Correlation Between Physical Fitness and International Tennis Number (ITN) Levels Among Children Tennis Players

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KEYWORDS  Tennis. Body Composition. Physical Fitness. ITN. Children

ABSTRACT  The purpose of the present research was to determine the anthropometric, body composition, physical fitness parameters and ITN scores and levels among children tennis players and to define the relationships between these anthropometric, body composition, physical fitness parameters and ITN scores and levels. 30 female children tennis players between eight to ten years of age, who have the Turkish Tennis Federation club licence and individual licences were included in the study. The subjects were tested on four different performance variables, namely, the anthropometric, body composition, physical fitness and ITN levels profiles. For data analysis, the Pearson coefficient was calculated. According to the research findings, there are no significant relationships between ITN total scores and any of the anthropometric and body composition values. On the other hand, there are significant positive relationships between ITN total scores and ball throwing, vertical jumps, standing broad jumps, and reverse sit-ups. There is a negative significant relation between ITN total scores and auditory reactions. Similarly, there are no significant relationships between ITN values and any of the anthropometric and body composition values. There are negative significant relationships between ITN values and ball throwing, vertical jumps, standing broad jumps, and reverse sit-ups. There is a positive significant relation between ITN values and auditory reactions. In conclusion, this study indicated that ball throwing, vertical jumps, standing broad jumps and back extension variables were statistically linked to specific performance levels identified via the ITN levels.