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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**METHODOLOGY FOR DEVELOPING INDIVIDUAL TECHNICAL-TACTICAL
PROFILES OF TRAINED FEMALE BOXERS BASED ON COMPREHENSIVE
ASSESSMENT OF INDIVIDUAL CHARACTERISTICS****Gulasal Matchanovna Rakhimkulieva***Doctoral Researcher**Scientific Research Institute of Physical Education and Sports**Uzbekistan State Academy of Sports**Email: raximquliyevag@gmail.com**Tashkent. Uzbekistan***ABOUT ARTICLE**

Key words: trained female boxers, individual characteristics, comprehensive diagnostics, criteria-based assessment, technical-tactical profile, psychophysiological preparedness, individualized training.

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Abstract: This article presents the scientific and methodological foundations for developing individual technical-tactical profiles of trained female boxers through comprehensive diagnostics and criteria-based assessment of their individual characteristics. A comprehensive assessment approach encompassing physical, psychophysiological, technical, and tactical components was employed to provide an integrated characterization of the athletes' preparedness. The diagnostic system was structured around 12 informative indicators, and a five-level criteria-based rating scale was developed to enable comparison of results expressed in different units of measurement. The level of development of each indicator was classified as low, below average, average, above average, or high, and the obtained results were systematically organized into physical, psychophysiological, technical, and tactical domains. The integrated analysis of these domains enabled the development of an individual technical-tactical profile for each female boxer, allowing the identification of relatively strong and underdeveloped components within the structure of preparedness and the assessment of their

interrelationships. The scientific and methodological significance of the proposed methodology lies in extending the use of comprehensive diagnostic results beyond merely describing an athlete's current level of preparedness, enabling their application as diagnostic criteria for determining individualized training priorities and supporting the targeted individualization of the training process.

Introduction. Skilled female boxers' competitive performance is characterized by high physical demands, rapidly changing bout situations, and the need to make appropriate technical and tactical decisions under time constraints. Under such conditions, assessing an athlete's level of preparedness based on isolated indicators is insufficient to fully characterize her individual capabilities. Therefore, the comprehensive assessment of physical, psychophysiological, technical, and tactical components in an integrated manner represents an important scientific and methodological prerequisite for identifying the individual structure of an athlete's preparedness and for the targeted individualization of the training process.

Among local researchers, R.D. Khalmukhamedov investigated the technical-tactical and psychophysiological characteristics that determine the individual activity styles of highly skilled boxers, analyzing the manifestation of offensive, defensive, and counterattacking actions in relation to athletes' individual performance characteristics. G'.Q. Rajabov, in turn, focused on the assessment of preparatory and technical-tactical actions employed by highly skilled boxers during competitive activity. These studies provide a scientific basis for considering individual characteristics and technical-tactical performance indicators when assessing boxers' preparedness.

Among international researchers, H. Chaabène, M. Tabben, B. Mkaouer, E. Franchini, and colleagues investigated the physical and physiological characteristics of boxers and demonstrated that aerobic and anaerobic capacities, muscular strength, and speed-strength abilities are important components of boxing-specific preparedness. Other studies in combat sports have also highlighted the close relationship between technical-tactical performance and psychophysiological processes such as anticipation, choice reaction, attention, and rapid decision-making. Overall, the available scientific literature has addressed various aspects of boxers' physical and physiological, psychophysiological, and technical-tactical preparedness.

The purpose of the research The purpose of this study is to develop and scientifically substantiate a methodology for constructing individual technical-tactical profiles of trained

female boxers based on a comprehensive assessment of their physical, psychophysiological, technical, and tactical characteristics.

Research objectives:

To scientifically and methodologically substantiate and systematize the physical, psychophysiological, technical, and tactical indicators and comprehensive diagnostic criteria characterizing the individual preparedness profiles of trained female boxers.

To develop and substantiate a five-level criteria-based assessment scale that enables comparison of diagnostic results expressed in different units of measurement and determination of their respective levels of development.

To develop a methodology for constructing individual technical-tactical profiles of trained female boxers by integrating the results of comprehensive diagnostics and criteria-based assessment across physical, psychophysiological, technical, and tactical domains.

To identify the relatively strong and underdeveloped components of athletes' preparedness based on their individual technical-tactical profiles and to scientifically substantiate the use of these profiles for tailoring the training process to the individual characteristics of each athlete.

The object of the research is the sports and technical-tactical training process of trained female boxers training at the boxing facility of the Yangiobod Sports Base in Angren, Tashkent Region, Uzbekistan.

The subject of the research is the methodology for comprehensive diagnostics and criteria-based assessment of the physical, psychophysiological, technical, and tactical indicators of trained female boxers, as well as for identifying their individual characteristics of preparedness.

Research methods. The study employed the analysis of scientific and methodological literature, pedagogical observation and testing, psychophysiological diagnostics, video-based analysis of technical-tactical actions, expert assessment, pedagogical experimentation, and mathematical-statistical methods. These methods were used to determine the physical, psychophysiological, technical, and tactical preparedness indicators of trained female boxers, to comprehensively assess them according to established criteria, and to identify the athletes' individual characteristics of preparedness.

The scientific novelty of the research is as follows:

A comprehensive assessment system comprising 12 diagnostic indicators and a five-level criteria-based rating scale was developed to assess the individual characteristics of trained female boxers. Based on the integration of diagnostic results across physical,

psychophysiological, technical, and tactical domains, a methodology for constructing individual technical-tactical profiles was developed. The proposed approach enables the identification of relatively strong and underdeveloped areas of athletes' preparedness and provides a scientific and methodological basis for individualizing the training process according to each athlete's individual characteristics.

Methods. The study was designed to comprehensively diagnose the individual preparedness characteristics of trained female boxers, assess results expressed in different units of measurement using standardized criteria, and construct individual technical-tactical profiles based on the obtained data. The research methods included the analysis of scientific and methodological literature, pedagogical observation and testing, psychophysiological diagnostics, video-based analysis of technical-tactical actions, expert assessment, pedagogical experimentation, and mathematical-statistical analysis. Within the methodological approach, the preparedness of female boxers was considered not as a collection of isolated physical or technical indicators, but as an interconnected system of physical, psychophysiological, technical, and tactical aspects of preparedness. This approach enables a comprehensive assessment of each athlete's individual capabilities, facilitates the analysis of relationships among different areas of preparedness, and allows the identification of relatively well-developed areas as well as those requiring further improvement.

To comprehensively assess the individual preparedness characteristics of trained female boxers, 12 diagnostic indicators were selected. These indicators were designed to provide an integrated assessment of the athletes' physical capabilities, psychophysiological responses, technical actions, and tactical performance.

Table 1

Diagnostic Indicators for the Comprehensive Assessment of Individual Characteristics of Trained Female Boxers

No.	Diagnostic Indicator	Unit of Measurement	Diagnostic Focus
1	30 m sprint	s	Speed
2	3 × 10 m shuttle run	s	Agility
3	Standing long jump	cm	Explosive strength
4	Push-ups	repetitions	Strength endurance
5	Straight punches performed in 10 seconds	number of punches	Boxing-specific movement speed
6	Choice reaction time	ms	Sensorimotor response speed

7	Attention and rapid decision-making	points	Situational perception and rapid decision-making
8	Punch accuracy	%	Accuracy of technical actions
9	Defensive efficiency	%	Effectiveness of defensive actions
10	Counterattack efficiency	%	Effectiveness of counterattacking actions
11	Footwork and distance control	0-10 points	Management of boxing distance
12	Bout activity	actions/min	Tactical activity

The diagnostic indicators enable the assessment of the preparedness of trained female boxers across different areas. Tests characterizing physical preparedness were designed to assess speed, agility, explosive strength, and strength endurance; psychophysiological indicators were used to evaluate sensorimotor reaction, attention, and rapid decision-making; while technical-tactical indicators were aimed at assessing the speed and accuracy of punching actions, defensive and counterattacking efficiency, distance control, and bout activity. Since the diagnostic results were expressed in different units of measurement, including seconds, milliseconds, centimeters, number of repetitions, percentages, and points, direct comparison between the indicators was limited. Therefore, a five-level criteria-based rating scale was applied to standardize the results within a unified assessment system. Each diagnostic indicator was rated from 1 to 5 points according to the established criteria, thereby determining its level of development.

Table 2.

Five-Level Criteria-Based Rating Scale for Diagnostic Indicators

Score	Level	Diagnostic Interpretation
1	Low	Requires priority development
2	Below average	Requires targeted development
3	Average	Sufficient, but requires further improvement
4	Above average	Well-developed level
5	High	Relatively high level of development

This scale enables diagnostic results expressed in different units of measurement to be converted into a unified scoring system and compared across indicators. Since each of the 12 indicators was rated on a scale from 1 to 5 points, the theoretical range of the overall integral score was 12-60 points.

Table 3.

**Areas for the Comprehensive Assessment of Individual Preparedness
Characteristics of Trained Female Boxers**

Area of Preparedness	Assessed Indicators	Diagnostic Focus
Physical	30 m sprint; 3 × 10 m shuttle run; standing long jump; push-ups	Assessment of speed, agility, explosive strength, and strength endurance
Psychophysiological	Choice reaction time; attention and rapid decision-making	Assessment of sensorimotor reaction, attention, and rapid decision-making abilities
Technical	Straight punches performed in 10 seconds; punch accuracy	Assessment of the speed and accuracy of punching actions
Tactical	Defensive efficiency; counterattack efficiency; footwork and distance control; bout activity	Assessment of the effectiveness of tactical actions during bout situations

The comprehensive assessment of the individual preparedness characteristics of trained female boxers was systematically organized across physical, psychophysiological, technical, and tactical areas. Physical preparedness was assessed in terms of speed, agility, explosive strength, and strength endurance; psychophysiological preparedness included choice reaction time, attention, and rapid decision-making; technical preparedness focused on the speed and accuracy of punching actions; and tactical preparedness encompassed defensive and counterattacking actions, footwork, distance control, and bout activity. The diagnostic results were analyzed comprehensively, with particular consideration given to the relationships among the assessed indicators rather than interpreting each indicator in isolation. This approach made it possible to identify individual differences in the preparedness structure of female boxers with comparable levels of sporting qualification and to determine relatively well-developed areas as well as those requiring further improvement. Based on the results of comprehensive diagnostics and criteria-based assessment, an individual technical-tactical profile was constructed for each athlete. The methodological procedure followed the sequence of 12 diagnostic indicators, a five-level criteria-based assessment, systematization across four areas of preparedness, comparative analysis, construction of an individual technical-tactical profile, and identification of priority areas for further development. Areas in which relatively

low results were recorded were identified as priorities for further development, while the interrelationships among the other areas of preparedness were maintained. Thus, the proposed methodology enables diagnostic results to be used to identify athletes' individual preparedness characteristics and to scientifically determine priority areas of the training process.

Conclusion. The findings of the study demonstrated the scientific and methodological importance of comprehensively assessing the individual preparedness characteristics of trained female boxers by integrating physical, psychophysiological, technical, and tactical indicators. Since assessment based solely on isolated test results does not provide a complete representation of an athlete's preparedness structure, an integrated approach combining indicators from different areas within a unified diagnostic system was developed. The proposed methodology incorporates 12 diagnostic indicators characterizing the individual preparedness of trained female boxers and enables their systematic assessment across physical, psychophysiological, technical, and tactical areas. Given that the diagnostic results were expressed in different units of measurement, a five-level criteria-based rating scale was applied to facilitate their standardized comparison. Classification of the results as low, below average, average, above average, and high provided a unified basis for identifying individual differences in athletes' preparedness structures. The systematization of comprehensive diagnostic results across physical, psychophysiological, technical, and tactical areas made it possible to identify relatively well-developed aspects of preparedness as well as those requiring further improvement. The integral score was used as a supplementary summary measure, while the assessment of individual preparedness characteristics was primarily based on the relationships among diagnostic results across the different areas. This approach takes into account the possibility that female boxers with comparable levels of sporting qualification may exhibit different individual preparedness structures. Based on the results of comprehensive diagnostics and criteria-based assessment, a methodology for constructing individual technical-tactical profiles was developed. The profile was not intended to rank athletes according to an overall score; rather, it served as a diagnostic tool for characterizing the individual relationships among the physical, psychophysiological, technical, and tactical aspects of each female boxer's preparedness. This approach provides a methodological basis for identifying areas requiring further development and for prioritizing pedagogical interventions within the training process.

References:

1. Achilov, A. M., Khalmukhamedov, R. D., Shin, V. N., Tajibayev, S. S., & Rajabov, G'. Q. (2012). *Yosh bokschilarni tayyorlash asoslari* [Fundamentals of training young boxers].

2. Khalmukhamedov, R. D., Tajibayev, S. S., & Rajabov, G'. Q. (2015). Boks [Boxing]. Tashkent. 185 p.
3. Rajabov, G'. Q. (2020). [Article title to be specified]. Zamonaviy ta'lim (O'zbekiston), 1, 70-74.
4. Rajabov, G'. Q. (2020). [Article title to be specified]. Fan-Sportga, 3, 13-16.
5. Rajabov, G'. Q. (2018). [Article title to be specified]. Fan-Sportga, 4, 21-26.
6. Rakhimkulieva, G. M., & Rajabov, G'. Q. (2021). [Article title to be specified]. International Research and Practice Conference Engineering & Technology, 12(4), 12-16.
7. Khalmukhamedov, R. D. (2009). Tekhnologiya podgotovki edinobortsev na etapakh godichnogo tsikla [Technology of training combat sport athletes at different stages of the annual cycle] (Doctoral dissertation abstract). Tashkent. 56 p.
8. Vorontsov, A. (2020). Modern methods of assessment of technical and tactical actions in boxing of girls. Visnyk Kamianets-Podilskoho Natsionalnoho Universytetu imeni Ivana Ohienka. Fizychnye Vychovannia, Sport i Zdorovia Liudyny, 19, 10-17. DOI: 10.32626/2309-8082.2020-19.10-17.
9. Konokh, A., & Vorontsov, A. (2019). Prioritetni napriamy vdoskonalennia systemy pidhotovky v zhinochomu boksi [Priority directions for improving the training system in women's boxing]. Sportyvnyi Visnyk Prydniprovia, 3, 11-18. DOI: 10.32540/2071-1476-2019-3-011.
10. Konokh, A., & Vorontsov, A. (2019). Obuchenie tekhniko-takticheskoy podgotovke devochek v gruppakh bazovoy podgotovki po boksu [Teaching technical and tactical preparation to girls in basic boxing training groups]. In Fizychnye vychovannia i sport v navchalnykh zakladakh Ukrainy na suchasnomu etapi: stan, napriamky ta perspektyva rozvytku (pp. 232-238). Kharkiv: FOP Ozerov H. V.
11. Chaabène, H., Tabben, M., Mkaouer, B., Franchini, E., Negra, Y., Hammami, M., Amara, S., Chaabène, R. B., & Hachana, Y. (2015). Amateur boxing: Physical and physiological attributes. Sports Medicine, 45(3), 337-352. DOI: 10.1007/s40279-014-0274-7.
12. Russo, G., & Ottoboni, G. (2019). The perceptual-cognitive skills of combat sports athletes: A systematic review. Psychology of Sport and Exercise, 44, 60-78. DOI: 10.1016/j.psychsport.2019.05.004.
13. Davis, P., Wittekind, A., & Beneke, R. (2013). Amateur boxing: Activity profile of winners and losers. International Journal of Sports Physiology and Performance, 8(1), 84-91. DOI: 10.1123/ijsp.8.1.84.

14. Davis, P., Benson, P. R., Pitty, J. D., Connorton, A. J., & Waldock, R. (2016). Performance analysis of elite female amateur boxers and comparison with their male counterparts. *International Journal of Sports Physiology and Performance*, 11(1), 55-60. DOI: 10.1123/ijsp.2014-0133.