

RATE OF SUCCESSFUL ATTEMPTS OF MALE WEIGHTLIFTERS ON THE 2024 EUROPEAN WEIGHTLIFTING CHAMPIONSHIPS

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ABSTRACT

The results in official competitions is a valuable source of feedback information for coaches and sports scientists to successfully control the training process. In international tournaments, elite athletes are often under tremendous psychological and physiological pressure to achieve great performance. In Olympic weightlifting, in events where athletes of similar potential and preparedness compete, the struggle for top places is especially intense, as often the final ranking depends on only one successful attempt. Unsuccessful attempts due to over-excitement are the most common reason competitors underperform or drop out. Purpose. The purpose of the study was to evaluate the rate of successful attempts of male weightlifters on the 2024 European weightlifting championships in Sofia, Bulgaria. Methods. The attempts of 170 male weightlifters in 10 weight classes were recorded and statistically analyzed. The rate of successful attempts was estimated – overall and stratified by attempt number. **Results**. The overall rate of successful attempts for the snatch and clean and jerk was similar (with insignificant differences) for all studied weight classes. For both competitive exercises, the highest success rate was measured in the first attempts, followed by second and third. 52% of the attempts in the snatch were successful compared with only 47% in the clean and jerk. Conclusion. In our opinion, pre-competition reduction of body mass and/or accumulated fatigue during the preparation is the main reason for this 6% statistically significant difference. As the snatch is the more technical exercise than the clean and jerk, these findings may be due to strictly methodological reasons: Early specialization is typical for Olympic weightlifting - during their first years in the sport, athletes place an emphasis on developing proper technique at the expense of strength work.

Key words: rate of success, attempts, female weightlifters, European championships

INTRODUCTION

The struggle for the top places in the competitions is characterized by great tension, especially among competitors of similar strength abilities, where the success rate in all the six attempts is of a decisive importance for victory over the opponent (1, 2). The unrealized attempts are the main reason for unsatisfactory results and droppings out of championship rankings (3-5).

In the era of the modern high level of sports and technical results and a trend towards a continuous increase of sports competitiveness as a result of the gradual equalization of the achievements of the strongest weightlifters in

*Correspondence to: Valentin Panayotov, National Sports Academy, Department Weightlifting, Boxing, Fencing and Sports for all, Sofia, Bulgaria, e-mail: v_panajotov@abv.bg, 0893396440 Europe, it is very often necessary to apply different tactical options in the complex competition environment. These changes are not accidental, but premeditated tactical moves aimed at confusing and upsetting an opponent of nearly equal physical capabilities. In other cases, weightlifters fail, when the time for recovery is insufficient, it is necessary to increase the weight of the barbell for the upcoming attempt as a result of extreme mental stress, underestimation of all components of the competition situation, inconsistency with current condition and capabilities of the weightlifter, lack of a concrete, realistic and flexible plan for initial weights and increases in barbell weight on the second and third attempts (6, 7).

MATERIALS AND METHODS

The aim of the present study is to reveal the success rate based on attempt record of the

European Men's Weightlifting Championships for male athletes in 2024.

To achieve this goal, we set the following tasks: 1. To establish the success rate of attempts in the snatch in the European Championship.

2. To establish the success rate of attempts in the clean-and-jerk in the European Championship.

3. To establish the ratio of realized and unrealized attempts of male weightlifters in the European Championship.

The contingent of the study consisted of 170 male athletes in 10 weight classes who participated in the European Championship in 2024.

As the main methodological approach, we used a system-structural analysis of the protocols of

the European Weightlifting Championship held in 2024 in Sofia.

RESULTS

Figures 1, 2 and 3 present the data on the success rate of attempts in the snatch for all competitors in the 10 weight classes who participated in the European Championship in 2024.

In **Figure 1** we observe that the success rate in the snatch in the first attempts in three of the weight categories – up to 61 kg, up to 81 kg. and over 109 kg – is around and over 50%. The smallest rate is found in the weight category of up to 96 kg - 34%, and the average success rate is 43%.



Figure 1. Success rate in the first attempts in the snatch in percentages

In **Figure 2** we represent the data on the success rate in the second attempts in the snatch by weight categories. The results show that the success rate in three of the weight categories – up to 55 kg, up to 73 and up to 96 kg – is the largest around and above 40%, followed by

most categories with rates of around and below 30%, and the smallest rate is measured in the weight class of to 89 kg - 22%. The average success rate is 34%. In our opinion, the reason for the better success rate is the higher number of missed first attempts in this weight category.



Figure 2. Success rate in the second attempts in the snatch in percentages

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Figure 3 presents the data on the success rate in the third attempts in the snatch by weight categories. In the third attempts in the snatch the success rate is lowest: it varies between 37% to 11% in the different weight classes.

The results show that the success rate in the snatch, when evaluated separately for each attempt, is the highest in the first attempts 43%, followed by the second – 34% and the third – 24%. The average overall success rate of all attempts in the snatch is 33%.



Figure 3. Success rate in the third attempts in the snatch in percentages

In **Figures 4, 5 and 6** we represent the data on the success rates for the first, second and third attempts in the clean-and-jerk. In the first figure, we observe that, regardless of the accumulated fatigue after the three attempts in the snatch, in the first attempts the largest success rate is measured in the weight category of up to 67 kg - 63%, while the smallest is in the weight class of up to 61 kg - 35% with an average value for all categories of 52%.



Figure 4. Success rate in the first attempts in the clean-and-jerk in percentages

In the second trial (**Figure 5**) in the clean-andjerk we observe that the average success rate in the weight categories of up to 73 kg and up to 96 kg is the largest -40%, while in the other categories it is below 37%, with an average value for all categories of 33%.



Figure 5. Success rate in the second attempts in the clean-and-jerk in percentages

As seen in **Figure 6**, the average success rate in the clean-and-jerk is the lowest -15% in the

PANAYOTOV V., et al. third attempts and varies between 3% and 30% for the studied categories.



Figure 6. Success rate in the third attempts in the clean-and-jerk in percentages

The obtained results show that the average overall success rate of attempts in the snatch for all weight categories is the highest in the first attempts -43%, while in the following 2 attempts the competitors achieve a lower rate -34% in the second and 24 % in the third attempts. The same trend is observed in the clean-and-jerk: the highest success rate is found

in the first attempts -52% for all weight categories, 33% in the second and 15% in the third.

Figure 7 presents the data (in percentage ratios) of the realized and unrealized attempts in the two competitive exercises in total for all male competitors who participated in the European Weightlifting Championship in 2024 in Sofia.



Figure 7. Percentage ratios for the realized and unrealized attempts in the two competitive movements for all competitors

DISCUSSION

Our data showed that the weightlifters had a greater number of attempts (by 6%) than in the snatch compared to the clean-and-jerk. In both competitive exercises, we observe a high percentage of missed attempts, with this rate in clean-and-jerk being higher by 10% compared to the snatch – 45%. The analysis of the weight categories separately reveals that the most successful attempts are realized in the category up to 109 kg – 2 (68%) in the snatch. In the clean-and-jerk the weight category of up to 61 kg is the most successful with 1.9 (63%)

attempts. In the same weight class, the overall success rate is 3.8 (60%) of 6.

Our results confirm the findings of previous studies: the analysis of the success rate of the competitive exercises and attempts shows that in their initial attempts, athletes most probably underestimate the weight on the barbell, the tactic gaps when adding weight to the barbell in each subsequent attempt, the effect of body mass reduction on sports performance, momentary mental state, etc. (5, 8, 9). In the second attempts, the additions to the weight on the bar are very often beyond their capabilities, as they often overestimate their strength and capabilities. We find the greatest number of unrealized attempts in the third ones because they competitors aim to a record weight.

In our opinion, these results corroborate the conclusion that the coach must assess in advance athlete's momentary physical abilities and strength and be aware of the potential tactical actions of the opponents in order to successfully implement and modify a preplanned tactical scheme during a contest (10, 11).

CONCLUSION

In big international competitions, in both competitive exercises, in their struggle for winning a medal and quotas for participation in the Olympic Games, the weightlifting elite realizes an insufficient number of successful attempts.

A detailed analysis of the success rate of individual competitive exercises and of each attempt separately, confirms that probably are technically and physically athletes unprepared or underestimate the weight of the bar during their initial attempts. In the second attempts, the additions to the weight of the barbell are very often beyond their capabilities, as they often overestimate their strength and technical capabilities, and as a result, the most unrealized attempts are found in the third attempt, especially if athletes aim at achieving a record.

In our opinion, the reasons for the unrealized attempts can be of a different nature. Some of them include an increased excitability, physically unpreparedness for the weight of the barbell, body mass reductions, larger jumps in weight addendums on the barbell in the second and third attempts, and overall fatigue.

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