

RELATIONSHIP OF PERFORMANCE IN 50 METRE SPRINT OF DIFFERENT SWIMMING STROKES AND SELECTED ANTHROPOMETRIC VARIABLES AMONG THE BOYS OF UNDER 14 YEARS OF AGE

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ABSTRACT

Swimming is one of the most exciting of Olympic sports as it offers many challenges and attractions for sport and recreation purposes. Swimming is also an attractive pastime, its cardiovascular benefits being realised all the more now and is also promoted for health and general fitness. Nowadays a considerable body of knowledge about swimming is available to sports scientists. This has resulted from ingenuities in extrapolating backwards from observations made after all-out swimming efforts, design of instrumentation for obtaining good quality data during activity in the swimming pool, and development of swim simulators and swimming tanks with good fidelity to realistic conditions. The present investigation attempts to find out the relationship between performance in 50 metre sprint of different swimming strokes and selected anthropometric variables among the boys of fewer than 14 years of age. The sample was selected from School National Competition. The chosen strokes for the study were Free Style Stroke, Butterfly Stroke, Back Stroke and Breast Stroke. Anthropometric Variables used for the study were Weight, Height, Arm Span, Biacromial Diameter, Upper Arm Circumference, and Calf Circumference. ANOVA and Correlation were applied to compare the performance. Post Hoc Test was used if the 'F' value was found to be significant. The study reveals that all the four strokes i.e., Freestyle Stroke, Butterfly Stroke, Back Stroke and Breast Stroke were found to have same type of Weight, Height, Arm span, Biacromial diameter, Hand length, Upper arm circumference and Calf circumference. It is further revealed that in Freestyle stroke, performance has significant relationship with height, arm span and hand length whereas performance has no significant relationship with Weight, Biacromial Diameter, Upper Arm circumference and Calf circumference. In Butterfly Stroke, performance has significant relationship with Height, Weight, Hand length, Upper arm circumference, Arm span and Calf circumference, whereas, performance has no significant relationship with Biacromial diameter. In Back stroke, no significant relationship has been seen between the performance and selected anthropometric variables. In Breast stroke, performance has significant relationship with Height, Arm span and Hand length whereas performance has no relationship with Weight, Biacromial diameter, Upper arm circumference and Calf circumference. Hence, this investigation comes up with certain authentic facts about the swimming as sport that may prove helpful to make further research in this thrust area. The primary data collected during the research can be used to determine the potential of success of the game in National as well as International Championships under this age group.

KEYWORDS: *Free Style Stroke, Butterfly Stroke, Back Stroke and Breast Stroke; Anthropometric Variables used for the study were Weight, Height, Arm Span, Biacromial Diameter, Upper Arm Circumference, and Calf Circumference*