

COMPARATIVE ANALYSIS OF BALANCED STATE OF WEIGHTLIFTING RESULTS OF MALE AND FEMALE COMPETITORS AT THE LONDON 2012 OLYMPIC GAMES

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Abstract

The article deals with the comparative statistical analysis of the results of male and female lifters, achieved in London, UK, at the 2012 Olympic Games. It has been established that in case of male weightlifters there are significant differences between the results of different bodyweight categories; the winner of the given category would have been on the average only the 7th in the next, heavier weight category. In general there is a rather high homogeneity within the categories, the performance level of the lifters on the 6th places is only 6.16 % (SD= 2.35 %) less than the results of the gold medalists. On the contrary, in case of female competitors results are not balanced. The homogeneity is high; there are huge differences between the results of the winners and the others. The gold medalists of the given category would have been still 5th in the next category, and the results level of the lifters on the 6th places is 11.87 % (SD=4.85 %) less than the winning result. The difference between the 6.16 % and the 11.87 % is statistically significant ($p=99.9$ %). The main reasons of the difference are the following: 1. male weightlifting has a much longer history and higher popularity than female weightlifting; 2. in many countries the level of female weightlifting is rather low; 3. there is a special qualification system for the Olympic games which strongly limits the participation of lifters; 4. the number of male competitors was 149, but the number of female lifters only 103 in London. The performance level is - as an average - 23 % less for female competitors, compared to the results of the male lifters of the same (or similar) bodyweight.

Keywords: *homogeneity, lifter, performance, statistics, bodyweight categories*