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Relationship between Age, Gender, Anthropometrics Characteristics and Dynamic Balance in Children Age Group between 5 to 12 Years Old at Anand City, Gujarat

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Abstract : Objective: To assess the relationships among age, gender, anthropometrics and dynamic balance in 5 to 12 years of children in Anand city. Method: Cross-sectional study was conducted. 150 school going children of 5-12 (75-girls, 75-boys) years were recruited from the school of the Anand city-Shivam English Medium school, Veer Vithalbhai Patel school, Adarsh Primary school. Height, weight, arm length, and foot length were measured in 150 children of 5 to 12 years. Dynamic balance was assessed using Time Up and Go Test, Functional Reach Test, Pediatric Balance Scale. Results: Positive relationship (r = 0.58 and r= 0.77) were found between increasing age and FRT and PBS scores. A negative relationship (r = - 0.46) was observed between age of boys and TUG test. Significant gender by age group difference was observed in FRT. Arm length and height has the strongest influence on FRT, and age, height, foot length; and arm length has the strongest influence on PBS. Conclusions: Age and arm length have the strongest relationship with the dynamic balance (FRT, PBS). Dynamic balance ability is directly related to the age. It helps the pediatric therapists in selecting dynamic balance test according to the age.

Keywords : age, gender, anthropometric, dynamic balance
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