

## A RELATIONSHIP STUDY OF PSYCHOLOGICAL VARIABLES WITH THE PLAYING ABILITY OF CRICKET BATSMEN

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**Abstract:-** This study is aimed to find the association among the selected Psychological variables and batting performance in cricket. A total of 50 male subjects were selected from the cricket camp, practice match, and their cricket academy in Haryana and Delhi by using random sampling. The age of the subjects ranged from 17 to 28 years old ( $19.08 \pm 1.22$ ), and all were regular players with good skills. The psychological assessment instrument developed by Dr. M.L. Kamlesh (SAMT) was used to evaluate achievement motivation (1990), Smith's (1979) standard psychological instrument was used to evaluate aggression and the Agnihotri Self-confidence Inventory (ASCI), created by Rekha Agnihotri in 1987, was used to assess self-confidence were all measured in this study. For the sake of this investigation, descriptive statistics and Pearson correlation methods were used for analyze. A value of 0.05 was chosen to represent the level of significance. The findings of this investigation showed that in the majority of selected Psychological variables, finding of the present study clearly reveals that Achievement motivation and self-confidence, have a significant relationship with the performance of Batting in Cricket players.

**Keywords:** Cricket, Batting Performance, Achievement motivation, Self-confidence, and Aggression.

### INTRODUCTION

Physical activity is an inherent trait of a human being. (Kumar, N. 2018). Cricket is now seen as an athletic activity; performance levels in cricket are influenced by demand. Athletes improve their athletic performance by obtaining their ideal degree of physical and mental fitness. Each sportsperson has varied demands, as well as varying levels of physical and

mental condition. The mental and emotional abilities needed by athletes for the successful competition are developed through sports psychology. Sports include both cerebral and physical abilities. For you to perform at your best, there must be a relationship between your physical abilities, your thoughts, and your emotions. Your performance suffers when the mental and emotional aspects of your game are out of line with your physical abilities. Sports performance may be improved by using some psychological principles. No one can currently perform at their absolute best in athletics without the development of psychological traits. (Sabir, M.G. 2016)

Motivation, self-Confidence, and aggression are three psychological variables that are strongly connected and essential for achieving optimum athletic performance. In human behavioral psychology, it is well known that motivation for achievement is a crucial psychological element (Sharma, A., & Purashwani, D. P. 2021).

Numerous research has been done about achieving motivation and how it affects performance. According to studies, competition participation is dependent on accomplishment motivation, which is the most significant predictor of performance (Huschle, et. al. 2008; Carey, et. al. 2000) In the pursuit of a deeper comprehension of accomplishment motivation in sports, several motivation theories from the academic world have been incorporated (Ames, 1984, 1992; Dweck, 1986; Nicholls, 1989).

Aggression is defined as the intentional imposition of a harmful verbal, gestural, or bodily state on another person. Aggressiveness is a pattern of actions, not a mental disposition. It manifests itself in delegated activities with the intent to cause harm. (Chawla, N., 2017).

Athletic performance has frequently been shown to be significantly influenced by self-confidence. Increasing one's self-confidence is frequently an important factor for all athletes, according to the majority of players, coaches, and sport psychology experts who firmly feel that confidence is a fundamental psychological requirement for success in sports (Hamid, R.T., et al 2010).

## **PROCEDURE AND METHODOLOGY**

The study aimed to determine the relationship between Psychological variables and the batting performance in cricket. A total of 25 male subjects were selected from a cricket camp, practice match, and cricket academy in Haryana by using random sampling. The age of the

subjects ranged from 17 to 28 years and all were regular players with a good level of skill. Only 3 predictors (independent) variables such as Achievement motivation, self-confidence, and aggression. The psychological assessment instrument developed by Dr. M.L. Kamlesh (SAMT) was used to evaluate achievement motivation (1990). Smith's (1979) standard psychological instrument was used to evaluate aggression. The Agnihotri Self-confidence Inventory (ASCI), created by Rekha Agnihotri in 1987, was used to assess self-confidence.

**Batting Performance (Dependent variable)** Three experienced cricket coaches evaluated the playing prowess of the chosen cricket batsmen, and their evaluations served as the performance parameter. The investigator gave the assessment guidelines. The chosen players' playing abilities will be evaluated by each coach on a 10-point scale for each topic. The sum of the coaches' evaluations for each topic will be divided by 3 to get the subject's individual score. The coaches' performance evaluations were closely connected with one another.

## STATISTICAL ANALYSIS

Means and standard deviations will be used as descriptive statistics to characterize the characteristics of the data. This study aimed to establish a connection between batting and psychological factors, Pearson product-moment correlation coefficient method will be produced. The threshold for significance will be fixed at 0.05. Statistical methods like mean, standard deviation, and Correlation analysis methods will be used by SPSS software to classify the data and provide the desired results.

## RESULT AND DISCUSSION

**Table 1**

**Descriptive statistics of Psychological variables with the batting performance in cricket**

Factors	Subjects	range	Min.	Max.			S.D
					Mean	Std. Error Mean	
<b>PERFORMANCE</b>	50	4.00	6.00	10.00	8.41	.12	.87
<b>AM</b>	50	20.00	16.00	36.00	24.64	.70	4.98
<b>SC</b>	50	11.00	42.00	53.00	47.82	.35	2.48
<b>AGG</b>	50	11.00	7.00	18.00	13.28	.31	2.20

The descriptive statistic for a few psychological factors of male cricket batters at the national level is shown in Table 1 below. The mean and S.D of the Achievement motivation is  $24 \pm 4$ , self-confidence is  $47 \pm 2$ , aggression is  $13 \pm 2$  and performance is  $8.41 \pm .87$

The selected psychological factors for cricket players include minimum and maximum values in the same category that are as follows: achievement motivation (16; 36) and a range of 20, self-confidence (42; 53) and a range of 11, aggression (7; 18) and a range of 11, and performance (6; 10) and a range of 4. The Mean and S.D difference has been shown picturesquely in figure1.

**Figure No. 1 of Mean And S.D**

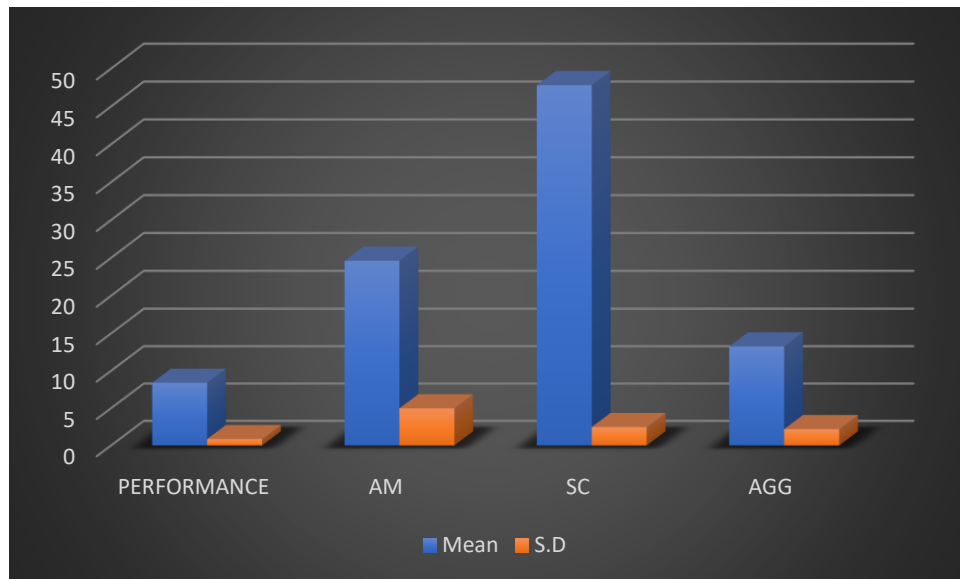


Fig.1 Mean and S.D difference of descriptive statistics.

**Table 2**

**.Pearson product moment correlation coefficient between the selected Psychological variables and the performance of the cricket batsmen.**

Variables	X1	X2	X3
<b>Batting Perform.</b>	.407**	.346*	-.008
<b>X1</b>		-.007	.032

X2			-.106
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\*Correlation is significant at .05 levels (two-tailed).

x1- Achievement motivation

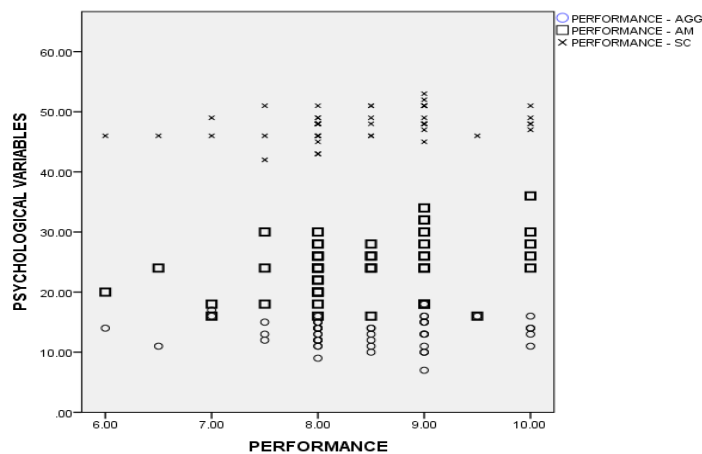
x2- Self-confidence

x3- Aggression

B.P- Batting Performance

**Table II** shows a correlation between psychological variables and the effectiveness of the chosen cricket batters. Except for aggression, achievement motivation and self-confidence are found to be positively and strongly connected. The correlation coefficient between the achievement motivation and self-confidence and the performance of cricket batters is ( $r=.407$ ;  $p<.05$ ) and ( $r=.346$ ;  $p<.05$ ), respectively, demonstrating a strong and significant association between the two. In other words, if cricket player has higher levels of achievement motivation and self-confidence, they would play better and it may also improve their performance. Aggression ( $r= -.008$ ;  $p=.957$ ) is seen to be insignificant in relation to performance, though. The correlation of batting performance and selected psychological variables have been shown picturesquely in figure 2.

**Fig. no. 2**



**Fig. 2 scatter diagram** of correlation between batting performance and selected psychological variables i.e. Achievement motivation, self-confidence and aggression.

### DISCUSSION AND FINDING

The finding of the present study clearly reveals that Achievement motivation and self-confidence, have a significant relationship with the performance of Batting in Cricket players.

Considering conclusions drawn from this investigation, the hypothesis that there was a significant relationships between Achievement motivation, self-confidence, and Sports Aggression with the Performance of batting in Cricket players was Accepted in the case of Achievement motivation and self-confidence, whereas not accepted in the case of Sports Aggression. As a result, we might conclude that players who are highly certain of themselves tend to be highly motivated by the pursuit of Achievement. Both variables affect each other and contribute to performing better in batsmen's performance/ability in cricket. The finding of current investigation is also supported by Hamid Reza Taheri, Mehdi Sohrabi, & Jafar Mohamadi. (2010) performed research on young Iranian elite wrestlers to identify the factors that contribute to their sport-related self-confidence and how it affects their athletic performance. According to the results of the study, self-confidence is a major contributor to athletic achievement, and developing one's self-assurance should be a high priority for any athlete. The finding of the study is also supported by Sabir, M. G. (2016, April 28). conducted the study to examine the relationships between Sports Aggression & Mental Toughness with the Batting Performance of Cricket players. And the finding of the study shows that an insignificant relationship was found with aggression. The finding of the study also supported by Sharma, A., & Purashwani, D. P. (2021) conducted a study to examine the Relationship between selected psychological variables among trainees of combat sports. And the finding of the study shows that a significant relationship was found with achievement motivation. The finding of the study also supported by Ahmadi, S. S., Besharat, M. A., Azizi, K., & Larijani, R. (2011). conducted a study for Contact and Noncontact Sports to examine the association among Aggression Dimension and Anger Dimension. In addition, this investigation demonstrates various anger characteristics are rarely equally associated with violence. It does not influence the relationship between anger dimensions and aggressive behavior in contact and non-contact sports.

## CONCLUSION

On the basis of the findings and under the scope of the study's limitations, it is determined that the Batting performance of cricket players has a positive relationship with Achievement motivation and self-confidence in psychological variables.

Some other following conclusions have been also drawn –

1. Significant relationship found in selected psychological variables (Achievement motivation-  $r=.407$ ;  $p<.05$ , and self-confidence-  $r= .346$ ;  $p< .05$  in relation to batting performance in cricket.
2. Insignificant relationship found aggression-  $r=-.008$ ;  $p>.05$  in relation to batting performance in cricket.

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