



## STUDY ON PSYCHOLOGICAL CHARACTERISTICS OF HIGH SCHOOL STATE LEVEL VOLLEYBALL PLAYERS ON GAME PERFORMANCE

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### ABSTRACT:

Sports psychology applies the psychological principles in a sports situation. It aims at understanding an athlete and helps to enhance his learning potentials and tackles the competition situation effectively. Sports psychology is mainly concerned with the psycho regulative analysis of sports ability and performance. Proper study and application of psychological principles in different sports and physical exercise and understanding psychological effect of subjective and objective environment help in improving sports ability.

Fross and Troppmen (1976) stated that there are many factors which influence the behaviour of sportsmen such as psychological, sociological etc. The psychological variables are anxiety, self-confidence, self-concept, personality, aggression, motivation, perseverance, fear etc. These psychological variables have both positive and negative effects on the performance of athletes. Psychology of sports means applying psychological theories and concepts to aspects of sports such as coaching and teaching.

### PURPOSE OF THE STUDY

The main Purpose of this study was is to identify the significant and influencing number of Psychological Characteristics High School State Level Volleyball Players in Relation to game performance

### METHODOLOGY

The aim of the present study was to identify the significant and influencing number of Psychological Characteristics High School State Level Volleyball Players in Relation to game performance

### SUBJECTS

Total 100 subjects were selected for fulfil the aim of the study. The age group of the above players was between 11 to 15 years and players were selected from different Schools from Koppal & Ballari district.

### THE VARIABLES

In order to assess Psychological characteristics selected Psychological questionnaire of Aggression, Sports Achievement Motivation & Sports Competitive Anxiety were administered.

### CONCLUSION

The correlation values between game performance and psychological variables such as aggression (0.210\*) and Sports competitive anxiety (0.5730\*) in the high school state level volleyball players were greater than the tabulated 'r' value (0.128) & were significantly correlated with the game performance.

The psychological variables The Sports Competitive anxiety variables showed the highest of 48.8425 percent. Thus the research conclude that the pscyholgoigcal varabiles play significant role in the game peformance.

**Keywords:** Psychology, Aggression, Achievement Motivation & Anxiety.

### INTRODUCTION

Psychology being the science of activities of an individual in relation to his environment and playing is avital role in the environment of sports. It is helping a bit into the systematic study of behaviour and other verification through experimentation of sportspersons.

Sports psychology applies the psychological principles in a sports situation. It aims at understanding an athlete and helps to enhance his learning potentials and tackles the competition situation effectively. Sports psychology is mainly concerned with the psycho regulative analysis of sports ability and performance. Proper study and application of



psychological principles in different sports and physical exercise and understanding psychological effect of subjective and objective environment help in improving sports ability.

The sports psychologist uses psychological assessment techniques and intervention strategies in an effort to help individuals to achieve their optimal performance. While sports psychology is concerned with analyzing human behaviour in various types of sports setting; it focuses on the mental aspects of performance. Psychologists believe that winning and losing should not be considered a subjective experience of the athlete alone. It has been found deeply related to performance in the subsequent competition. Losing threatens sports whereas winning strengthens it. This fact has been substantiated by Dr. Pani (1980) who found that the decrease in the intelligibility of kinaesthetic sensations was more pertinent after defeat than the post-victory stage (Gurbaksh S. Sandhu, 1992).

Strong links in the academic domain have been established between peer relationships and social competence, friendliness, cooperativeness, altruism, perspective-taking, and self-esteem. Peers play an important role within the sports context as well. Positive team interactions, friendship, and social support from peers are strong sources of sports enjoyment, motivation, the expectation of success, and future participation intentions. In the case of psychological skills the main aim is to maximize the probabilities of success. Sport psychology lectures are known to be both very entertaining and informative. Coaches and players are realizing that to get ahead they need an added resource and that resource is a trained mind.

Most athletes fatigue mentally before they fatigue physically, due to the fact that their mind is not in a good shape as their bodies. The mind-body connection is a very powerful one. For everything you think in your mind, your body has a reaction, regardless of whether it is real or imagined (Karlene Sugarman, M.A., 1998).

**Golby, J., & Wood, P. (2016)** The study examined the effects of a psychological skills intervention (PST) designed to enhance the mental toughness and psychological well-being of student-athlete rowers (N = 16). Within this context, PWB was conceptualized by an amalgamation of the following psychological constructs; self-esteem, perceived self-efficacy, positive affect, and dispositional optimism. Progress was examined at three times evenly dispersed over the course of the six-month intervention, pre-, mid and post-intervention. The intervention was solution-focused and informed by Dweck's (2009) theory of a growth mindset and Goldberg's (1998) psychological strategies to develop mental toughness. The study design was a 2 (group) × 3 (time) two-way MANOVA with repeated measures on one factor (time). Various measures of mental toughness and positive psychological constructs were utilized. Over the course of the intervention, MT significantly improved, in addition to perceived self-efficacy, self-esteem, and positive effect. Positive significant relationships were observed between components of MT and each of the positive measures; which lends support to the conceptualization of MT as a positive psychological construct which fosters positive psychological states (Clough & Strycharczyk, 2012). Further research is warranted to examine the development of MT on negative psychological constructs.

**Kamuran YerlikayaBalyanet, al, (2016)** examined the association between personality, competitive anxiety, somatic anxiety and physiological arousal in athletes with high and low anxiety levels. Anxiety was manipulated by means of an incentive. Fifty male participants, first, completed the Five Factor Personality Inventory and their resting electrodermal activity (EDA) was recorded. In the second stage, participants were randomly assigned to high or low anxiety groups. Individual EDAs were recorded again to determine precompetition physiological arousal. Participants also completed the Competitive State Anxiety Inventory-2 (CSAI-2) and played a computer-simulated soccer match. Results showed that neuroticism was related to both CSAI-2 components and physiological arousal only in the group receiving the incentive. Winners had higher levels of cognitive anxiety and lower levels of physiological arousal than losers. On the basis of these findings, we concluded that an athlete's neurotic personality may influence his cognitive and physiological responses in a competition.

**Leila Gholamhossinzadeheghlidi, et, al, (2016)** investigated the relationship of psychological skills and performance of skilled male volleyball players in vulnerable situations of Competition. For this purpose, 33 male players were selected by available sampling that was participated in Iran's Premier League and was achieved in the final round. A questionnaire of mental skills of Ottawa 3 (OMSAT) and Data software was used to collect information and to analyze the performance of players in three positions of service, attack, and defense, respectively. Spearman correlation coefficient



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results showed that there were no significant relationship base psychological skills, psychosomatic and cognitive skills with the success of the players' performance in some skills. According to the calculation of the effect size in the skills of goal setting in the service position ( $r = 0.30$ ), it indicates the average relationship of goal setting in the implementation of service and calculated number on the defensive position  $r = -0.25$  which reflects the average and reverse relationship, in the illustration skills in the service position  $r = 0.23$  represents the average relationship between illustration in competition designing skills in attack position  $r = -0.19$  showed the average and inverse relationship between competition designing and implementing an attack. In general, it seems that some mental skills in the performance of volleyball players play a useful role with average effect size.

**Zamirullah khan, et al. (2011)** has conducted a study on Anxiety and Motivation is important psychological variables in sports and its need to achieve a high level of competition. Without knowledge of these two variables, athletes cannot give best in competition. The aim of the study was to find out the relationship between Anxiety and Motivation of intervarsity Badminton players. The total sample consisted of twenty players age ranged from 17 to 25 years. Sports Competition Anxiety Test (SCAT) and Sports Achievement Motivation Test were administered to collect the data. Mean, standard deviation and Pearson Product Moment Correlation were computed to analyze the data at 0.05 level of significance. It was found that significant negative relationship between Achievement Motivation and Anxiety.

## PURPOSE OF THE STUDY

The main Purpose of this study was is to identify the significant and influencing number of Psychological Characteristics High School State Level Basketball Players in Relation to game performance

## METHODOLOGY

The aim of the present study was to identify the significant and influencing number of Psychological Characteristics High School State Level Volleyball Players in Relation to game performance

## SUBJECTS

Total 100 subjects were selected for fulfil the aim of the study. The age group of the above players was between 11 to 15 years and players were selected from different Schools from Koppal & Ballari district.

## THE VARIABLES

In order to assess Psychological characteristics selected Psychological questionnaire of Aggression, Sports Achievement Motivation & Sports Competitive Anxiety were administered.

## DATA ANALYSIS

Values are presented as mean values and SD. Pearson Correlation, Analysis of variance, were used to test if population means estimated by two independent samples differed significantly. Level of significance was set at the 0.05. Data was analysed using SPSS Version 16.0 (Statistical Package for the Social Sciences, version 16.0, SSPS Inc, Chicago, IL, USA).

## Psychological variables for high school state level volleyball players in relationship to post coaching game performance during invitational competition.

Si No	Variables	Pearson Correlation
1	Aggression	0.210*
2	Sports Achievement motivation	-0.091
3	Sports competitive anxiety	0.573*

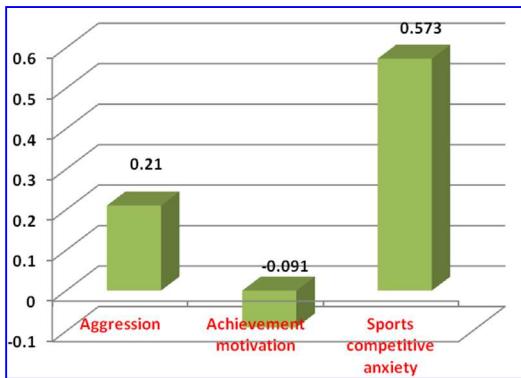
\* Significant at 0.05 level ( 0.128) n=28, df=30



The above table shows that Pearson's coefficient of correlation values between game performance and psychological variables such as aggression (0.210\*) and Sports competitive anxiety (0.5730\*) in the high school state level volleyball players were greater than the tabulated 'r' value (0.128) at 0.05 level of confidence, they were significantly correlated with the game performance at 0.05 level. Therefore it was concluded that there was a significant relationship between post coaching game performance during invitational competition and psychological variables aggression in the high school state level volleyball players.

The remaining psychological variables such as sports achievement motivation variables were less than that the tabulated 'r' value (0.128) at 0.05 level of significance. Therefore it was concluded that there was found a non significant relationship between post coaching game performance during invitational competition and psychological variables sports achievement motivation and sports competitive anxiety in the high school state level volleyball players.

**The bar diagram showing the Psychological variables for High school state level volleyball players in relationship to post coaching game performance during invitational competition.**



**Table Summary of regression Analysis between predictor variables (psychological) and post coaching game performance during invitational competition of high school state level volleyball players**

Regression analysis		Analysis of Variance				
r	0.488 *	Sources	df	Sum of Squares	Mean Squares	F value
r <sup>2</sup>	0.238	Regression	1	156.601	156.601	8.754*
Adj r <sup>2</sup>	0.211	Residual	28	500.866	17.888	
Std. Error.	5.422943	Total	29	657.467		

\* Predictors: Sports Competitive anxiety

Table shows the values of parameters of the regression analysis between the predictor variables (psychological) and post coaching game performance during invitational competition of High school state level volleyball players. The result of the regression analysis showed that psychological variable like Sports Competitive anxiety ( predictor variables) was taken against the criterion variables yielded a coefficient of multiple correlations (r) of 0.488\* and adjusted multiple correlation squares (r<sup>2</sup>) of 0.238. The r<sup>2</sup> value translated into 23.80 percent of the observed variance in the post-coaching game performance during invitational competition score. The analysis also gave a standard error of 5.422943 and F-value of 8.754\* which was significant at an alpha level of 0.05.

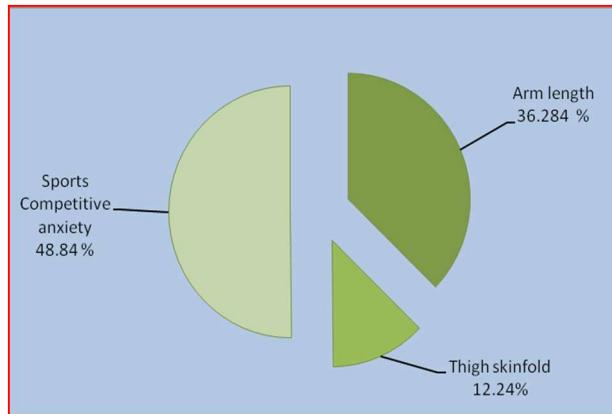
## The beta of the predicting psychological variables on post coaching game performance during invitational competition of high school state level volleyball players

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	114.583	3.615		31.696	0.000
	Sports Competitive anxiety	8524	0.177	-0.488	-2.959	0.006

Table shows the prediction of psychological variables in the regression for Beta values and significant 't' corresponding to the variables regressed against the depended variables. The beta values for Sports Competitive anxiety (-0.524), was found to be significant. This confirms that there was to be the best predictor of post coaching game performance during invitational competition in the High school state level volleyball players. The remaining predictor was found nonsignificant in the High school state level volleyball players.

The Pie Diagram shows that among the different variables the Arm length, thigh skinfold, and Sports Competitive anxiety were showed better predictor of morphological and psychological variables when compared to other 39 variables. The Sports Competitive anxiety variables showed the highest of 48.8425 percent, followed by the arm length with 36.284 percent and thigh skinfold with 12.2485 percent.

## The pie diagram showing contribution of the predicting morphological and psychological variables on post coaching game performance during invitational competition of High school state level Volleyball players



## CONCLUSION

The correlation values between game performance and psychological variables such as aggression (0.210\*) and Sports competitive anxiety (0.5730\*) in the high school state level volleyball players were greater than the tabulated 'r' value (0.128) & were significantly correlated with the game performance.

The psychological variables The Sports Competitive anxiety variables showed the highest of 48.8425 percent. Thus the research conclude that the psychological variables play significant role in the game performance.



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