RELATIONSHIP OF PSYCHOMOTOR ABILITIES TO THE PLAYING ABILITY OF INTERUNIVERSITY LEVEL VOLLEYBALL PLAYERS

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ABSTRACT

The purpose of this study was to investigate the relationship of relationship of psychomotor abilities to the playing ability of interuniversity level volleyball players. Fifty male volleyball players of north zone interuniversity were selected as subjects for this study. The subjects were in the age group of 18-25 year, served as subjects for this study. The selected psychomotor abilities variables e.g. agility, shoulder power, leg power, speed, stepping time and hand reaction time. Findings reveals that playing ability of interuniversity level volleyball players is significantly related to the agility (r= -0.78), shoulder power (r=0.77), leg power (r=0.82), speed (r= -0.72), stepping time (r=0.86), and hand reaction time (r= -0.76) as the obtained correlation were higher than the value of 0.2732 required for the correlation to the significant at 0.05 level of 48 degree of freedom.

Keywords: Psychomotor Ability , Volleyball and Players.

INTRODUCTION:

Unlike the past, modern volleyball is not based on stereotyped pattern of attack where in players hit hard in in standard conditions of play. High class teams now rely on artful and accurate sets, varied in form and agile moves of the front line players to display skilful movement in offense. In modern volleyball, which is a typical game of polystrcutred complex movement top notch result require certain somatic functional and kinesiological characteristics of players. Among the morphological features, longitudinal dimensionally of the skeleton is the main prerequisite of player's efficacy. Due to the importance of muscular capacity, the body volumes of volleyball players likewise contribute to their performance in the game.

Volleyball, which is an excellent around team sport, has been widely accepted as a highly competitive as well as a recreational game throughout the world. It is now recognized as one of the most breath taking and dramatic sport of the Olympics both from the players and spectators view Point.

The game of Volleyball offers opportunities for the development of Strength, endurance, speed, agility, and neuro-muscular skills and immediate action along with many precise educational outcomes. The game of Volleyball requires a conditioning programme, which develops flexibility, muscular strength, power and agility all of which must be integrated to achieve the optimum skill performance from each player.

The game provides an ample opportunity for the development of strength, speed, endurance, agility, neuro-muscular skill and coordination of the by various actions involved in it. Such actions are running, jumping, bending, stretching and other movements which call balance and carryout values and thus it meets all the requirements of an excellent form of physical activity.

A player who is physically fit does not only enjoy volleyball more but he is also capable of using all the skills attend and mastered by him through strenuous end along practice right to the end of the game. The twin combination of both skill and physical fitness is indispensable for a good player, without either of which he will not be able to achieve much.

Keith Nicholls (1979) recommends power, agility, coordination, flexibility, muscular and cardio respiratory endurance and concentration as well as quick thinking and reaction time as the factors basic to performance in volleyball.

MATERIALS AND METHODS:

Fifty (50) male volleyball players of north zone interuniversity were selected as subjects for this study. The subjects were in the age group of 18-25 year volleyball players representing their universities in north zone interuniversity tournament held at Kukshetra University in November 2013.

Criterion Variables (Independent Variables)

1. Agility
2. Power of shoulders
3. Power of legs
4. Speed

5. Movement time(Stepping time)
6. Hand Reaction Time

Criterion Measure (Dependent Variables)

The subjective judgement of volleyball playing ability of each subject was based on performance analysis of five components of play i.e. attack, Block, Organization of Attack, Back Court Play, and service during the representative competition. Each component was analysed separately by three experts. The average score of five experts was considered as scores on playing ability of the subject.

Table 1
Administration of the Test and Collection of Data

Variable	Equipment or Test used	Test (Units)
Agility	4×10 Mts Shuttle Run	In Second
Shoulder Power	Basketball Throw	In Meter
Leg Power	Sargent Jump	In Centimetre
Speed	50 Mts Run	In second
Speed of Movement (Stepping time)	Electronic Reaction Time Apparatus	In second
Hand Reaction Time	Nelson Hand Reaction	In Seconds

STATISTICAL METHOD:

In order to find out the relationship of selected psychomotor variables to the playing ability of interuniversity level volleyball players Pearson's Product Moment correlation were calculated. The level of significance was at 0.05.

Table 2

Relationship of Psychomotor Variables to the Playing Ability of Interuniversity Level Volleyball Players

Criterion Variable	Independent Variables	Calculated 'r'
Volleyball Playing Ability	Agility	-0.78*
	Shoulder Power	0.77*
	Leg Power	0.82*
	Speed	-0.72*
	Speed of Movement (Stepping Time)	0.86*
	Hand Reaction Time	-0.76*

*Significance at 0.05 level

$r_{0.05}$ (48) = .2732

Relationship of Psychomotor Variables to the Playing Ability

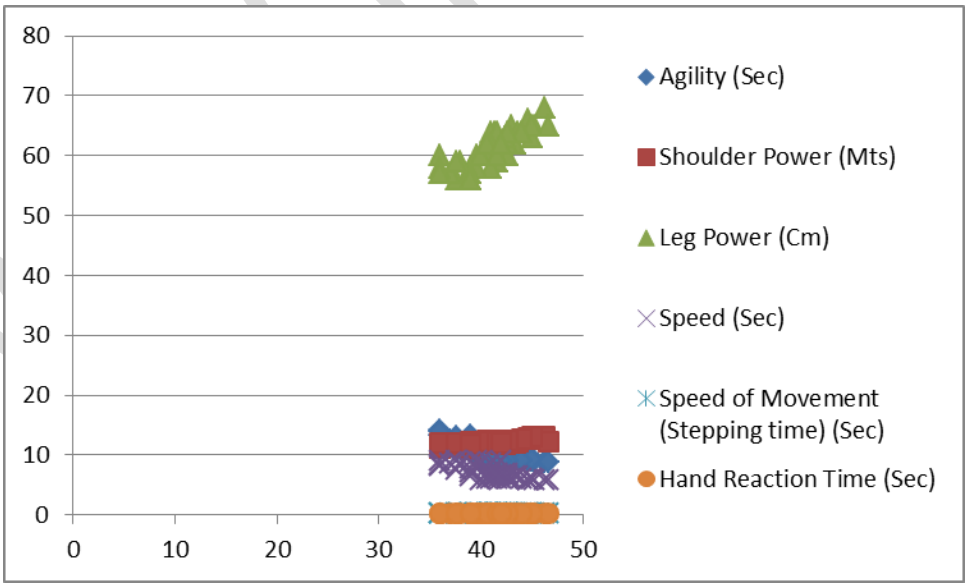

Figure 1

RESULT:

Table 2 shows that playing ability of interuniversity level volleyball players is significantly related to the agility (r= -0.78), shoulder power (r=0.77), leg power (r=0.82), speed (r= -0.72), stepping time (r=0.86), and hand reaction time (r= -0.76) as the obtained correlation were higher than the value of 0.2732 required for the correlation to the significant at 0.05 level of 48 degree of freedom.

DISCUSSION OF FINDINGS:

Findings reveals that playing ability of interuniversity level volleyball players is significantly related to the agility (r= -0.78), shoulder power (r=0.77), leg power (r=0.82), speed (r= -0.72), stepping time (r=0.86), and hand reaction time (r= -0.76) as the obtained correlation were higher than the value of 0.2732 required for the correlation to the significant at 0.05 level of 48 degree of freedom.

Therefore, it is evident that the variables of agility, shoulder power, leg power speed, stepping time and hand reaction time contributed to the playing ability of interuniversity level volleyball player.

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