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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**CRITERIA FOR INDIVIDUAL MANAGEMENT OF TRAINING LOAD VOLUME
AND INTENSITY IN THE TECHNICAL PREPARATION OF WRESTLERS****Bakhtiyor Khidirovich Kholiqov***Tashkent University of Economics and Pedagogy**Faculty of Social Sciences**Department of Social Sciences and Physical Education**Associate Professor, PhD in Pedagogical Sciences*xoliqov.baxtiyor@mail.ru*Tashkent, Uzbekistan***ABOUT ARTICLE**

Key words: wrestling, technical preparation, training volume, intensity, individualization, monitoring.

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Abstract: This article substantiates criteria for individual control of training volume and intensity during wrestlers' technical preparation. A comparative analysis of published research informs a decision framework combining external load, internal athlete response and stability of technical execution. The number of repetitions is interpreted together with opponent resistance and task complexity. This is a conceptual and methodological study; the proposed framework has not undergone experimental validation.

Introduction. In wrestling, the outcome of a technical action does not depend solely on how many times the action is performed. The timing of the entry, distance, opponent's balance, grip stability, and response to counter-actions collectively determine the final execution. Ten identical attempts performed in an unresisted drill and during active sparring impose different physical and psychological demands. Therefore, equating the number of repetitions with training load oversimplifies the actual content of the training process [1, 2].

The consensus on monitoring sports training load recommends distinguishing external work from the athlete's internal response to that work [1]. This distinction is particularly important in wrestling: even when an athlete performs the same number of repetitions, internal strain may vary depending on the opponent's body mass, experience, and resistance strategy.

Therefore, the training plan should separately record both the work performed and its impact on the athlete.

Existing studies have reported that short-term multicomponent training can improve performance in wrestling-specific tests, while individual responses among participants may vary [5]. This observation demonstrates the limitations of applying a predetermined average standard to all athletes. At the same time, a positive change in test performance does not automatically mean that a technical action will be effective in a competitive bout.

Aim of the Study

The aim of the study was to theoretically substantiate a system of criteria for modifying the volume and intensity of training load while maintaining the quality of technical execution.

Materials and Methods

The research materials consisted of publications addressing sports training load, wrestling-specific tests, and technical-tactical analysis. The methods included critical analysis of the relevant literature, differentiation of concepts, comparative analysis of findings reported in the literature, and pedagogical modeling. Results concerning wrestling and judo reported in the reviewed sources are not presented as independent experimental findings of the present study. Practical verification of the proposed approach constitutes a separate research task.

Results and Discussion. The analysis demonstrated that it is appropriate to characterize the external load of technical training across five dimensions. The first dimension is volume, including the number of sets, attempts, and total work time. The second is intensity, including movement speed and the number of active actions performed per unit of time. The third is density, defined by the ratio of work to recovery. The fourth is the complexity of the technical task, ranging from predetermined situations to variable and unpredictable situations. The fifth is the nature of opponent resistance. Rather than mechanically combining these dimensions into a single aggregate value, it is more meaningful to record them separately according to the specific objective of the training session [1, 2].

For the assessment of internal response, the athlete's subjective rating of perceived exertion after training may serve as a practical tool. In the session-RPE approach proposed by Foster and colleagues, this rating is considered in combination with training duration [3]. However, this measure does not assess technical accuracy or the quality of decision-making under opponent resistance. Therefore, subjective exertion should be interpreted together with heart-rate data and the coach's technical observations [4].

Counting only whether an attempt was successfully completed is insufficient for evaluating technical quality. Recording interruptions or errors during the preparatory, entry,

execution, and finishing phases makes it possible to identify the source of technical deficiencies more accurately. For example, loss of balance during the finishing phase may be associated not with insufficient force during the main action, but with an inappropriate distance established during an earlier phase. In such a case, simply increasing intensity would not resolve the underlying training problem.

A conditional progression is proposed for increasing training load: stable execution under standardized conditions; execution with modified distance and grip; partial resistance; active resistance; and finally, a controlled bout. At each stage, the type of technical error and the proportion of high-quality executions should be monitored. Progression to the next stage should not be determined by an identical numerical threshold for all athletes; rather, the criterion should be established relative to the athlete's previous performance and the complexity of the selected technique.

The central question guiding the coach's decision should not be "How many repetitions were completed?" but rather "Was the movement pattern maintained when the load was increased?" If technical quality is maintained, the task can be made more complex. If technical quality repeatedly deteriorates, it may be more appropriate to extend the recovery interval, reduce opponent resistance, or return to a specific phase of the technique. This approach does not independently quantify injury risk; rather, it provides a framework for pedagogical adjustment.

Wrestling-specific tests provide additional information about functional preparedness [8, 9, 10]. However, the number of throws performed and the heart rate recorded during a test are not equivalent to tactical decision-making during training sparring. Therefore, test results should be compared with the technical-quality log and the situations observed during controlled bouts. The complementary use of different data sources allows for a more cautious interpretation of the findings in relation to sports practice.

When designing a microcycle, it is logical to allocate time for technical correction following high-resistance work and for precise execution at lower intensity. Observations of fatigue-related changes during successive judo bouts support the need to document the conditions under which technical performance is assessed following high exertion [2, 7]. However, this evidence does not establish a ready-made daily standard for wrestling; rather, it supports the need for individualized monitoring of recovery.

The interaction among different types of external load should also be analyzed separately. For example, when opponent resistance increases, an athlete may perform fewer attempts within the same period of time. Interpreting this solely as a reduction in volume would

be inappropriate because the mechanical and decision-making demands of each individual attempt may have increased. Therefore, recording work duration, number of attempts, and resistance simultaneously makes it possible to explain differences between two training sessions more accurately. This conclusion follows from the logic of monitoring, although its quantitative relationship should be examined separately [1, 2].

The model proposed in this article is limited to technical preparation. It cannot, by itself, explain an athlete's overall level of preparedness, medical status, or competitive performance. Competitive outcomes also depend on the level of the opponent, tactical planning, and other factors. Therefore, in subsequent empirical studies, technical execution should be treated as the primary outcome, while competitive performance indicators should be recorded separately as supplementary criteria. Research examining the relationship between combat actions and functional capacity in judo and jiu-jitsu also indicates the need to interpret findings within the specific conditions of each sport [6].

When documenting pedagogical decisions, the target technical action of the training session should be defined in advance. If several techniques, movement speeds, and resistance levels are changed simultaneously, it becomes difficult to determine which factor caused the observed improvement in execution. Therefore, during the initial stage, one primary task should be selected, and complexity should be increased only after a certain level of stable execution has been achieved. This sequence allows changes in the movement itself to be distinguished from the effects of the training situation.

An individual standard should not be established on the basis of an athlete's single best performance, but rather on stable execution across several comparable training sessions. A high result on a single day may be associated with a particularly suitable opponent or an easier task. Therefore, records should first be accumulated under comparable conditions, after which the level of resistance can be modified. If the athlete maintains the technical pattern across repeated sessions, progression to the next level of difficulty becomes more pedagogically justified.

Within the proposed model, reducing the training load should not be interpreted as regression. When fatigue or phase-specific technical errors increase, returning to the movement at a lower intensity may serve as preparation for a subsequent complex task. To evaluate the effectiveness of this decision, technical execution and the athlete's exertional response in the following session should be considered together. In this way, the recovery interval is analyzed not as purposeless rest, but as an integral component of technical instruction.

Caution is required when applying the findings to other groups of wrestlers. The biomechanical structure of a technique, the athlete's experience, and the stage of the training cycle may differ considerably; consequently, the same level of resistance may create different levels of difficulty across groups. For this reason, the article does not propose universal numerical thresholds. Future research should examine the sensitivity of the criteria across different age, skill, and weight groups in order to determine the conditions under which the model is most applicable.

Another condition for managing intensity is to distinguish the different phases within a single training session. An attempt performed during warm-up and movement recall, an attempt during the main training load, and a control attempt performed at the end of the session should not be combined into a single reporting category. Recording the objective and resistance level for each phase makes it possible to identify more precisely when technical quality begins to decline. This information can then be used to modify the sequence of exercises in the subsequent microcycle.

The technical complexity of the same throwing technique may depend on the opponent's gripping and defensive habits. Therefore, the training-load management card should record not only the opponent's body mass but also the type of counter-action used during the exercise. If stable execution at high intensity is observed only against a passive partner, this should not be regarded as sufficient evidence of competition readiness. The next stage should test whether technical quality can also be maintained against an active opponent.

If technical preparation decisions are based only on average weekly workload, undesirable changes in individual training sessions may remain undetected. For example, although the total number of attempts during the week may remain within the planned range, the finishing phase of the main technique may have deteriorated during two consecutive sessions. If the coach identifies this signal early, the task can be modified in a timely manner. Therefore, current-session analysis and periodic analysis should be regarded as complementary levels of monitoring.

In subsequent testing of the theoretical model, the primary technical-quality outcome should be predetermined and maintained throughout the study. Selecting only favorable indicators after the study has been completed would reduce the reliability of the conclusions. If the number of attempts, resistance conditions, and assessment rules are specified in advance, it becomes easier to determine whether the proposed management procedure actually provides an additional benefit.

The five-stage preparation scheme presented in this material should be interpreted not as a set of numerical standards, but as a logical sequence of training tasks. Figure 1 compares three theoretical patterns of training-load dynamics. The linear, stepwise, and undulating patterns are not ready-made prescriptions for a particular athlete; rather, technical quality and recovery should serve as the criteria for selecting the most appropriate pattern.

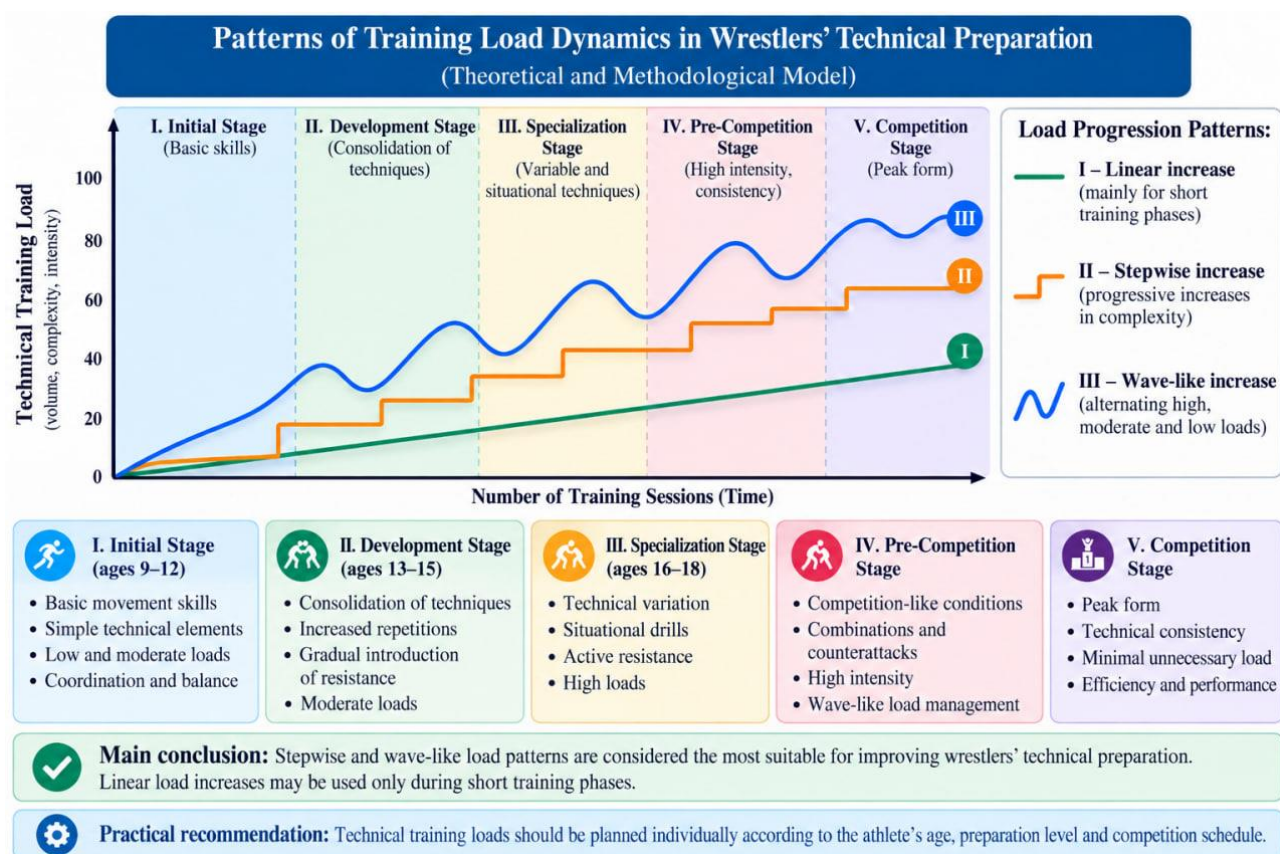


Figure 1. Load Dynamics at Different Stages of Technical Training

As athletes progress from the initial learning stage to competitive performance, the complexity of exercises and the level of opponent resistance change accordingly. Therefore, the training load should be adjusted at each stage not merely according to the number of repetitions, but also with consideration of technical performance quality and recovery status.

Conclusions. The management of training load volume and intensity in improving the technical and tactical preparation of wrestlers at the stage of sports mastery should not be limited to increasing the number of repetitions or extending training duration. In this process, the complexity of the task, intensity of opponent resistance, movement speed, athlete's internal physiological response, level of fatigue, and qualitative characteristics of technical actions should be comprehensively assessed in an interconnected manner. Such an approach makes it possible to individualize the training load according to the athlete's individual capabilities and

functional state, identify technical errors in a timely manner, and ensure the stability of technical and tactical actions.

To scientifically substantiate the effectiveness of the proposed methodological approach, it is important to develop a standardized and reliable coding system for identifying and assessing technical errors, determine the individual baseline characteristics of the study participants, and record training loads and technical-tactical outcomes according to objective criteria. In addition, conducting a pedagogical experiment involving experimental and control groups, statistically analyzing the obtained results, and comparing changes in technical, tactical, physical, and functional indicators will make it possible to scientifically establish the practical effectiveness of the proposed approach.

From this perspective, an integrated training-load management model may contribute to the progressive improvement of technical and tactical actions while taking into account the individual characteristics of wrestlers, increasing the pedagogical effectiveness of the training process, and ensuring the stable performance of technical actions during competitive activity.

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