K-1 SPORT DEVELOPMENT ON THE BASIS OF INDICATORS OBTAINED FROM ALL FINAL GRAND-PRIX TOURNAMENT FIGHTS (1993-2004)

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Understanding sport development in this day and age cannot be but directed towards mathematical models of situational parameters identification, on which the placing of top athletes at world-level tournaments depends. For the abovementioned reasons the analyses are primarily concerned with the identification of fighter successfulness parameters and, if the gathered data are correct, with examining the development of sport, K-1 in this particular case. This article is concerned with determining parameter values indicating the situational placing of fighters taking part in Tokyo GP tournaments (1993-2004). By applying particularly precise methods, including a detailed review of DVD recordings, 102 types of different situations have been registered in all final tournament fights. Each fighter having made it to the final tournament has been described by every one of those 103 situation variables (Kapo, 2005). These data have been processed by a special algorithm (Bonacin 2006) which includes rescaling the initial data to a universal range from 1 to 5. All data for every single fighter have been summed up and a continual set of indicators explicitly positioning every fighter has been obtained. As we are talking about 8 fighters in 12 tournaments, those 96 fighters have in the end been described on the universal scale with 96 parameters. We conclude that the applied methodology revealed that the best fighters indeed have the highest values on the global universal scale. Out of 96 possible positions, the first 7 spots are occupied by 7 winners. Therefore, the upper part of this scale belongs only to winners, especially because the scale also reveals some other details. Overall data development on the time universal scale of all fighters shows that the highest results at final K-1 GP tournaments were achieved in the period from 2001 to 2004, whereas the lowest were those in the beginning. Polynomial (5) shows that, after the initial growth trend, there was considerable stagnation in the period between 1995 and 2000 but also that 2004 edition was by far the most successful. The results indicated that such an approach has accurately identified the most successful fighters in the analysed time period, as well as their general basic fighting features. Finally, the illustrations for the indicators for all fighters together, within the years, were given, resulting in determining the global trend in K-1 development.

References