



A COMPARATIVE STUDY ON SELECTED PSYCHOMOTOR ABILITIES BETWEEN KALABURAGI AND RAICHUR DISTRICTS HIGH SCHOOL BASKETBALL PLAYERS

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ABSTRACT

Sport is conceived as a psycho-physical phenomenon in the modern times. When one analyses the sports-skills, almost all motor movements are found to be backed by one or the other psychological factor. Since sport is so visible and influential, psychomotor abilities are receiving considerable attention with an increasing number of individuals wishing to be involved in their explorations. Psychomotor abilities are skills such as hand-eye coordination, balance, and reaction time that arise from a unity of cognitive and physical functions. All healthy people develop some psychomotor abilities during the course of early development, and many people choose to develop those abilities further for work, athletics, or other activities.

KEY WORDS: *psycho-physical phenomenon , influential, psychomotor , physical functions.*

INTRODUCTION:

Psychomotor is a combination of mind and motor system of the body and movement. Psychomotor plays an important role in the field of sports and games. Perception, Kinesthetic sense and some other factors are involved in this. Every action before execution needs some degree of mental alertness. This leads to the further movement of the motor organs to perform the specific movement. Psychomotor domain is concerned with movements and other closely related factors that influence it.

Proficiency in any sport requires an ideal integration of numerous abilities developed to an ideal degree. However, performance measures of these abilities do vary from activity to activity. Fleishman identified the dimensions underlying the human performance into the physical proficiency (fitness) area and the psychomotor area. The factors of strength, power, stamina, flexibility, coordination and balance constituted proficiency whereas reaction-time, speed of movement, arm hand steadiness, visual perception, manual dexterity and rate control were the abilities considered under psychomotor domain. Psychomotor variables act as the medium for the realization of cognitive and affective domains of learning and motor behavior. All these domains of learning are inseparable identities and work in perfect harmony and unison with one another. The psychomotor variables are primarily concerned with muscular contraction. Performance of motor skills involves neural, physiological and psychological aspects and is a continuum that runs the gamut from physical to cognitive and there is always integration between these aspects of human behavior.

Psychomotor fitness of an individual is a perfect blending of physical as well as motor fitness and goes a long way in fielding the excellent outcomes. The nations exhibiting excellence in the international sports do attach great significance to the total fitness level of their players. Different sports activities call for different levels of fitness. The level of fitness varies depending upon the level of competition as well. Participation in the top-notch competitive Basketball and Handball requires the player to be in a state of optimum fitness. Modern Basketball and Handball are fast games, characterized by incredible athletic

performances by athletes. In fact, modern Basketball and Handball players are able to perform many different moves, jumps, running, change of directions and technical movements in very short time and with an order determined by the tactical situation. Running with and without the ball; in line and with different paths; jumping; throwing and passing and receiving in motion or during flight represent the technical characteristics of modern top Basketball and Handball players. Then, to excel at the highest levels, it is important that training methodologies are developed on a simple basis: specificity. The closer to the demands of the performance, the better the training is.

OBJECTIVE OF THE STUDY:

The aim of this study is to find out the significant differences of selected psychomotor abilities between high school basketball of Kalaburagi and Raichur districts.

REVIEW OF RELATED LITERATURE:

Amit Kumar Singh et. al (2015), the purpose of the study was to compare Sub Junior, Junior and Senior Soccer players by their selected coordinative abilities. Methods: The study was conducted on 90 subjects with a purpose to compare Sub Junior, Junior and Senior Soccer players by their coordinative abilities. The variables selected for the study were Balance ability and Rhythmic ability. Thirty subjects were selected from each level i.e sub juniors, juniors and seniors. For Sub Juniors, the age of the subjects was 16 years and below. For juniors, the age of the subjects was 19 years and below. For seniors, the age of the subjects was above 19 years. To compare the selected coordinative abilities among sportsman belonging to three levels (Sub Junior, Junior and Senior), one way analysis of variance (ANOVA) was used and level of significance was set at 0.05 level. Results: It was concluded that: In relation to Balance ability significant difference was found between three age group level i.e sub juniors, juniors and seniors. In case of Balance ability, the sequence of performance between three age group was seniors>juniors>sub-juniors. In relation to Rhythmic ability significant difference was found between three age group level i.e sub juniors, juniors and seniors. In case of Rhythmic ability, the sequence of performance between three age group was seniors>juniors>sub-juniors.

Praveen Kumar Mishra and Dr. Prabhash Puri (2015), the main aim of the present study is to compare selected psycho-motor abilities of male Indian Track and Field of Sports Girls and non Sports Girls origin. To conduct the study, 100 Track and Field, who took part in state level Track and Field championships held in various parts of India, were selected as sample. Out of these 100 selected subjects, 50 have Sports Girls origin (Av. age 18.22 yrs) and the same number i.e. 50 have Non Sports Girls origin (Av. age 17.91 yrs). To determine hand-eye coordination of the selected subjects, Mirror Drawing Test was used. Simple reaction time of the selected girl's Track and Field was assessed by Nelson Test. The results reveal no significant difference in selected psycho-motor abilities of Track and Field with Sports Girls and Non-Sports Girls origin. It was concluded that psycho-motor abilities of Female Track and Field did not differ significantly on the basis of their Sports Girls, Non-Sports Girls origin. Keywords: Sports Girls, Non-Sports Girls, Psycho-motor abilities, Track and Field.

MATERIALS AND METHODS:

To achieve the purpose of the study a group of sixty (N=60) boys subjects aged between 13-15 years, who participated in the district level basketball competitions were selected on the random sampling method from Kalaburagi and Raichur districts.

50 Meter Dash was administered to determine acceleration and speed. The score is the time recorded to the nearest 1/100th of a second. Push-ups test was administered to determine strength. The score is the Total number of push-ups performed by the subjects. Illinois agility test was administered to test the running agility. The score is recorded to the nearest 1/10th of a second. Stork balance stand test was administered to assess the ability to balance on the ball of the foot. The score is the total time recorded in

seconds. 800 meter run test was too administered to determine cardiovascular endurance. The score is the time recorded to the nearest 1/100th of a second. The data is collected on the post district level basketball competitions.

STATISTICAL TECHNIQUE:

The student's t-test and ANCOVA statistical techniques is applied to find out the significant differences on psychomotor abilities between high school basketball players of Kalaburagi and Raichur districts.

RESULTS AND DISCUSSIONS:

1. Analysis of psychomotor abilities of Kalaburagi and Raichur districts high school Basketball players.

Table.No.1
Differences in psychomotor abilities of Kalaburagi and Raichur districts
high school Basketball players

Paired Samples Statistics							t-value	Sig. (2-tailed)
Pairs	Players	Variable	Districts	Mean	N	Std. Deviation		
Pair 1	BASKETBALL	SPEED	Kalaburagi	7.59	30	0.52	7.341*	.000
			Raichur	6.67	30	0.68		
Pair 2		STRENGTH	Kalaburagi	21.30	30	4.86	0.88	.385
			Raichur	22.43	30	5.09		
Pair 3		AGILITY	Kalaburagi	20.90	30	1.02	3.762*	.001
			Raichur	19.92	30	1.23		
Pair 4		BALANCE	Kalaburagi	10.07	30	14.34	.000	1.000
			Raichur	10.07	30	7.39		
Pair 5		ENDURANCE	Kalaburagi	3.68	30	0.45	.979	.336
			Raichur	3.51	30	0.77		

Significant at 0.05 level

Pair 1, Pair 2, Pair 3, Pair 4 and Pair 5:

- It can be seen from the table.No.1 that the value t-statistics 7.431 and 2.62 of paired samples test between Kalaburagi and Raichur district high school basketball players in Speed and Agility tests respectively. The t-values are significant as the p-values (.000 and .001) are less than 0.05. Thus, it can be concluded that the mean values of Speed test between Kalaburagi (7.59) and Raichur (6.67) and Agility test between Kalaburagi (20.90) and Raichur (19.92) are not similar. In other words there is significant difference in Speed and Agility test scores between Kalaburagi and Raichur district high school basketball players.
- It can be also seen from the table.No.1 that the value t-statistics 0.88, .000 and .979 of paired samples test between Kalaburagi and Raichur district high school basketball players in Strength, Balance and Endurance tests respectively. The t-values are not significant as the p-values (.385, 1.000 and .336) are more than 0.05. Thus, it can be concluded that the mean values of Strength test between Kalaburagi (21.30) and Raichur (22.43), Balance test between Kalaburagi (10.07) and Raichur (10.07) and Endurance test between Kalaburagi (3.68) and Raichur (3.51) are not similar. In other words there is no significant difference in Strength, Balance and Endurance test scores between Kalaburagi and Raichur district high school basketball players.

CONCLUSION:

Based on the findings it is concluded there is significant difference in Speed and Agility test scores between Kalaburagi and Raichur district high school basketball players. Also words there is no significant difference in Strength, Balance and Endurance test scores between Kalaburagi and Raichur district high school basketball players. Psycho-motor abilities are supposed to be the basis of successful sports performance. The psycho-motor profile of a sports person is comprised of different type of abilities. The results of the study help the coaches and physical fitness trainers to prepare the advanced coaching and training programmes according to their level of psycho-motor abilities.

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