (2017) The Essential and Forms of the Approaches to Control the Documents Execution. 3 (1-9): 39-46. doi: 10.17922/2412-5466-2017-3-1-39-46.
- [23] Ivanova ND, Stepanova ON (2010) Motives for participation of athletes over 35 years of age in training and competitive activities. *Pedagogical education and science*. 11: 22-24.
- [24] Bikbulatova AA, Karplyuk AA, Parshin GN, Dzhafar-Zade DA, Serebryakov AG. (2018) Technique for Measuring Vocational Interests and Inclinations in High-School Students with Disabilities. *Psikhologicheskaya nauka i obrazovanie - psychological science and education*. 23(2) : 50-58. doi: 10.17759/pse.2018230206
- [25] Antonov AA (2014) Peculiarities of motivation of persons with hearing impairment to rink-bandiclasses. *European Social Science journal*. 3(41) : 106-109.
- [26] Makina L.R. (2010) Research of motivation of sports activity of sportsmen with visual disability of training groups. *Bulletin of the Chuvash State Pedagogical University*. 5 : 89-95.
- [27] Stepanova ON (2011) Methods of collecting and processing marketing information in physical culture and sports. Moscow, 240.
- [28] Kuzmin MA (2012) Motivation of sports activities in various sports. *Scientific notes of the University. P.F. Lesgafta*. 2(84) : 84-89.
- [29] Korneva MA, Makhov AS, Stepanova ON (2014) Peculiarities of the motivation of athletes with disabilities with the defeat of the musculoskeletal system. *Theory and practice of physical culture*. 6 : 55-58.