

Effects of net height scale on badminton performance and satisfaction among children

ABSTRACT

The height of the net scaling accordance with the physical size is important to improve performance and produce optimal shot kinematic characteristics in children. This study aimed to identify the average rate of optimal net height scaling among children aged seven to nine years. This study uses an experimental design with a total of 48 children randomly selected as study participants. Participants were divided into 24 pairs (boys = 12 pairs, female = 12 pairs) which were equivalent in terms of skill level and gender. All participants played against their respective pairs using four net height situations namely JP (155 cm), JM100 (127 cm), JM92 (117 cm) and JM82 (104 cm) situations reciprocally. All matches are conducted using a singles competition system with 11 points which is two sets per match situation. Data collection was done through video recordings and questionnaires. Shot performance was analysed from the aspects of serve success, shot chances and rally length. Participants' satisfaction with the four paired match situations was obtained through a questionnaire. Study data were analysed using SPSS version 16.0 program. The results of one-way ANOVA test for repeated measurements showed that there was significant mean score differences ($p < .05$) for performance and satisfaction between the JP, JM100, JM92 and JM82 situations. The findings of the study showed that scaling the net height of 92% of the average height of children aged seven to nine years was the optimal net height. Therefore, this study suggests that the use of standard net heights among children should be reviewed.