

BULGARIAN WEIGHTLIFTERS WOMEN' ACHIEVEMENTS AT EUROPEAN CHAMPIONSHIPS AND ANALYSIS OF MEDALISTS' SPORTS PROFILE

Preliminary communication

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Abstract

The aim of the study is to analyze the rankings of Bulgarian women weightlifters at European Weightlifting Championships and describe medalists' personal profiles by the dynamics of their sports performance. The report analyzes the rankings of Bulgarian weightlifters women at European Championships and medalists' personal profiles through dynamics of athletic performance by Sinclair' coefficient for the period 1988 - 2016. Based on the analysis it has been established the number of competitors won medals and titles who have had a long successful sports career. Personal and summarized analysis for sports performance has been made that showed a growth of over 30 according to Sinclair' coefficient. Object of the study: Bulgarian women weightlifters medalists from European Championships in age group 17 to 33. The results of weightlifters prove that physical exercises affect humans' physiological functions, but adaptative capabilities of the body allows overcoming the accompanying troubles and achieving success at the championships. It was also found that high sports performance in weightlifting has no negative affection to the motherhood' function of women competitors and it is not an obstacle for achieving high sports results.

Keywords: *Sinclair' coefficient, sports performance, sports training, woman weightlifter athlete, menstrual cycle and pregnancy*

INTRODUCTION

The dynamics of sports life in weightlifting for women requires detailed analysis of competitive activities which we have been directly linked as a specialists. This is predisposed by the fact that the system of sports training' theory and methods has its female characteristics for this mainly male sport. Of particular importance is not only what qualities will be necessary for the success, but also the women's capabilities in extreme training sessions (with weights), which allow them to achieve high sport achievements (Petkov & Keller (Петков & Келлер), 1998); Petkov & Panayotov (Петков & Панайотов), 2013; Petkov, Panayotov & Chalakov (Петков, Панайотов & Чалков), 2014).

The girls from Bulgaria within the early age of weightlifting were attracted by the challenge of the new women's sport. For those who have used the power drills and reached the top of their abilities in the sport they practiced, it has been a springboard for their performances and success.

Over the years, insufficient information about the influence of some important exercises with weights leads to negative attitude towards the female weightlifting sport, which would negatively affect the childbirth function.

M. Toteva and B. Ilinova (Toteva (Тотева), 2006; Ilinova (Илинова), 2014; found that a number of famous athletes return to sport as athletes at the top level of their performance after the birth of their children, but about the athletes practicing weightlifting sport there was no data.

We have studied the sport profile of Bulgarian women weightlifters, medalists from the European championships that could have changed the mindset

and attracted more competitors for weightlifting as a sport.

The aim of the study is to analyze the rankings of Bulgarian women weightlifters at European Weightlifting Championships and describe medalists' personal profiles by the dynamics of their sports performance.

Tasks:

1. To establish a basis for the rankings of competitors from European leagues for the period 1988 – 2016.
2. To analyze the sport achievements of the medalists since their first participation at international competitions until 2016.

Object of the study: Bulgarian women weightlifters medalists from European Championships in age group 17 to 33.

METHODS

A system-structural analysis has been made for women's records of the European Weightlifting Championships for the period 1988 - 2016.

The most correct way to present the collected data in order to trace their achievements for this period and because of the occurred changes and their participation in different weight categories, is at the rate of Sinclair's coefficient.

RESULTS AND DISCUSSION

Bulgaria does not participate in two of 29 held European Championships (2011. and 2015). The analysis showed that for this period 1988 - 2016, have been involved 36 competitors and 26 of them won medals from Snatch + Clean & Jerk + twelve (Figure 1.).

Figure 1. presents graphically those who won gold medals - 15 competitors have won 54 titles.

It is evident that the number of champions is reduced. Analyzing the rankings in the women's age group there is no doubt that not only for Bulgarian sport, but also for European one's as well the most successful competitor who had won many European championships' titles and had been European champion 10 times is Yankova, 2014, followed by M. Trendafilova, which won 9 titles. I. Rifatova and D. Mintcheva had won 7 titles, G. Kirilova - 6, J. Georgieva - 4, S. Stoeva and H. Ilieva - 2 titles. They have been followed by D. Kerkeleva, V. Tosheva, S. Asenova, K. Nikolaeva, M. Maneva, M. Meleshkova and K. Karadjova, who had been champions only once.

Women weightlifters who had won championships' titles are in the age range 17-33 years old, suggesting that age is not a criterion for success and there is no relation to the sport and technical results' value. Sports experience, which is around and more than 10 years, largely affects the absolute values of performances and has been reported by the some authors (Boianov & Yankova (Боянов & Янкова, 2009; Yankova (Янкова), 2014; (Yankova & Panayotov (Янкова & Панайотов, 2014).

Due to the restriction that is imposed collected data has been presented only for the first three women according to

the rankings of Bulgarian heavy athletics, medalists at European championships. The study observed almost the same sport performance's dynamic for the others, but also for those who had become a mothers.

Figure 2. presents collected data for N. Yankova. For the period 1990 - 2002 her body mass index varies in range of $\pm 8,0$ kg. in different weight categories, as her sports experience was 13years between the age of 19 to 32 years (Yankova (Янкова) (2014).

The analysis confirmed a high growth (the highest - 31.73) in the sport mastery at the end of her sports and competitive career. It has been observed for this period of time some failures in her performance during the competition. The reason for this has been her annual participations, the reduction of body mass index, bad condition, traumas, and some other factors. The performance's growth is probably due both to the sports practice and the increase in power, which can be explained by the improvement of the reflex regulation and the intramuscular coordination.

Figure 3. shows the results of M. Trendafilova for the period 1988. to 2004. who has been between 18 - 34 years old, and body mass index varies in range of $\pm 7,5$ kg. within the past 16 years of her sport experience.

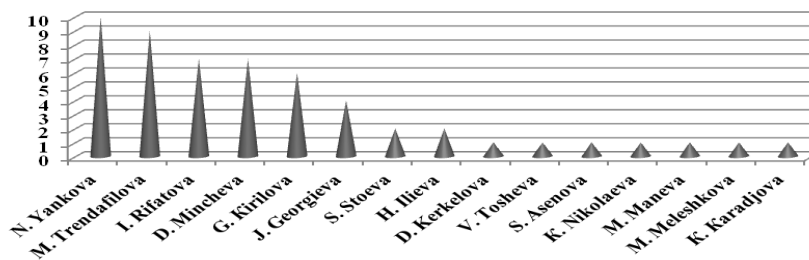


Figure 1 Number of champions' titles

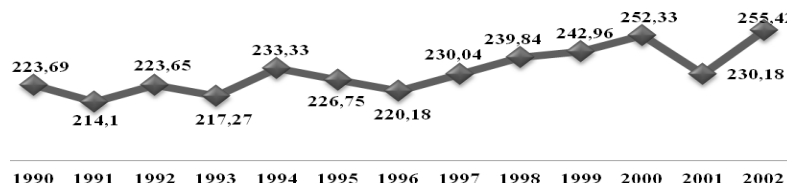


Figure 2 Data for 1990 – 2002 period collected of N. Yankova's participation at European championships

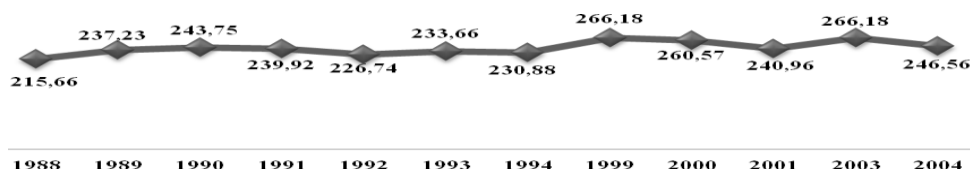


Figure 3. Data for 1988 - 2004 period collected of M. Trendafilova's participation at European championships

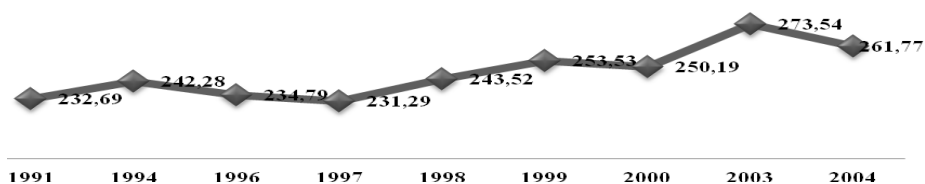


Figure 4 Data for 1991-2004 period collected of I. Rifatova's participation at European championships.

In tracking the performance as well as her sports achievements, it has been established some optimal values for the period and an increase of 30.9 compared to the initial data. It is evident that her extremely high results were achieved in two pre-Olympic years. If we compare them to initial data with 50.52, we have probably obliged to say that it is due to breaks made during her competitive career and her aspiration to win the Olympic quota.

Some top level athletes despite of their initial success stop being active sports competitors, others ceased their sport activities after giving birth of a child or after surgery, pregnancy, injuries, diseases, etc. Then they came back on the podium and continue their remarkable success.

Figure 4. present a collected data for I. Rifatova for 1991 - 2004. Her body mass index is in range of ± 5.0 kg. between the age of 20 to 33 years for a sports experience of 13 years.

The analysis established an output growth of 29.08 compared to the data at the end of her sports and competitive career. The first upward peak of her career was after the birth of her first child and her second career's achievement was after her second child birth with 40.85.

Figure 4. shows her highest results after becoming a mother that is not an obstacle for her in achieving high sports results. It has been reported in some other researches of Toteva (Тотева) (2006) and Ilinova (Илинова) (2014) for women practicing some other sports.

The impact of physical exercise during the menstrual cycle on sport achievements for the respondents weightlifters is studied by Yankova & Pinova (Янкова & Илинова) (2009); Ilinova (Илинова) (2014), and others. They determined that the menstrual cycle has not affected the performance and the training capacity. The weightlifters does not discontinuing their physical training these days and take part in competitions and achieved a remarkable success.

The specific anatomical and physiological characteristics of the female body predispose different requirements for the training process, which necessities a particular attention to the woman athlete in relation to accompanying symptoms before and during the menstrual cycle and the pregnancy and to those who continue their competitive career after giving birth of a child.

Figure 5. reflected the number of gained medals by percentage.

It is evident that for the mentioned period the highest is the percentage of gold medals - 51, 28% - silver medals, as well as not so small percentage of the bronze medals - 21.

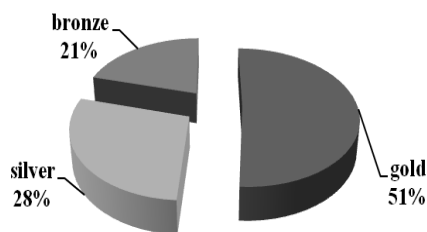


Figure 5 Distribution of types of medals

It is characteristic that they have been dominated for a period of 17 years (1988 - 2005) and have won 9 times the champion title, once the II place and four times the III place in the team ranking. After the 2005. they have won no team title.

In the individual ranking 26 competitors won 312 medals (in different competitive categories and in the twelve competitions) for the entire period, such as 157 gold medals, 95 silver and 60 bronze medals. In the competition exercises jerk and clean and jerk they won 206 medals (103 gold, 65 silver and 38 bronze medals), they possess 106 medals from Snatch + Clean & Jerk + twelve, 15 of them won 54 league titles, 18 won 30 silver medals from Snatch + Clean & Jerk + twelve and 14 earn 22 bronze medals from Snatch + Clean & Jerk + twelve.

CONCLUSION

We have been found that for the studied period in the individual ranking 26 competitors had gained 312 medals, they won 106 medals for Snatch+Clean & Jerk+twelve, 15 of them won 54 league titles, 18 competitors won 30 silver medals for Snatch+Clean & Jerk+twelve and 14 gained 22 bronze medals for Snatch+Clean & Jerk+twelve.

The research showed that the success of Bulgarian athletes might have been due to the fact that many of them often have used a power training in their sports practices. A lower values has been identified at the beginning due to a logical reasons: technically has been performed or with insufficient sport experience, etc., regarding the won titles it has been suggested that not age (from 17 to 33 years old) but the sports experience, which is about 10 years has been the real criterion for the success.

The collected data showing the dynamics of sport performance for the period of targeted training's effect showed a positive growth at least over 30 ratio according to Sinclair's coefficient at the end of their sport career. The top achievements has been realized at the European Women's Championship a year before the first Olympic Games. It is probably due to their aspirations for gaining the Olympic quota and participation in the Games.

The results of weightlifters prove that the physical exercises affect humans' physiological functions, but the adaptive capabilities of the body allows overcoming the accompanying troubles and achieving success at the championships.

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