



A COMPARATIVE STUDY OF REACTION ABILITY AND AGGRESSION AMONG DISTRICT STATE AND UNIVERSITY LEVEL MALE CRICKET PLAYERS

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Abstract:The purpose of this study was to compare the reaction ability and aggression among district level, state level and inter university level male cricket players. For the purpose of this study two hundred and twenty five different levels of cricket players were selected as subjects. The subjects were of three levels i.e. district level, state level and inter university level. Equal numbers of subjects were randomly selected for this study. For each level seventy five male cricket players were selected. The ages of the subjects were between seventeen and thirty years. In order to compare different levels of cricket players in relation to reaction time and aggression Analysis of Variance (ANOVA) was used at 0.05 level of significance. The means and standard deviations of inter university, district and state level cricket players in relation to reaction ability were 0.21 ± 0.03 , 0.20 ± 0.028 and 0.19 ± 0.019 respectively. The means and standard deviations of inter university, district and state level cricket players in relation to aggression were 17.94 ± 3.65 , 17.94 ± 3.87 and 16.46 ± 2.95 respectively. There was no significant difference among different levels of cricket players in relation to reaction ability. There was no significant difference among different levels of cricket players in relation to aggression.

Introduction:

Reaction time has been a favorite subject of experimental psychologists since the middle of the nineteenth century. However, many of these papers are hard to understand for the beginning student. In this review, I have summarized the major literature conclusions that are applicable to undergraduate laboratories using *Reaction Time* software. In simple reaction time experiments, there is only one stimulus and one response. 'X at a known location,' 'spot the dot,' and 'reaction to sound' all measure simple reaction time.

Aggression as human destiny, an innate urges toward death and destruction; we are genetically determined to be aggressive. Aggression operates as a powerful instinct (mordido); hostile impulses generated from this instinct gradually build up over time (accumulation of specific energy) and unless periodically released in safe and non-injurious ways, it will soon reach dangerous levels. Aggressive energy must be released (redirected or sublimated, catharsis) or the person will "explode" and kill him or another.

Statement of the problem

The purpose of this study was to compare the reaction ability and aggression among district level, state level and inter university level male cricket players.

Hypothesis

It was hypothesized that there would be no significant difference among district level, state level and inter university level cricket players in relation to reaction ability. It was also hypothesized that there would be no significant difference among district level, state level and inter university level cricket players in relation to aggression.

Significance of the Study

In light of the findings of present study, it may contribute to the field of physical education and sports in following ways:

- This study may be helpful to know the reaction ability of different levels of cricket players.
- This study may also be helpful to prepare the training programme to develop the reaction ability of different levels of cricket players.
- This study may be helpful to know the contribution of reaction ability and

aggression in the performance of cricket players.

- This study may be helpful to know the level aggression of different levels of cricket players.

A. Methodology

B. Selection of Subject

For the purpose of this study two hundred and twenty five different levels of cricket players were selected as subjects. The subjects were of three levels i.e. district level, state level and inter university level. Equal numbers of subjects were randomly selected for this study. For each level seventy five male cricket players were selected. The ages of the subjects were between seventeen and thirty years.

Selection of Variables

On the basis of available literature and discussion with experts following variables were selected for the purpose of this study:

- Reaction Time
- Aggression

1) Selection of the Test/ Questionnaire and Criterion Measures

The following tests were selected and their scores were considering as criterion measure for this study.

Reaction time: Reaction time of hand was measure by the test of Reaction Time on Anand's Electronics Reaction Time aspirators.

Aggression:

Aggression was measured by using **Sports Aggression Inventory**, developed by **Anand Kumar** and **Prem Shankar Shukla**.

Reliability of Data

The reliability of data was ensured by establishing the instrument reliability, tester's competency reliability, reliability of the tests and subject's reliability.

Instruments Reliability

The instruments, which were used in the study, were obtained from standard firms, which cater to the needs of various research laboratories in India and abroad and their calibration were accepted as accurate enough for the purpose of this study.

Tester Competency

To ensure that the investigator was well versed in the techniques of conducting the tests, the investigator had a number of

practice sessions in the testing procedure under the guidance of the expert. The tester's competency was also evaluated together by reliability of tests.

C. Statistical Procedure

In order to compare different levels of cricket players in relation to reaction time and aggression Analysis of Variance (ANOVA) was used at 0.05 level of significance.

Statistical Analysis

The data collected were analyzed with the help of Analysis of Variance (ANOVA) at 0.05 level of significance.

Findings

The result pertaining to the selected variables of different levels of Cricket players have been presented in tabular form.

The means and standard deviation of selected variables of different levels of Cricket players have been presented in table -1.

Table-1 The means and standard deviation of selected variables of different levels of Cricket players

Variables	Groups	Mean	Standard Deviation
Reaction Ability	District	0.21	0.03
	State	0.20	0.028
	University	0.19	0.019
Aggression	District	17.94	3.65
	State	17.05	3.87
	University	16.46	2.95

Table 1 explores the means and standard deviations of university, district and state level cricket players in relation to reaction ability were 0.21 ± 0.03 , 0.20 ± 0.028 and 0.19 ± 0.019 respectively The means and standard deviations of university, district and state level cricket players in relation to aggression were 17.94 ± 3.65 , 17.05 ± 3.87 and 16.46 ± 2.95 respectively.

Comparison of Different Levels of Cricket Players in Relation to Reaction Ability has been presented in table -2

Table-2 Analysis Of Variance among Different Levels of Cricket Players in Relation to Reaction Ability

Source of Variance	df	Sum of Squares	Mean Square	F
Between groups	2	1.984	0.992	1.771
Within groups	222	124.35	0.560	

Tab. F .05 (2,222) = 3.04

Table 3 indicates that there was no significant difference among different levels of cricket players in relation to reaction ability because the calculated value of F .05 (2,222) = 1.771 was lower than the tabulated value of F .05 (2,222) = 3.04.

Comparison of Different Levels of Cricket Players in Relation to Aggression has been presented in table -3

Table-3 Analysis Of Variance among Different Levels of Cricket Players in Relation to Aggression

Source of Variance	df	Sum of Squares	Mean Square	F
Between groups	2	16.482	8.241	1.036
Within groups	222	1765.356	7.952	

Tab. F .05 (2,222) = 3.04

It appears from the Table - 4 that there was no significant difference among different levels of cricket players in relation to aggression because the calculated value of Tab. F .05 (2,222) = 1.036 was lower than the tabulated value of Tab. F .05 (2,222) = 3.04.

Discussion of Findings

The result shows that there was no significant difference among district, state and university cricket players in relation to reaction ability. This may be attributed to the fact that the reaction ability is an inborn quality and less trainable. The result also show that selected cricket players of different groups were not equal in reaction time, there were difference among different levels of cricket players but significant difference was not exist. The training methodology states that the reaction ability maximally depends on the nervous system with the coordination of muscular system. The muscular system may be developed with the help of training while nervous system is less trainable. The result shows that there was no significant difference among district, state and university cricket

players in relation to aggression. This may be due to the nature of the game. The game of cricket is a body contact game known as combative sports. The level of game does not affect the nature of game. To play cricket at any levels need same type of temperament and aggression.

Discussion of Hypothesis

It was hypothesized that there would be no significant difference among district level, state level and inter university level cricket players in relation to reaction ability and aggression. The results show that there were no significant difference among district, state and university levels cricket players in relation to reaction ability and aggression. Therefore the hypothesis has been accepted in case of reaction ability and aggression.

Conclusions:

The means and standard deviations of inter university, district and national level cricket players in relation to reaction ability were 0.21 ± 0.03 , 0.20 ± 0.028 and 0.19 ± 0.019 respectively.

The means and standard deviations of inter university, district and national level cricket players in relation to aggression were 17.94 ± 3.65 , 17.94 ± 3.87 and 16.46 ± 2.95 respectively. There was no significant difference among different levels of cricket players in relation to reaction ability. There was no significant difference among different levels of cricket players in relation to aggression.

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