ABSTRACT

A LONGITUDINAL STUDY OF ASSESSMENT OF DEVELOPMENTAL AGE AND ITS RELATIONSHIP WITH MOTOR PERFORMANCE TESTS IN BOYS

Sports in 21st century have gained much popularity and prominence than in any other period of human history. Now, it has become an absolute necessity that right talents are identified for the right game. Sports is now no more a hobby, it has become a full time profession. Modern sports, in fact, compel athletes to take up sports competitions as a full time vocation besides making name and fame. Multi-disciplinary efforts are put together with the craze of taking human performance to its optimum possible level. Performance in certain events and activities has already reached to its breaking point; unless and until there is some miracle, increase in speed performance by 0.01 seconds seems to be a difficult and challenging task.

The data of 350 boys ranging in age from 12 to 18 years was collected from different schools of the Punjab. The subject were divided in 7 (Seven) age groups i.e. (12 years, 13, 14,15,16,17 and 18 years). Each group is having approximately 50 students. The date of birth was converted into decimal age. The subjects whose range as following, 11.501-12.500 were grouped in 12 years, 12.501-13.500 were grouped in 13 years, 13.501-14.500 were grouped in 14 years, 14.501-15.500 were grouped in 15 years, 15.501-16.500 were grouped in 16 years, 16.501-17.500 were grouped in 17 years, 17.501-18.500 were grouped in 18 years, groups were formed. The body development index (BDI) was determined by taking the following Anthropometric measurements:

1. Body density (cms)
2. Body weight (kgm)
3. Fore – arm circumference (cms)
4. Bicromial breadth (cms)
5. Biliospihle breadth (cms)

Standard instruments and techniques as given by Weiner and Lourie, (1969) was used for taking these measurements as given by Wutscherk, (1982). Motor performance of Boys of 12 to 18 years of age at different age levels was taken by applying Motor fitness variables as follows:

1. Speed: 50 mtr. run
2. Cardiovascular Endurance 2.4 K .m.
3. Agility Fan Test
4. Explosive Strength of Legs: i) Standing Broad Jump
   ii) Vertical Jump

The descriptive statistics i.e. Mean and Standered deviation. Inferential statistics were applied for comparison on maturity status and motor performance measures of boys. The correlation were worked out where found suitable. Longitudinal statistical test packages were used to interpret data into more meaningful from.