TECHNICAL-TACTICAL PROFILE AND WINNING PROBABILITY ANALYSIS OF ELITE UZBEK JUDOKA DAVLAT BOBONOV

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Abstract

This study aims to analyze the technical-tactical profile of Davlat Bobonov, the bronze medalist in judo at the Tokyo Olympics. Specialized video analysis was conducted on 125 official judo contests organized by the International Judo Federation (IJF). The analysis focused on determining the ratios of standing and ground techniques, as well as the efficiency of standing fighting and grappling techniques. The results revealed that 24.8% of Bobonov's effective techniques were in katame waza, while 75.2% were in ne waza. He demonstrated high effectiveness in executing koshi waza, sutemi waza, ashi waza, and te waza techniques. This study presents an individualized analysis of one competitor's technical-tactical profile. Such analysis and observations can inform the development of training programs for male judo athletes and guide judo coaches in their preparation processes. Additionally, the findings can serve as a model for the technical-tactical preparation of qualified judokas. By identifying relationships and similarities between the contest profiles of other competitors, new strategies for future training can be formulated.

Keywords: judo, efficiency of techniques, individual profile.

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Introduction

Practicing judo can significantly contribute to the development of both physical and mental attributes in athletes. The inaugural edition of the World Judo Championships took place in Tokyo, Japan, in 1956, marking a historic milestone for the sport. Notably, during this initial championship, there were no weight classes, reflecting the nascent stages of judo's organizational structure [1, 2].

Since its inception as an Olympic sport in 1964, judo has garnered widespread attention and participation worldwide. Alongside the proliferation of judo competitions at various levels, there has been a growing interest among researchers and scientists in analyzing the technical and tactical preparations of judo athletes [3, 4, 5].

It's worth noting that one of the enduring areas of study in judo research is the analysis of competitive bouts. Over the decades, scholars have extensively examined the dynamics of judo competitions, shedding light on various aspects of performance, strategy, and tactics employed by judokas. This sustained focus underscores the sport's complexity and the ongoing quest to understand and optimize athletes' performance.

Furthermore, the global interest in analyzing the combat activities of judo practitioners continues to expand. Researchers from diverse backgrounds and regions are increasingly delving into the nuances of judo techniques, strategies, and tactical approaches, contributing to a deeper understanding of the sport's intricacies and facilitating advancements in training methodologies and competitive performance.

Uzbek judokas have emerged as formidable contenders on the international stage, showcasing their prowess in prestigious tournaments such as the Olympic Games, Asian Games, and various official International Judo Federation (IJF) competitions. Notably, Uzbekistan's judo contingent has secured numerous notable achievements over the years, highlighting their competitive prowess and dedication to the sport.

In the annals of Olympic history, Uzbek judokas have clinched two silver medals: Armen Bagdasarov in 1996 and Abdullo Tangriyev, alongside five bronze medals earned by Rishod Sobirov in 2008, 2012, and 2016, Diyorbek Urozboyev in 2016, and Davlat Bobonov in 2020. These accolades underscore Uzbekistan's consistent presence and success on the grandest stage of judo competition.

Moreover, Uzbek judokas have left an indelible mark on the World Championships, amassing an impressive tally of four gold medals, three silver medals, and seven bronze medals. These achievements signify Uzbekistan's sustained excellence and competitiveness in the global judo arena.

As in other nations, Uzbekistan has witnessed the emergence of a new generation of judo talents in recent years. These young athletes are increasingly making their mark in international competitions, showcasing the depth of talent and potential within Uzbekistan's judo ranks.

Furthermore, the International Judo Federation (IJF) has implemented changes to refereeing rules aimed at enhancing the spectacle and excitement of judo competitions. These alterations, based on the latest scientific findings, directly influence the fighting style and technical-tactical profiles of judokas. As athletes adapt to these evolving regulations, they must refine their techniques and strategies to remain competitive in the dynamic landscape of international judo.

As previously mentioned, Davlat Bobonov stands as the preeminent judoka both globally and within Uzbekistan (refer to Picture 1). His athletic journey from 2014 to the present day has been nothing short of exceptional, marked by remarkable achievements and a distinct sporting legacy.

In the World Championships held in Hungary in 2020, Bobonov clinched the 2nd place, showcasing his prowess on the international stage. Moreover, at the Tokyo 2020 Olympic Games, he secured a bronze medal in the highly competitive -90 kilogram weight category, further solidifying his status as one of the world's elite judokas.

Bobonov's dominance extends beyond major championships, with an impressive track record of garnering over 10 medals in official International Judo Federation (IJF) tournaments, including Grand Slams, Grand Prix events, and other prestigious competitions.

According to the IJF ranking list, Bobonov currently holds the 3rd position in the World Seniors Ranking, amassing a total of 4114 points. This ranking underscores his consistent performance and standing among the world's top judo athletes.

Despite his remarkable achievements, existing literature lacks comprehensive studies focusing on the individual technical-tactical profile of Davlat Bobonov and the unique structure of his judo contests. To address this gap, this research aims to elucidate Bobonov's individual technical-tactical profile, shedding light on his distinctive approach to judo competition and providing valuable insights into his strategic and technical repertoire. Through this analysis, we seek to provide a comprehensive understanding of Bobonov's judo style and contribute to the broader body of knowledge in the field of judo research.

Materials and Methods

After the conclusion of the Tokyo 2020 Summer Olympic Games, Davlat Bobonov commenced his participation in international judo tournaments. The research materials for this study were gathered through audio-video recordings and graphic methods of data collection. A total of 125 contests were sampled from three official International Judo Federation (IJF) competitions, namely the Grand Slam Abu Dhabi 2021 (November), Grand Slam Paris 2022 (February), and Grand Slam Ulanbaatar 2022 (June).

The study focused on analyzing various technical-tactical indicators observed during Bobonov's contests, including:

1. Ratios of katame-waza (ground techniques) and ne-waza (ground fighting).

2. Efficiency of standing fighting techniques, including sutemi-waza (sacrifice techniques), te-waza (hand techniques), ashi-waza (foot techniques), and koshi-waza (hip techniques).

3. Efficiency of grappling techniques, encompassing kansetsu-waza (joint-locking techniques), shime-waza (strangulation techniques), and osaekomi-waza (pinning techniques).

By meticulously examining these elements, the study aimed to provide comprehensive insights into Bobonov's technical and tactical performance across a range of judo competitions, contributing to a deeper understanding of his judo style and strategic approach.

Results and Discussion

In numerous scientific studies, the activity during judo combat has been categorized into various phases, including total fight time, standing fight time, displacement without contact or approach, gripping, technique execution, groundwork combat, and pause time [9, 10]. Other research has delineated judo combat phases as break, preparation, gripping, technique execution, fall, and groundwork phases. Different time characteristics have been identified for each of these combat phases. It has been noted in research that the durations of these phases vary across weight, age, and gender categories [11]. The analysis of the literature reveals significant disparities in combat phase durations based on specific athlete characteristics such as age, weight, gender, qualification level, among others.

Figure 1 illustrates the ratios of katame-waza and ne-waza techniques implemented by Bobonov. As depicted in the figure, ne-waza techniques dominate, constituting 75.2% of the total techniques utilized, while katame-waza techniques account for 24.8%. Furthermore, studies indicate that the distribution of standing fight and ground fight phases varies depending on the weight categories of the judokas [12].

This finding underscores the importance of understanding the strategic preferences and technical inclinations of individual judokas, as well as the impact of physiological factors such as weight category, on their performance dynamics during competition. By elucidating these nuances, coaches and athletes can tailor training regimens and strategic approaches to optimize performance outcomes across different competitive contexts (Figure 1).

As depicted in Figure 2, the efficiency of standing fighting techniques across various waza categories—koshi waza, sutemi waza, te waza, and ashi waza—was analyzed. Interestingly, no significant differences were observed among these four types of standing techniques. However, it is noteworthy that koshi waza techniques were slightly more prevalent, accounting for 30% of Bobonov's repertoire during the observed competitions. Sutemi waza techniques, on the other hand, were the least utilized at 20%. Ashi waza and te waza techniques were employed at a similar frequency, each comprising 25% of the total techniques utilized.

Comparing these findings with past World Championships data (2014-2015), it is evident that there are some disparities in technique usage among male judo athletes. During the specified time period, male judo athletes utilized te waza techniques in 29% of cases and ashi waza techniques in 36% of cases [13]. These variations highlight the evolving nature of judo techniques and the importance of adaptability in response to changing competitive landscapes (Figure 2).

Figure 3 illustrates the efficiency of grappling techniques employed by Bobonov during the observed competitions. Our analysis indicates that pinning

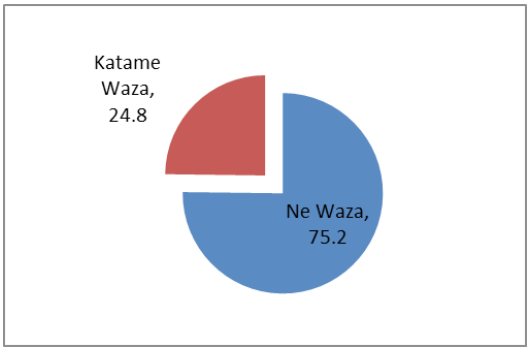

Figure 1. Ratios of Katame Waza and Ne Waza.

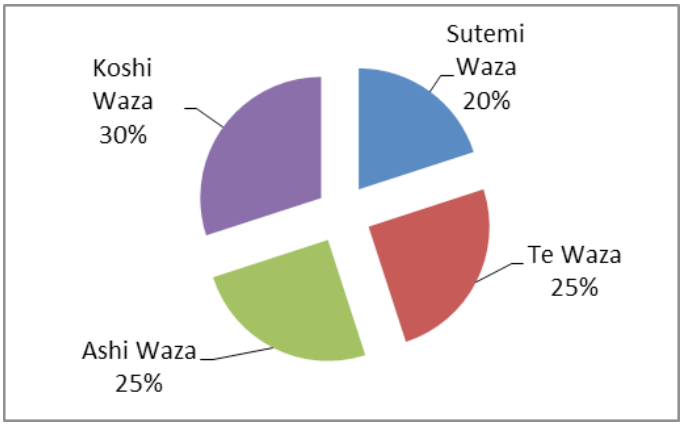

Figure 2. Efficiency of standing fight (sutemi waza, te waza, ashi waza and koshi waza).

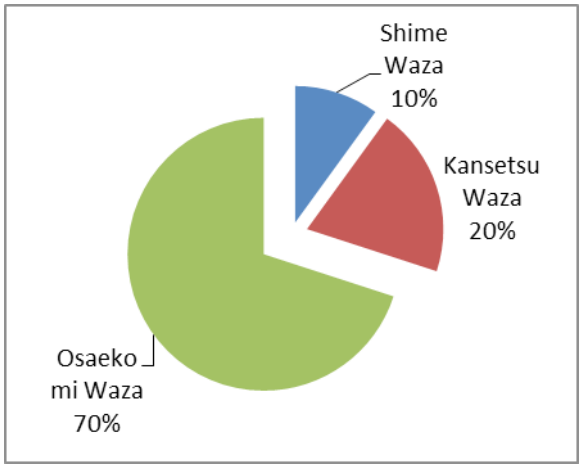

Figure 3. Efficiency of grappling techniques *(kansetsu waza, shime waza and osaekomi waza)*.

techniques (osaekomi waza) were the most efficiently executed, comprising 70% of Bobonov's grappling repertoire. Following pinning techniques, joint-lock techniques (kansetsu waza) were utilized with a frequency of 20%, while choke techniques (shime waza) were less frequently employed at 10%.

It is noteworthy to consider the broader context of recent changes in the International Judo Federation (IJF) Refereeing Rules, aimed at enhancing the attractiveness and dynamism of judo as a sport [14]. These rule changes, particularly the imposition of limited time for ground fighting during contests, may impact the opportunities for efficient utilization of certain techniques, especially those from the shime and kansetsu waza categories. As such, judokas like Bobonov may need to adapt their tactical approaches to optimize their performance within the confines of the updated ruleset, ensuring continued competitiveness and success in the evolving landscape of judo Competition (Figure 3).

Conclusion

In conclusion, the formulation of an effective and progressive training program is a formidable task, not only in judo but also in various other sports, making it a crucial aspect in athletic development [15, 16]. Davlat Bobonov's remarkable achievements during the analyzed period underscore the significance of analyzing and monitoring high-potential athletes in judo.

The results presented in this study offer valuable insights into the individual technical-tactical profile of a top-level judo competitor. Such analyses and observations play a pivotal role in guiding the training process for judo coaches. By delineating the specific strengths and tendencies of athletes like Bobonov, coaches can tailor training regimens to optimize their performance outcomes.

Furthermore, the findings of this study can serve as a desired model for the technical-tactical preparation of qualified judokas. By identifying relationships and similarities between the contest profiles of different competitors, new strategies for future training can be formulated. This iterative process of analysis and adaptation is essential for staying ahead in the dynamic and competitive landscape of judo.Ultimately, the individualized approach to technical-tactical

analysis presented in this study not only enhances the understanding of Davlat Bobonov's judo style but also contributes to the broader body of knowledge in judo research. It serves as a roadmap for coaches and athletes alike, facilitating continuous improvement and innovation in training methodologies aimed at achieving optimal performance outcomes in judo Competition.

Future research possibilities

Future research endeavors could focus on the refinement of training strategies, the development of comprehensive long-term training plans, and the optimization of coaching processes. This avenue of exploration is crucial, particularly in light of the pivotal role that coaching paradigms [16, 17, 18] play, as well as the intricate interplay of psychological factors within the training context [19, 20, 21, 22].

References

1. Brabec, M. B. L., Seixas Duarte, T., Ahmedov, F., Aedo-Munoz, E. A., Aidar Martins, F. J., Sorbazo, S. D. A., ... & Brito Ciro, C. J. (2024). Combat Time in International Female Judo: A Systematic Review and Meta-Analysis. Ido Movement for Culture. Journal of Martial Arts Anthropology, 24(2), 39-49.
2. Brousse M, Matsumoto, D. (1999). Judo And Sport A Way Of Life. The inclusion of women's judo. International Judo Federation. San Francisco, California.
3. Sterkowicz S., Kęsek M. (1983). Charakterystyka działań podczas I Międzynarodowego Turnieju judo kobiet. [in Polish].
4. Ahmedov, F., Gardašević, N., Norboyev, K., & Umarov, K. (2020). Differences of Duration of the Fight Depending on the Stage of the Judo Competition. Int. J. Hum. Mov. Sports Sci, 8, 380-383.
5. Tropin Y., Boychenko N., & Kovalenko J. (2021). Improving the methodology of development of strength qualities of 15-16-year-old judokas. Slobozhanskyi Herald of Science and Sport, № 2(82), C. 17-22. doi:10.15391/snsv.2021-2.003.
6. https://www.ijf.org/country/uzb. International Judo Federation.
7. Błach W, Rydzik Ł, Błac Ł., Cynarski W. J., Kostrzew M, Ambroży T. (2021). Characteristics of Technical and Tactical Preparation of Elite Judokas during the World Championships and Olympic Games. International journal of environmental research and public health, 18(11), 5841. https://doi.org/10.3390/ijerph18115841
8. https://www.ijf.org/wrl?category=5&view=expanded. International Judo Federation.
9. Miarka B, Cury R, Julianetti R, Battazza R, Julio UF, Calmet M, Franchini E. (2014). A comparison of time-motion and technical-tactical variables between age groups of female judo matches. Journal of Sports Sciences. 32: 1529-1538.
10. Miarka B, Panissa V.L, Julio U.F, Del Vecchio F.B, Calmet M, Franchini E. (2012). A comparison of time-motion performance between age groups in judo matches. Journal of Sports Sciences, 30, 899-905.
11. Giovani M, Franchini E, Jose R.J, Tudiro L.B. (2010). Structural Analysis of Action and Time in Sport: Judo. Journal of Quantitative Analysis in Sport, DOI: 10.2202/1559-0410.1226.
12. Shavkatovich F.A. (2020). The relationship between the weight classes and competitive activity of judo athletes. Int. J. Phys. Educ. Sport. Health, 7, 108-111.
13. Adam M, Klimowicz P, Pujszo R. (2016). Judoists' tactical and technical efficiency during the World Championships in 2014 and 2015. Baltic Journal of Health and Physical Activity. 8. 19-28. 10.29359/BJHPA.08.2.02.
14. https://www.ijf.org. International Judo Federation Refereeing Rules.
15. Sacripanti A., Ahmedov F. (2021). JUDO. Manual.
16. Bompa T., Buzzichelle C. (2019). Periodization of Strength Training for Sports. 4th Edition. Human Kinetics Press.
17. Németh, Z., Shopulatov, A., Felder, H., Ridwan, M., Sobhkhiz, A., Basra, M. A. B. A., ... & Ahmedov, F. (2024). Sport coach education programs: Perspectives and features. Revista iberoamericana de psicología del ejercicio y el deporte, 19(1), 31-37.
18. Cahyono, T., Hartono, F. V., Gani, R. A., Ahmedov, F., Sliz, M., Lobo, J., ... & Setiawan, E. (2023). Coach leadership style, coach-athlete relationships and engagement in team sports: The mediating role of athlete burnout. Revista iberoamericana de psicología del ejercicio y el deporte, 18(6), 687-692.
19. Singh, R. M., Skrypchenko, I., Kamo, H., Shopulatov, A., Ahmedov, F., & Hofmeister, M. (2023). Fear of failure and anxiety in kurash athletes: gender and age differences. Health, sport, rehabilitation, 9(4), 46-56.
20. Ahmedov, F., & Abdulakhatov, A. (2023). Relationship between sports competition anxiety and technical-tactical actions of winning and losing kurash athletes. Ido Movement for Culture. Journal of Martial Arts Anthropology, 23(2), 1-5.
21. Tropin Y, Podrigalo L, Boychenko N, Podrihalo O, Volodchenko O, Volskyi D, Roztorhui M. Analyzing predictive approaches in martial arts research. Pedagogy of Physical Culture and Sports, 2023;27(4):321–330. https://doi.org/10.15561/26649837.2023.0408
22. Rovniy, A., Mulyk, K., Perebeynos, V., Ananchenko, K., Pasko, V., Perevoznyk, V. & Dzhym, V. (2018). Optimization of judoist training process at a stage of gradual decline of sporting achievements. Journal of Physical Education and Sport, 18(4), 2447-2453. DOI:10.7752/jpes.2018.04367.