

Relationship between Selected Motor Fitness and Psychological Variables with Playing Ability of Male Volleyball Players

Mr. Jatinder Kumar^{1*} Dr. Anu Sharma²

¹ Research Scholar, Panjab University, Chandigarh

² Associate Professor, PGGCG, Sector-11, Chandigarh

Abstract – The purpose of the study is to find out the relationship of motor fitness and psychological variables with playing ability of inter college Volleyball male players. Thirty outside hitter inter-college level Volleyball players from different colleges of Panjab University who have represented at Inter - college Volleyball tournament were purposively selected as subjects for this study and their age were ranged between from 18 to 23 years. With respect to motor fitness variables four variables such as speed, agility, strength endurance, flexibility and three psychological variables such as Cognitive anxiety, Somatic anxiety and Self- Confidence were taken into consideration under the independent variables. The playing ability measured as dependent variable and it was judged by Coaches Rated Scale on 10 point scale. Speed was assessed by 30 Meter Dash, agility was assessed by 4 x 10 Meter Shuttle Run, Strength endurance was assessed by Bent Knee Sit Ups and Flexibility was measured by Sit & Reach Tests. Cognitive anxiety, Somatic anxiety and Self- Confidence were measure by Competitive state anxiety inventory (CSAI 1990). The collected data was used to find out the relationship among the selected dependent and independent variables. The Karl Pearson's Product Moment Coefficient of Correlation was used to find out the relationship between the selected variables. The level of significance was fixed at 0.05. The results concluded that the playing ability of volleyball male players had positively correlation with agility, cognitive anxiety and self –confidence and rest of the selected variables had not shown any significant relationship with playing ability. The motor fitness and psychological variable are most crucial for enhancement of playing ability of Volleyball players.

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INTRODUCTION

A sport is as old as mankind itself. But the concept of sports has been changing from time to time. A long back when the primitive man used sports battle against the natural calamities, to protect him from animals and to secure food for living. With the passage of time sports competitions began to occupy important place in the society. Sports have come handy as communal vehicle that satisfying the basic requirement of the society at all ages. As participants, spectators, or volunteers, people are attracted to sport arguably more than to any other activity. This popularity transcends national, cultural, socio-economic and political boundaries and can be invoked with success in virtually any community in the realm (Barrow, H & McGee, R. (1989). Volleyball from a recreational game has presently developed into a highly competitive game, which requires a high level of fitness, skill efficiency, good physique etc. jump service, introduction of the Libero, variety of attack combinations are some of the examples of recent characteristics of volleyball game. The performance of player now a days are

largely influenced by the motor fitness, skill and body composition, because the demands on technical execution of the game have considerably gone up (Clifton, 1962). Physical fitness variables are those variables which are related with different conditions of human body such as strength endurance, flexibility, agility and speed etc. In the field of competitive game like volleyball, the term sports psychology has taken giant strides in a short span of time. The psychological aspects have been emphasized and becoming a vital aspect in the study of psychological characteristics that limit the performance of an individual in a game situation at high level of competition (Terry et.al (1998). Volleyball is a very popular game in India but very less scientific research has been done especially in both the field physical and psychological. Research work in the both field is very important to improve the game through which results can educate the coaches, physical educationist and as well as volleyball players about the role played by physical and psychology variables in attaining the high performance efficiency.

METHODOLOGY

To conduct the study, total 30 (N -30) male volleyball outside hitter players from Panjab University Chandigarh Inter College participants were selected as subjects. The age ranged between 18 to 23 years. Speed, Strength Endurance, Flexibility and Agility variables were used to collect the physical data of participants. Cognitive anxiety, Somatic anxiety and Self- Confidence tests were used to collect psychology data of participants. 50m Dash test was used to measure the speed, Bent knee sit-ups was used to measure strength endurance, Sit and reach test was used to measure flexibility, Shuttle run was used to measure agility and Cognitive anxiety, Somatic anxiety, Self- Confidence were measure by Competitive state anxiety inventory (CSAI 1990).

RESULTS

To examine the relationship of motor fitness and psychological variables with performance of volleyball playing ability, Pearson's Product Correlation Moment was used. The level of significance was set at .05, which was considered as adequate for the purpose of the study.

Table no 1

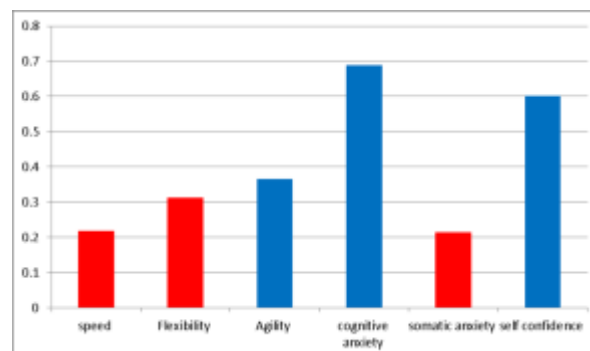
Relationship between motor fitness and psychological variables with playing ability of outside hitter volleyball players

MOTOR FITNESS VARIABLE	PLAYING ABILITY	PSYCHOLOGICAL VARIABLE	PLAYING ABILITY
Speed	Pearson Correlation .218	COGNITIVE ANXIETY	Pearson Correlation .689**
	Sig. (2-tailed) .247		Sig. (2-tailed) .000
	N 30		N 30
Flexibility	Pearson Correlation .312	SOMATIC ANXIETY	Pearson Correlation .214
	Sig. (2-tailed) .093		Sig. (2-tailed) .257
	N 30		N 30
Agility	Pearson Correlation .365*	SELF CONFIDENCE	Pearson Correlation .602**
	Sig. (2-tailed) .047		Sig. (2-tailed) .000
	N 30		N 30
Strength Endurance	Pearson Correlation .314		
	Sig. (2-tailed) .091		
	N 30		

* Significant at 0.05 level of significance $r(0.05)(28) = .361$

Figure 1

Relationship between motor fitness and psychological variables with playing ability of outside hitter volleyball players



* Significant at 0.05 level of significance $r(0.05)(28) = .361$

The table-1 showed correlation between independent variables and dependent variable, When the data was analyzed by using Pearson's Product moment correlation statistical technique out of 7 selected independent (motor fitness and psychological) variables only 3 were found significantly positive correlated with dependent variable (Playing ability) namely agility ($r = .365$), Cognitive anxiety ($r = 0.689$) and self-confidence (0.602).

DISCUSSION OF FINDING

Motor fitness and psychological variables of male volleyball players of Panjab University Chandigarh inter college and playing ability was found by administering appropriate tests as well as utilization suitable statistics. It has been found that there is a positive relationship between Agility and volleyball playing ability. Agility means the players ability to move his body quickly from one direction to other. It is very important for volleyball players because the greater agility means more ability to move his body in one direction to other during game to defend and to attack the ball simultaneously. A significant relationship was also found between cognitive anxiety and playing ability. This relationship may be due to that optimal level of cognitive anxiety increase the performance of players during competition. Some researchers showed that low level of cognitive anxiety increase the performance of player but in this study data showed positive relationship between cognitive anxiety and playing ability. A positive correlation was also found between self-confidence and playing ability. Self –confidence is the main predictor of performance during competition if a player has low level of self -confidence it will affect his individual as well as the team performance also, this study showed positive relationship between players self-

confidence and playing ability, that means if players have high self -confidence their playing ability to perform is also increased. Others variables had showed no significant relationship with playing ability.

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Corresponding Author

Mr. Jatinder Kumar*

Research Scholar, Panjab University, Chandigarh