



MOTOR ABILITY OF BASKETBALL AND FOOT BALL PLAYERS IN RELATION TO THEIR LIFESTYLE

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ABSTRACT.

For the present study 60 male basket ball players were selected. All the players taken for the sample had played at university level. Data was collected from the subjects during their trials for interuniversity camp. The age group of subjects was ranging between 20-25 years. Their physical fitness was assessed through selected items of Barrow Physical Fitness Test which comprised the 50 Yard Dash Run test, two hands Medicine Ball put test, Standing Broad Jump and Shuttle Run test. The lifestyle of the players was assessed through life style questionnaire. The players were divided into high and low life style on the basis of lifestyle scores. Anova 2x2 design was employed on the scores of motor ability. The data collected was then subjected to statistical analysis and interpretation. Result: There is no significant difference on '50 meter dash', 'two hand medicine ball put', 'shuttle run' and 'standing broad jump' dimensions of motor ability of the players with high and low life styles. There is no significant difference between 'two hand medicine ball put', 'shuttle run' and 'standing broad jump' dimension (arm power) of motor ability of the foot ball and basket ball players except on '50 meter' dash dimension of motor ability where foot ball players scored higher than basket ball players. There is no interaction effect of Life style and Type of Players on all the component of motor ability.



KEY WORDS: Motor ability, basketball and Football.

INTRODUCTION

Motor abilities are an inseparable part of sports performance and achievements. The term 'Motor ability' has been synonymously used with 'physical fitness'. However it differs from physical fitness, since the modern definition of physical fitness takes into its account not only motor fitness components but also health-related components. The efficiency of basic movements, involves such elements, as power, agility, speed, flexibility, strength. The motor abilities for performance commonly recognized are strength, speed, power, agility, and flexibility, and reaction time, speed of movement, balance and co-ordination. In most sports, other factors such as physical skill, training, rest, nutrition being equal. It is important of notice that performance in motor abilities depends to a large extent on the state of health of the person concerned (Carpenter 1938).

In modern world, sports are becoming a highly specialized competitive human activity. Every hard to produce sportsman who can bring laurels in various competitions at international level performance in different sports disciplines including basket ball and foot ball is influenced by so many factors such as motor

ability, tactics, physiological aspects and level performance in disciplines. To achieve international standard of physical abilities and the best training of individuals are important factors (Hirat, 1979).

For advanced performance in all games including basket ball and foot ball high level of physiological abilities are required because these are highly technical sports disciplines. A player has to perform a combination of varying complicated. Any performer who likes to excel these games has to give full attention to the technical aspect which is of great importance due to the nature of different complicated skills involved. To achieve mastery over these skills one has to lay due emphasis on the development of necessary motor abilities in order to learn different movements and master them properly, a performer must possess sufficient amount of the abilities required.

METHODOLOGY:

For the present study 60 male basket ball and foot ball players were selected. All the players taken for the sample had played at university level. Data was collected from the subjects during their trials for interuniversity camp. The age group of subjects was ranging between 18-25 years. Their physical fitness was assessed through selected items of Barrow Physical Fitness Test which comprised the 50 Yard Dash Run test; two hands Medicine Ball put test, Standing Broad Jump and Shuttle Run test. The lifestyle of the players was assessed through life style questionnaire.

The players were divided into high and low life style on the basis of lifestyle scores. The data collected was then subjected to statistical analysis and interpretation. Anova 2x2 design was employed on the scores of motor ability. The type of players and life style were studied as independent variables and motor ability was studied as dependent variable.

RESULT:

TABLE 1: SUMMARY OF ANOVA FOR 2X2 DESIGN WITH RESPECT TO '50 METER DASH' (SPEED) DIMENSION OF MOTOR ABILITY

S.O.V	df	SS	MSS	F
A	1.0	0.4	0.4	0.7
B	1.0	9.4	9.4	16.9**
A X B	1.0	0.4	0.4	0.8
SS between	3.0	10.2		
SS within	28.0	15.5	0.6	
SS total	31.0	25.7		

S.O.V df SS MSS F A 1.0 0.4 0.4 0.7 B 1.0 9.4 9.4 16.9** A*B 1.0 0.4 0.4 0.8 SS between 3.0 10.2 SS within 28.0 15.5 0.6 SS total 31.0 25.7

**Significant at 0.01 level of confidence 7.64 > 0.01

*Significant at 0.05 level of confidence 4.20 > 0.05

MAIN EFFECTS

Life Style

(A) It has been observed from the table 1 that the F-ratio for the difference between the mean scores of high and low life style of players on '50 meter dash' dimension of motor ability was found to be insignificant at 0.05 level of confidence. Thus the data did not provide sufficient evidence to reject the hypothesis (1) namely; there is no significant difference on '50 meter dash' dimension (speed) of motor ability of the players with high and low life styles.

Type of Players (B) It has been observed from the table 1 that the F-ratio for the difference between the mean scores of foot ball and basket ball players on 50 meter dash dimension of motor ability was found to be significant at 0.01 level of confidence. Thus, the data provide sufficient evidence to reject the hypothesis (2) namely; there is no significant difference between '50 meter dash' (speed) of motor ability of

the foot ball and basket ball players. It is further clear from table 4.1 that foot ball players scored higher than basket ball players on '50 meter' dash dimension of motor ability.

TWO ORDER INTERACTION

Life style x Type of Players (AXB) It has been observed from the table 1 that the F-ratio for the interaction between Life style and Type of Players was found to be insignificant at 0.05 level of confidence. Thus, the data did not provide sufficient evidence to reject the hypothesis (3) namely; there is no interaction effect of Life style and Type of Players on the '50 meter dash' (speed) of motor ability.

TABLE 2: SUMMARY OF ANOVA FOR 2X2 DESIGN WITH RESPECT TO TWO HANDS MEDICINE BALL PUT(ARM POWER) DIMENSION OF MOTOR ABILITY (SPEED) DIMENSION OF MOTOR ABILITY

S.O.V	Df	SS	MSS	F
A	1.0	0.1	0.1	1.1
B	1.0	0.0	0.0	0.0
A X B	1.0	0.1	0.1	0.9
SS between	3.0	0.2		
SS within	28.0	2.7	0.1	
SS total	31.0	2.9		

* * Significant at 0.01 level of confidence 7.64 \geq 0.01

* Significant at 0.05 level of confidence 4.20 \geq 0.05

Main effects

Life Style (A) It has been observed from the table 2 that the F-ratio for the difference between the mean scores of high and low life style of players on two hands medicine ball put dimension of motor ability was found to be insignificant at 0.05 level of confidence. Thus the data did not provide sufficient evidence to reject the hypothesis (4) namely; there is no significant difference between two hand medicine ball put dimension (arm power) of motor ability of the players with high and low life styles

Type of Players (B) It has been observed from the table 2 that the F-ratio for the difference between the mean scores of foot ball and basket ball players two hand medicine ball put test of motor ability was found to be insignificant at 0.05 level of confidence. Thus, the data did not provide sufficient evidence to reject the hypothesis (5) namely; there is no significant difference between 'two hand medicine ball put' dimension (arm power) of motor ability of the foot ball and basket ball players.

TWO ORDER INTERACTION

Life style x Type of Players (AXB) It has been observed from the table 4.4 that the F-ratio for the interaction between Life style and Type of Players was found to be insignificant at 0.05 level of confidence. Thus the data did not provide sufficient evidence to reject the hypothesis (6) namely; there is no interaction effect of Life style and Type of Players on the two medicine ball put test of arm power component of motor ability.

TABLE 3 : SUMMARY OF ANOVA FOR 2X2 DESIGN WITH RESPECT TO SHUTTLE RUN OF MOTOR ABILITY (SPEED) DIMENSION OF MOTOR ABILITY

S.O.V	Df	SS	MSS	F
A	1.0	0.0	0.0	0.1
B	1.0	0.0	0.0	0.1
A X B	1.0	1.3	1.3	4.6*
SS between	3.0	1.4		
SS within	28.0	8.0	0.3	
SS total	31.0	9.4		

** Significant at 0.01 level of confidence 7.64 \geq 0.01

* Significant at 0.05 level of confidence 4.20 \geq 0.05

Main effects

Life Style (A) It has been observed from the table 4.6 that the F-ratio for the difference between the mean scores of high and low life style of players on shuttle run dimension of motor ability was found to be insignificant at 0.05 level of confidence. Thus the data did not provide sufficient evidence to reject the hypothesis (7) namely; there is no significant difference between shuttle run dimension of motor ability of the players with high and low life styles.

Type of Players (B) It has been observed from the table 4.6 that the F-ratio for the difference between the mean scores of foot ball and basket ball players on shuttle run test of motor ability was found to be insignificant at 0.05 level of confidence. Thus, the data did not provide sufficient evidence to reject the hypothesis (8) namely; there is no significant difference between shuttle run test dimension of motor ability of the foot ball and basket ball players.

Life Style x Type of Players (AXB) It has been observed from the table 4.6 that the F-ratio for the interaction between Life style and Type of Players was found to be significant at 0.05 level of confidence. To further analyze the significant difference between various sub group 't' value were calculated and presented below in table 4.7:

TABLE 4: SUMMARY OF ANOVA FOR 2X2 DESIGN WITH RESPECT TO STANDING BROAD JUMP TEST OF MOTOR ABILITY (SPEED) DIMENSION OF MOTOR ABILITY

S.O.V	Df	SS	MSS	F
A	1.0	0.6	0.6	2.6
B	1.0	0.4	0.4	1.6
A X B	1.0	0.0	0.0	0.2
SS between	3.0	1.1		
SS within	28.0	6.7	0.2	
SS total	31.0	7.8		

** Significant at 0.01 level of confidence 7.64 \geq 0.01

* Significant at 0.05 level of confidence 4.20 \geq 0.05

Main effects

Life Style (A): It has been observed from the table 4 that the F-ratio for the difference between the mean scores of high and low life styles of players standing broad jump test of motor ability was found to be insignificant at 0.05 level of confidence. Thus the data did not provide sufficient evidence to reject, the hypothesis (10) namely; there is no significant difference between standing broad jump dimension of motor ability of the players with high and low life style.

Two of Players (B): It has been observed from the table 4 that the F-ratio for the difference between the mean scores of foot ball and basket ball players on standing broad jump test of motor ability was found

to be insignificant at 0.05 level of confidence. Thus, the data did not provide sufficient evidence to reject the hypothesis (11) namely; there is no significant difference between standing broad jump test of motor ability of the foot ball and basket ball players.

Life Style x Type of Players (AXB): It has been observed from the table 4 that the F-ratio for the interaction between Life style and Type of Players was found to be insignificant at 0.05 level of confidence. Thus, the data did not provide sufficient evidence to reject the hypothesis (12) namely; there is no interaction effect of life style and type of players on the standing broad jump test of motor ability.

CONCLUSION:

There is no significant difference on '50 meter dash', 'two hand medicine ball put', 'shuttle run' and 'standing broad jump' dimensions of motor ability of the players with high and low life styles. There is no significant difference between 'two hand medicine ball put', 'shuttle run' and 'standing broad jump' dimension (arm power) of motor ability of the foot ball and basket ball players except on '50 meter' dash dimension of motor ability where foot ball players scored higher than basket ball players. There is no interaction effect of Life style and Type of Players on all the component of motor ability.

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