INTEGRATION OF PHYSICAL AND PSYCHOLOGICAL TRAINING OF Wrestlers at the Stage of Preparation for the Elite Level

Assan Zholdasbay

Department of Physical Culture and Sports, Abai Kazakh National Pedagogical University, Almaty, Republic of Kazakhstan

Correspondence:

Assan Zholdasbay, Abai Kazakh National Pedagogical University, Almaty, Republic of Kazakhstan, zholdasbay_a@hotmail.com

Abstract: The purpose of the study is to substantiate the need to introduce a system of methodological tools for the development of sambo athletes 'readiness to integrate physical and psychological training during professional growth as a guarantee of their ability to receive high awards. The study was conducted in two stages: theoretical (analysis, comparison, and systematisation of normative documents on the research problem, classification, generalisation of theoretical data) and practical (pedagogical observations; control exercises; psychological tests). During the study, the content of the concepts "training process of sambo athletes" and "integration of physical and psychological training" was determined; their signs and features were revealed; a methodology for the preparation of sambo athletes to integrate physical and psychological training at an elite level was developed and implemented. During the experimental study among sambo athletes who attended the sports school "Satpayev Kali" (Shamalgan), a methodological toolkit was developed to improve the readiness of sambo athletes to integrate physical and psychological training at an elite level, namely: the implementation of components and criteria of readiness with selected methods of their development. According to the results of the conducted research, promising areas for improving the methodology of the development of sambo athletes' readiness for integration of physical and psychological training at an elite level in Kazakhstan.

Keywords: health-saving technologies, sports education, readiness components, methodical system, sports classes.

INTRODUCTION

In the era of informatisation and digitalisation of society, which leads to an increase in mental and informational loads on a person, the search for ways of optimisation, harmonisation, and adaptation in the socio-ecological environment, subject to constant updating, becomes relevant. In Kazakhstan, sambo wrestling is recognised as a national and priority sport, which has a high importance in the education of young people and the development of the personality of a citizen and patriot of Kazakhstan society. The state policy of Kazakhstan is aimed at the introduction of health-saving technologies in the process of training wrestlers at the stage of preparation for high-level sports. The relevance of the identified issues is conditioned by the existing problem of physical and psychological training of wrestlers for their qualitative preparation for high-level sports (The Strategy for..., 1997). The problem of the study is the theoretical and practical substantiation of the methodology of integration of physical and psychological training of sambo athletes at an elite level in Kazakhstan.

Akkari, Seidikenova, Bakitov, & Minazheva (2023) have proved that with the development of targeted national social programmes in Kazakhstan and based on an in-depth analysis of the current state of the educational environment, the issue of ensuring the level of public health becomes relevant. Ensuring an educated and healthy generation of future specialists is one of the most important tasks of the educational system of Kazakhstan. Physical culture and sports play a significant role in the development of a healthy and athletic Kazakh society, occupying a leading place in the development of universal culture. Maintaining a sporty lifestyle, according to scientists, is designed to provide the younger generation of Kazakhstan with the necessary amount of physical activity, develops physical qualities, and hardens. Participation in martial arts is designed to form the moral and volitional qualities of future specialists.

Hacıhasanoğlu, Yıldırım, Karakurt & Sağlam (2011) suggest that the insufficiency of the methodological developments aimed at revealing an integrative approach to the implementation of physical and psychological training of sambo wrestlers, which provides for the development of physical qualities and mental functions in athletes, blocks the process of preparing a sports reserve. Many researchers have proved the need for such integration, since the manifestation of the maximum physical qualities of a wrestler is associated with psychological preparedness. Lyell, Simmonds & Deane (2016), in papers related to the specifics of sambo training in sports classes and clubs, prove the existing insufficient level of psychological methods of training such athletes due to the lack of a powerful method-ological base. The researchers actively explore the psychology of sports as an applied science aimed at ensuring the effectiveness of the educational and training process and the high quality of athletes' preparation for competitions. It is proved that very important components in the process of training sambo athletes at the stage of preparation for an elite level are the realisation of the personality traits of the athlete; stable psychological adjustment when performing physical exercises. Therefore, the main goal of physical culture and sports is to achieve unity of physical and spiritual qualities of a person, increase physical and mental health along with the improvement of sports skills.

In the collection of materials of the international round table on the topic: "Training of professional in the context of digitalisation of education – Problems and prospects" (2022), researchers mention that the existing methodological tools aimed at training sambo athletes need to be gradually improved on the principle of primary competition and secondary training. Due to the implementation of significant changes in the content of the competitive sambo duel, the rules of the competition, training methods, tactical and technical techniques, reducing the duration of the duel, the wrestling process has become dynamic, continuous attacking actions are encouraged. All this requires sambo athletes to quickly solve tactical and technical problems and use certain attacking combination actions. However, the existing methodology of technical and tactical training does not sufficiently consider the requirements of modern freestyle wrestling.

The purpose of the study is to develop and implement a methodological system for training sambo athletes on the way to achieving the elite level in sports. During the conducted research, the following tasks are highlighted:

- 1. Analysis of the experience of physical and psychological training of sambo athletes and analysis of the possibilities of its integration into the training process of sports schools and classes.
- 2. Development and experimental verification of the methodology of integration of physical and psychological training of sambo athletes at the stage of preparation for an elite level in sports schools of Kazakhstan.
- 3. Determination of the nature of the influence of the developed integrated methodology on the development of physical and psychological qualities, increasing the functional capabilities of sambo athletes.
- 4. Testing the influence of an integrative approach to the training of sambo athletes at the stage of preparation for an elite level.

The solution to the outlined problems will contribute to the effective development of a complex of professional competencies of sambo athletes, the development of professionally significant qualities for competitiveness in the labour market, and the solution of urgent tasks and problems of socio-economic development of the country.

MATERIALS AND METHODS

The presented research was conducted in two stages: theoretical (analysis, comparison and systematisation of literature, normative documents on the research problem, classification, generalisation of theoretical data to assess the level of research and determine the importance of the studied issues) and practical (pedagogical observations; control exercises; psychological tests; analysis of plans and diaries of athletes, acquired experience innovative activity among coaches and highly qualified sambo athletes; conversations and interviews with athletes; questionnaires; psychophysiological methods; expert evaluation; competition method; pedagogical experiment; methods of mathematical statistics, evaluation of results using methods of mathematical statistics to verify the relevance of this author's methodology). The main methods in the process of experimental research were aimed at investigating the problems of the preparation of sambo athletes to integrate physical and psychological tools for the development of the readiness has been carried out. These methods were used to identify the input level of readiness of sambo athletes to integrate physical and psychological training.

The practical stage consisted of an experimental study conducted in the city of Shamalgan among sambo athletes who attended the "Satpayev Kali" sports school and engaged in wrestling for 10-15 years. In order to ensure the representativeness and reliability of the sample, the features of the development of experimental groups of respondents are determined. The establishment of the research array was carried out by pairwise selection. The condition was considered that at the end of the selection, the number of the experimental group met the requirements of representativeness. 36 sambo athletes were involved in the experiment. The control group included 16 respondents, and the experimental group included 20 participants. The experimental and control groups had no differences in height, weight, and dynamometric measurement results. The experiment was conducted during 2022-2023. Diagnostics of the effectiveness of the system of methodological means of preparing sambo athletes for the integration of physical and psychological training at an elite level, who were trained according to the methods of the honoured coach of the Republic of Kazakhstan in sambo Asan Zholdasbai, was carried out.

During the ascertaining experiment, the following components and criteria of readiness were identified, namely motivational (motivational and value criterion), psychological (emotional), physical (strength) and performance (reflexive). The levels of readiness of sambo athletes for the integration of physical and psychological training at an elite level in Kazakhstan have been determined and evaluated at medium and low levels. At the formative stage of the experiment, the selected components of the readiness of sambo athletes to integrate physical and psychological training at an elite level in Kazakhstan were tested. In the course of the research, the following principles were implemented: individualisation, accessibility, systematicity, visibility, gradual increase in workload, and strengthening of initiative. To increase the level of readiness of sambo athletes to integrate physical and psychological training at an elite level, a system of methodological tools has been developed, which include exercises aimed at the implementation of: mental self-regulation, concentration of attention, development of attention switching, noise immunity, imagination, muscle tension control abilities, development of relaxation skills.

The following methods were used to fulfil these conditions: development of positive motivation for psychological and physical training (questionnaires, conversations, analysis of the performances of advanced wrestlers), systematic analysis of performance during training and fights (individual training of causal schemes); development of individual performance in actions (conversations); development of wrestlers' self-esteem and goal planning ("personality training"); optimisation of the ratio of training motivation during a duel (training sessions, conversations and beliefs); development of motivational achievements in wrestlers (using stories based on pictures of the Thematic Apperceptive Test (TAT), development of mental self-regulation in wrestlers (psychoregulatory training of Sambo athletes). After the end of the experiment, the analysis of the results obtained and their generalisation was carried out, conclusions were drawn, and prospects for further research on this topic were substantiated.

RESULTS

An important aspect of the development of the social culture of the individual in Kazakhstan society is sport, which provides physical improvement, spiritual and moral development, the ability to social adaptation, value and motivational determination, achievement of a high level of skill and professionalism in the field of sports, namely Sambo wrestling. The implementation of the training of a high-level wrestler depends on a qualitatively selected methodological system, which includes tactical and technical actions that should tend to improve (Borysiuk, 2001; Melnyk, 2023). Nowadays, the requirements for the training of sambo athletes, in particular, at the stage of preparation for elite-level sports, constantly tend to increase. Since sports activities are carried out in extreme conditions, significant physical and neuropsychological stresses are required from athletes (Melnyk, Cherkasova, Khimenes & Zahura, 2023). Based on the relevance of the identified issues on the implementation of the integration of physical and psychological training of wrestlers at an elite level, an experimental study was conducted. The methodology of the honoured coach of the Republic of Kazakhstan in sambo Asan Zholdasbai was taken as a basis on which athletes were engaged.

In the process of forming an experimental study at the ascertaining stage of the experiment, to determine the real state of readiness of wrestlers for the integration of physical and psychological training, an analysis of competitive duels and the training process of athletes of different qualifications was carried out. Based on the analysis, it was found out that at the stage of preparation for an elite level, the wrestler must have the tactics of active struggle, consolidate the advantage through active manoeuvre, restrain the opponent with grips of various types, have the ability to actively use technical and tactical actions with reliable protection and counterattacking actions from capturing legs, make throws with a large amplitude, master the technique of pinning down the opponent in a dangerous position. It was found that the specificity of sambo wrestling is conditioned by the high and diverse motor activity of the wrestler associated with the manifestation of physical qualities (strength, speed, endurance, dexterity, flexibility) and psycho-

logical (concentration, steadfastness, attention switching), intellectual (resolution of situations), volitional (perseverance, determination, self-control, independence). Physical properties develop in the process of sambo wrestling, but special physical training is needed for a high level of their development.

To determine the actual readiness of wrestlers to integrate physical and psychological training, testing was conducted in both groups, which determines the level of physical fitness (motor qualities), physiological characteristics and psychological indicators, and the tolerance of physical activity. The purpose of testing is to identify the level of awareness of Sambo athletes of professional skills at the stage of preparation for an elite level. 36 sambo wrestlers who attended sports clubs in Almaty and engaged in wrestling for 10-15 years were involved in the survey. The control group included 16 respondents, and the experimental group included 20 participants. There were no significant differences in height, weight, and dynamometric measurement results between the experimental and control groups. The establishment groups – experimental and control – was carried out by analogy with one another for all the studied signs, which allowed for comparative observation. The results of experimental studies were evaluated at high, medium, and low levels. The experiment was conducted during 2022-2023.

At the stage of the ascertaining experiment, a theoretical analysis of the literature base on the problem of research, the acquired experience of innovative activity among coaches and highly qualified sambo wrestlers, who have repeatedly passed high victories, was carried out. Based on the data obtained, a methodology for integrating the physical and psychological training of wrestlers and assessing its impact on their level of preparedness at the stage of preparation for an elite level has been developed. According to the experimental programme in the control group, training was carried out during the year according to the traditional programme for wrestlers at the stage of preparation for an elite level. The experimental group was offered classes developed based on experimental methods of training wrestlers. After completing the training according to the experimental method, repeated testing was carried out in both groups, according to which the reliability of the change in the test results for the year and the difference in the gradation of the experimental data results between the experimental and control groups were evaluated. The integral indicator of the effectiveness of the training process is considered by the results of the performance of athletes at competitions. For this purpose, the participation of athletes of the experimental and control groups in competitions of different levels was considered. The performance was evaluated by points according to the developed scale. The points received individually by each athlete were added, after which the average values for the groups were calculated.

The method of integration of physical and psychological training of wrestlers is based on the relationship of physical qualities and mental functions. The implementation of psychological training of sambo athletes should be integrated into the process of physical training. The statement of spiritual and educational principles among wrestlers lays the foundation of personality and creates a platform for the development of physical properties. Mastery of techniques allows a wrestler to defeat an opponent and cultivate high spiritual qualities and self-control. Thus, the methodology is based on the implementation of physical indicators, moral principles, universal values, and the ability to concentrate, which is transformed into a concentration of energy and strength. The training of the concentration process is one of the mandatory sections of the psychological training of sambo athletes. The process of teaching concentration of attention is proposed to be carried out both by traditional methods of martial arts, and through psychotechnical training with elements of yoga, chi-gong, meditative practices. The indicated methodology of integration of physical and psychological training of wrestlers is proposed to be implemented by observing the following conditions:

- integration of mental and physical forces;
- knowledge of own strengths and capabilities by the wrestler;
- motivation to achieve success;
- confidence in achieving the set goal;
- ability to concentrate on performing a certain movement;
- ability to resist internal and external psychological factors;
- state of readiness of the wrestler at the time of performing the movements;
- development of volitional qualities (determination, fortitude, self-control).

The content of the methodological system of integration of physical and psychological training of wrestlers at the stage of preparation for an elite level is implemented in the following conditions:

1. Development of positive motivation for psychological and physical training. Verification of the condition is carried out through questionnaires, conversations, and analysis of the fights of advanced wrestlers.

- 2. Systematic analysis of performance during training and duels. To check the effectiveness of this condition, the study suggests the use of individual training of causal schemes, which is proposed to be carried out after each training session and duel, aimed at studying the actualisation of emotional states.
- 3. Development of individual effectiveness in actions. It consists in using conversations aimed at developing performance through strengthening sports motivation.
- 4. Development of wrestlers' self-esteem and goal planning. To implement this task, "personality training" was used. The training contributes to the development of adequate self-esteem among wrestlers.
- 5. Optimisation of the ratio of training motivation during the match. It is proposed to implement the task by using training sessions after the competition, while using conversation and persuasion.
- 6. Development of motivational achievements among wrestlers. The indicated condition consists of two aspects, namely: the motivation to achieve success and the motivation to avoid failure. The study suggests teaching athletes how to create stories based on TAT images, in the process of which wrestlers are invited to view photos of sports fights, where they should make a brief description of the emotions depicted in the photo.
- 7. The development of mental self-regulation in wrestlers. To implement the indicated condition, a psychoregulatory training of sambo wrestlers is proposed, during which the following functions are realised: concentration, stability, distribution and switching of attention, development of imagination.

In order to implement the methodology of integration of psychological and physical training of sambo athletes at the stage of preparation for an elite level, the components and criteria of its organisation are identified, namely: motivational (motivational and value criterion), psychological (emotional), physical (strength), and performance (reflexive). Based on indicators of the athletes' readiness to integrate psychological and physical training at an elite level during the ascertaining stage of the experiment, data processing was carried out in the control group. The obtained data at the stage of the ascertaining experiment are presented in Figure 1.

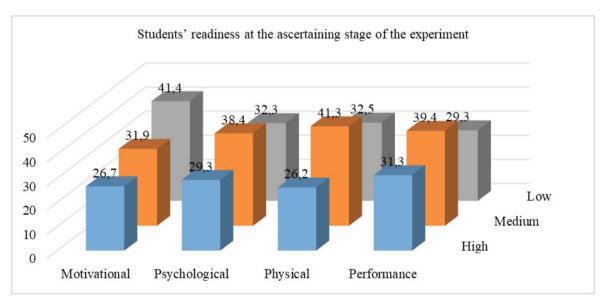


Figure 1. The results of diagnostics of the level of development of the components of the wrestlers' readiness for the integration of psychological and physical training at the stage of preparation for an elite level in the control group

Source: compiled by the author.

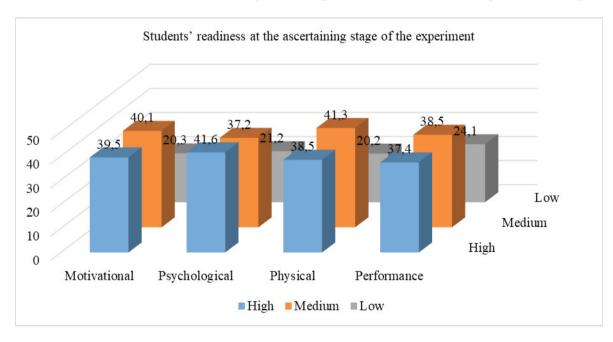
At the formative stage of the experiment, the following principles are proposed for implementation: individualisation, accessibility, systematicity, visibility, gradual increase in loads, strengthening of initiative:

- 1. The implementation of mental self-regulation in the study is proposed to be developed through a set of exercises: "Fingers", "Butterflies", "Attention", "Focusing", "Rhythmic contemplation", "Fly".
- 2. In order to concentrate attention to the use of exercises are offered: "Thermometer", "Pulse", "Geometric figures", "Breathing", "Searchlight".

- 3. For the development of attention switching: "Red-black table", "Numerical order", "Pump".
- 4. It is proposed to develop noise immunity through a series of exercises: "Obstacles" and "Number arrangement".
- 5. For the development of imagination: "Thinking training", "Word", "Mental visualisation", "Geometric figures", "Mental reproduction", "Motor skills training".
- 6. To develop the ability to control muscle tension: "Dynamometer", "Conductor", "Infrared rays".
- 7. To develop relaxation skills, exercises are used: "Contrast", "Slow motion", "Pump", "Bell", "Partial relaxation".

In the process of training wrestlers for elite-level sports, it is proposed to educate the following qualities in sambo athletes:

- Strength development (through repeated interval exercises). Before performing exercises for the development of strength, the following is carried out: psychological adjustment to previous activities to create mobilisation readiness for the manifestation of strength; creation of a mental image of "I am strong". To do this, athletes used psychoregulatory training (individual options) and ideomotor training. The exercises were carried out due to perseverance and determination.
- 2. Development of speed. The development of two types of speed was applied: quickness of reaction and rapid movements with the manifestation of great strength. The development of speed was carried out by gradually increasing the load (running for short distances, exercises with dumbbells, and exercises in pairs with elements of imitation of real sambo wrestling).
- 3. Development of endurance. It is proposed to run 1,000 meters using the methods of repeated and interval exercises.



The results of the study at the formative stage of the experiment are elaborated and presented in Figure 2.

Figure 2. The results of diagnostics of the level of development of the components of the wrestlers' readiness for the integration of psychological and physical training at an elite level in the experimental group

Source: compiled by the author.

Thus, the author's integrated methodology of psychological and physical training of sambo wrestlers is aimed at the development of athletes' physical qualities and mental functions that determine their manifestation in competitive conditions. The methodical system is aimed at accelerating the acquisition of control skills, optimising the training process, improving the quality of training and the results of competitions of sambo athletes. In this methodology, the priority is given to the psychological training of wrestlers as a guarantee of creating a psychological base for the

successful development and manifestation of physical qualities, namely: strength, speed, and performance. However, it is necessary to prioritise psychological training, as a guarantee of creating a psychological base for the successful development and manifestation of physical qualities – strength, speed, endurance.

The proposed methods, within the framework of a certain methodology for integrating physical and psychological training of sambo athletes in the preparation for elite-level sports, direct coaches to actively introduce psychological training to athletes. The use of modern methods of integrating psychological and physical training of wrestlers at an elite level requires athletes and their coaches not only to be active and able to find new solutions, but also to form the skills to independently set and perform new professional and social tasks of adaptation and work in changing conditions, confidence, and responsibility.

DISCUSSION

Today in Kazakhstan the improvement of the system of athletes' training, the search for effective methods of assessing and improving the physical fitness of wrestlers and their psychological readiness at the stage of preparation for high-level sports, in particular in judo wrestling, is becoming promising. The solution of this issue should be carried out by improving existing and developing new training programmes for judoists, updating the system of comprehensive control of the development of physical and psychological fitness (Rueda Flores, Mon-López, Gil-Ares & Coterón, 2023). The integration of physical and psychological training of wrestlers an elite level is a complex and multifaceted process. In the study, the components of integration include:

- subject (integration of knowledge);
- cognitive or epistemological (integration of cognition methods);
- active (integration of activity methods);
- organisational (integration of forms of implementation of activities);
- personal (integration of human manifestations within the framework of integrated knowledge);
- didactic (integration of teaching methods).

Integration is a process of movement and development of the system, where the number of its constituent elements and the intensity of their interaction are growing. The growing need for coaches to develop competencies aimed at knowing the specifics of content and technology in the context of the pedagogical process of training sambo athletes and the insufficient development of methodological tools for working in the training system of the sports reserve is becoming important (Соболенко & Мартинов, 2017; Beighton, Grahame, Bird, Beighton, Grahame & Bird, 1999). Based on the opinion expressed by researchers, sambo wrestling refers to a sport where the final result directly depends on both the physical qualities of athletes and their psychological adjustment to conducting active competitive activity. The implementation of modern sambo wrestling in Kazakhstan is based on the requirements of the parties of sports preparedness, which allows for the selection of relevant, reasonable, and adequate means and methods of training. Contrary to the opinion of researchers, the implementation of the integration of physical and psychological training of wrestlers requires not only sports classes that contribute to the full physical development of wrestlers at the preparation for an elite level and emotional unloading, but also work on improving their individual physical and psychological data.

The stage of preparation of sambo athletes for an elite level provides for the achievement of maximum results in sambo wrestling, there is a sharp increase in special training in the total amount of training work and the growth of competitive practice. The main task at this stage is the ability of sambo athletes to use means aimed at rapid adaptation. The goal of the stage is to maximise the total values of the volume and intensity of training work, a wide plan of classes with heavy loads (Fagard, 2001). Hacthasanoğlu et al. (2011) argued that sambo is a fairly young sport in Kazakhstan. According to researchers, today there are not enough developed training programmes and approaches for conducting training sessions of wrestlers at the stage of preparation for an elite level. Since the preparation of wrestlers for an elite level is based on the deepening of the physical qualities of athletes and the maximum realisation of individual capabilities, ensuring high sporting results in competitive conditions involves improving the technical skills of training sambo athletes on a permanent basis. According to honoured sambo coach of the Republic of Kazakhstan, Asan Zholdasbai, psychological training of sambo athletes precedes and accompanies physical training. The coach formulated the essence of the main problem of modern sports, which consists in a harmonious and complex combination of the main components of success: psychological, physical, functional, and tactical training of athletes (Dvoryatkina, Melnikov & Shcherbatykh, 2022).

The methods by Asan Zholdasbai for the integration of physical and psychological training of wrestlers have found active application among the following types of martial arts: judo, Kazakh wrestling, and freestyle wrestling. The coach of the Almaty region on combat sambo Kuanzhan Kulpeisov considers sambo wrestling one of the unique types of martial arts that is inherent in the culture of each nation. Sambo combines elements of judo, freestyle and Greco-Roman wrestling, Kazakh wrestling, sumo, and fist fight. That is why, according to the coach, the training of sambo athletes at the stage of preparation for an elite level requires the development of a special methodological system. Cabrera, Vega, Sarmiento, Paz-Susana & Tierra (2022) investigating the development of sambo located one of its founders in Almaty along with other outstanding coaches, namely, Kerey Koishibek.

An equally important person among the elite sambo athletes is the practitioner Asana Adambayuly, who learned the basics of wrestling under the guidance of a prominent specialist, the honoured coach of Turkmenistan Bayram Mammadov. In 2006, Asan Zholdasbai became the director of Youth Sports School No. 15 in Almaty (Cabrera et al., 2022). In the study, sambo wrestling is interpreted as a fight in two positions, namely: in a stand – the task of which is the ability to throw the opponent on the carpet, and on the ground – from a prone position to carry out a painful reception that will force the opponent to surrender. Asan Zholdasbai, within the framework of his methodology, tended to a wide arsenal of techniques for wrestlers to implement which they must have certain physical qualities, namely: strength, speed, endurance, and willpower. According to the coach, the wrestler is required to demonstrate strength and speed at the maximum level, which depends on the psychological readiness of the athlete. Mental training is recommended to increase the functionality of the athlete and the reliability of the competition.

Knight (2008), Fleischman & Mumford (1989) proved in scientific developments that in order to integrate the physical and psychological components, before performing exercises concerning the development of strength and psychological adjustment to competitive activity, the development of the image of "I am strong" should be used. The expressed opinion is considered correct and is reflected in the need to use psychoregulatory and ideomotor training. However, different arguments were made in the study, since the indicated exercises should be applied along with volitional efforts (stubbornness, determination). The development of strength, agility, flexibility, coordination can be carried out through game training, consisting in a combination of a standard approach to training and specially selected sports games, for example, wrestling rugball – basketball with elements of rugby, during which speed, functionality, cardio and general physical training develop.

Thus, the integration of physical and psychological training of wrestlers is proposed to be carried out using a methodological system based on a game technique aimed at the contextual development of physical qualities and mental functions during competitions. When athletes work in extreme conditions, significant changes and activation of pre-pathological processes occur in their psyche. Therefore, the complex and harmonious development of sambo athletes requires a renewed attitude to sports activities. Such integration is aimed at accelerating the development of process management skills at the subconscious level, optimising the training process, and improving the quality of training and competitive activities of wrestlers at the stage of preparation for an elite level.

Conclusions

The study concluded that high-quality professional training of sambo athletes for the integration of physical and psychological training at an elite level in Kazakhstan should be based on a system of methodological tools for the implementation of which it is necessary to predict the effective component of the content. The application of integration of physical and psychological training of sambo athletes at an elite level requires careful preparation from both the coach and the athlete, which allows the wrestler to adapt to the updated training methodology. The study confirms that knowledge of the theoretical and practical foundations of the integration of physical and psychological training of sambo athletes. The results of the experiment indicate significant positive changes in the levels of development of wrestlers' readiness for the integration of physical and psychological training, which proves the effectiveness of the developed system of methodological tools.

Promising areas for improving the development of readiness for the integration of physical and psychological training at an elite level have been formed. During the experiment, it was found that the readiness under study is at low and medium levels. It is determined that such a trend requires the creation of the necessary methodological tools, which will contribute to improving the level of training of specialists. The data obtained from the results of

the experiment after applying the proposed methodology allow drawing conclusions about the effectiveness of the implementation of methodological tools. In this regard, the policy of training sambo athletes in Kazakhstan should be aimed at updating the methodology of training future champions in the field of freestyle wrestling.

Prospects for further research are aimed at developing a wider range of methodological tools to form the process of preparing wrestlers to integrate physical and psychological training at an elite level. The obtained primary results require the expansion and deepening of the problem under study, therefore, the development of a broader set of scientific and methodological support will contribute to the development of systemic knowledge about the conduct of free-style wrestling tactics, and the development of skills and abilities to use them in practice. The data obtained can be considered as a tool to increase the readiness of sambo athletes to integrate physical and psychological training.

References

- Akkari, A., Seidikenova, A., Bakitov, A., & Minazheva, G. (2023). Internationalization of higher education in Kazakhstan: From political will to implementation. *Assessment and Public Policy in Education*, 31(119), e0223730.
- Beighton, P., Grahame, R., Bird, H., Beighton, P., Grahame, R., & Bird, H. (1999). Clinical features of hypermobility: locomotor system and extra-articular. *Hypermobility of joints*, 53-80.
- Borysiuk, Z. (2001). Somatic, exercise and coordination determinants of sports mastery in fencing. Sport Wyczynowy, (1-2), 17-29.
- Cabrera, V. A. G., Vega, J. E. C., Sarmiento, A. G., Paz-Susana, B. S., & Tierra, J. V. M. (2022). Diagnostics of the technical training process in Olympic wrestling. *Journal of Science and Technology in Physical Culture*, 17(3), 1052-1066.
- Collection of materials of the international round table on the topic: "Training of professional in the context of digitalization of education Problems and prospects". 2022. http://surl.li/gbayy
- Dvoryatkina, S. N., Melnikov R. A., & Shcherbatykh V. E. (2022). Identification of the research potential of students in the process of revealing integrative connections of the subject content of mathematical courses. *European Journal of Contemporary Education*, 11(3), 718-726.
- Fagard, R. H. (2001). A population-based study on the determinants of heart rate and heart rate variability in the frequency domain. *Verhandelingen-Koninklijke Academie Voor Geneeskunde van Belgie*, 63(1), 57-89.
- Fleischman, E. A., & Mumford, M. D. (1989). Abilities as causes of individual differences in skill acquisition. *Human Performance*, 2(3), 201-223.
- Hacıhasanoğlu, R., Yıldırım, A., Karakurt, P., & Sağlam, R. (2011). Healthy lifestyle behaviour in university students and influential factors in eastern Turkey. *International Journal of Nursing Practice*, *17*(1), 43-51.
- Knight, J. (2008). Internationalization: A decade of changes and challenges. *International Higher Education*, 50. https://doi.org/10.6017/ ihe.2008.50.8001
- Lyell, M. J., Simmonds, J. V., & Deane, J. A. (2016). A study of UK physiotherapists' knowledge and training needs in hypermobility and hypermobility syndrome. *Physiotherapy Practice and Research*, 37(2), 101-109.
- Melnyk, O. (2023). Composition variability and performance of the leading women's wrestling teams at the Olympic games. *Physical Culture and Sport: Scientific Perspectives*, 2, 32-42.
- Melnyk, O., Cherkasova, A., Khimenes, K., & Zahura, F. (2023). The modern arsenal of technical-tactical actions of highly qualified freestyle women wrestlers (according to the results of the 2022 World Championship). *Martial Arts*, 28(2), 90-99.
- Rueda Flores, M., Mon-López, D., Gil-Ares, J., & Coterón, J. (2023). Training Conditions and Psychological Health: Eating Behavior Disorders in Spanish High-Performance Women's Olympic Wrestling Athletes—A Qualitative Study. *International Journal of Environmen*tal Research and Public Health, 20(3), 2441.
- Соболенко, А. I., & Мартинов, Ю. О. (2017). Удосконалення техніко-тактичних дій студентів ВНЗ у боротьбі самбо. Scientific Journal of the Dragomanov Ukrainian State University, 1(82), 59-62. [in Ukrainian]
- The Strategy for development of the Republic of Kazakhstan until the year 2030. (1997). https://www.akorda.kz/en/official_documents/strategies_and_programs

Primljen: 25. decembar 2023. / Received: December 25, 2023 Prihvaćen: 15. februar 2024. / Accepted: February 15, 2024

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

08