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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –  
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**ASSESSMENT OF THE DYNAMICS OF CHANGES IN STRENGTH TYPES  
CHARACTERISTIC OF WRESTLING TECHNIQUES IN QUALIFIED BELBOGLI  
KURASH ATHLETES UNDER THE INFLUENCE OF ROTATIONAL MOVEMENTS  
USING ELECTRONIC MEASURING DEVICES****Sh.S. Mirzanov***Jizzakh State Pedagogical University**Faculty of Physical Culture**E-mail: [mirzanov\\_shodiyor@mail.ru](mailto:mirzanov_shodiyor@mail.ru)**Jizzak, Uzbekistan*

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**ABOUT ARTICLE**

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**Key words:** belt fighters, maximum and explosive power, rolling movements, measuring equipment.

**Abstract:** The results of the development of the leading types of force (maximum and explosive force), which increase the efficiency of its detonation in skilled belt fighters in state, the assessment of the dynamics of their displacement under the influence of rotational movements with the help of electronic relay equipment.

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**Introduction.** In belt wrestling (Belbogli kurash), the bout process takes place while both athletes hold the opponent's belt with both hands in a "locked" position. This condition may negatively affect the development and demonstration of maximal and explosive strength, which are crucial for effectively unbalancing the opponent and executing lifting and throwing techniques.

In addition, this sport involves continuous repetition of movements such as variable muscular tension, acceleration, jerking, turning, and rotational actions. These movements influence the receptors of the vestibular apparatus and may lead to body instability. As a result, balance may be disturbed, movement coordination can deteriorate, and not only the

demonstration of leading strength qualities becomes complicated, but also the effective execution of lifting and throwing techniques may be limited.

The purpose of the study was to investigate, using an electronic measuring device, the results of evaluating the dynamics of strength types that contribute to increasing the effectiveness of unbalancing and lifting the opponent in qualified belt wrestlers (students), as well as the changes in these strength indicators under the influence of rotational movements.

**Methodology.** The object of the study was the training process of qualified belt wrestlers studying in the 1st and 4th years at the Uzbek State University of Physical Education and Sport (UzSUPES) and participating in groups aimed at improving sports and pedagogical mastery.

During the research, the maximal and explosive strength types ensuring the activity of unbalancing and lifting the opponent were evaluated, as well as the dynamics of their changes under the influence of rotational movements using an electronic measuring device.

The strength indicators were measured in the following sequence:

- first, the device handle was pressed downward with both hands using maximal force;
- second, the same movement was performed using explosive (jerking) force;
- afterward, the same types of force were measured while lifting the device handle upward.

These indicators were determined after the athletes performed a load consisting of 15 rapid rotations of the body in a convenient direction while bending the trunk forward at 90°.

Balance stability was assessed in an upright position with the eyes closed while rotating the head in a comfortable direction with large amplitude at an average speed, as well as by rotating the body at an average speed while the trunk was bent forward at 90°.

**Results and Discussions.** The preliminary results of the study showed that in qualified belt-wrestling students the maximal downward pressing force of the device handle with both hands reached 692.25 N, while the explosive downward pressing force reached 4975.5 N.

The maximal upward lifting force of the device handle amounted to 998.16 N, whereas the explosive upward lifting force was 3564.78 N.

The results indicate that the level of maximal force required to lift the opponent (represented by lifting the device handle upward) was slightly higher than the maximal force used when pressing it downward. However, the level of explosive force used for lifting upward appeared to be weaker compared with the explosive force demonstrated when pressing downward.

**Conclusion.** It should be emphasized that the strength indicators studied in the wrestlers significantly decreased after performing rotational movements of the body while the trunk was bent forward at 90°.

This confirms that the intensive jerking, tension, turning, and rotational loads characteristic of belt wrestling bouts negatively affect the strength qualities under investigation.

Such conditions may also adversely influence the athletes' ability to unbalance the opponent and effectively perform lifting and throwing techniques during competition.

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