

# The Comparison of Intelligence among Combative and Non-Combative Sports

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**Abstract –** Many factors like personality, motivation, physical charities and motor abilities as well as environmental situations are regarded as having an interacting influence on an individual's selection of the achievement in various physical activities. Although variables and their effects on activity participation has been the subject of human number of studies, the role of intelligence has, to grate extant, been overlooked. Two Hundred male and female players (100 combative sports players & 100 non-sports players) were selected for this study. Average age of players was 22.1 with the range of 17-25 years old players. "Group Test of Intelligence" developed by Dr. S. Jalota was used as tool to measuring intelligence among combative and non-combative sports. The statistical procedure applied was Independent Sample 'Student' T-test and level of significance was set at 0.05. Significant difference was found among combative and non-combative sports player's intelligence as calculated 't' value 2.51 is great than tabulated 't' value 1.98 at 0.05 level of significance. It is found that intelligence level among combative sports players is more than non-combative sports players. There is significant difference of intelligence of combative and non-combative sports. It is also found that winning or losing in combative sports are largely depend upon player's own performance in comparison to that of non-combative.

**Key word:** Combative Sports, Non-Combative Sports.

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## INTRODUCTION

Many factors like personality, motivation, physical charities and motor abilities as well as environmental situations are regarded as having an interacting influence on an individual's selection of the achievement in various physical activities. Although variables and their effects on activity participation has been the subject of human number of studies, the role of intelligence has, to grate extant, been overlooked.

A concept applied to the particular types of mental ability needed to complete the demands of a sport task successfully. Sporting intelligence includes knowledge of the sport, knowledge of where and when important cues are likely to occur, the ability to search for and detect task-relevant cues, identification of cue patterns, short-term memory recall, and decision-making ability.

Intelligence is an obvious factor in any learning and hence the coaches and physical educationist should understand the concept of intelligence and its impact on performance. It is better for them to measure the

intelligence level of their students and present them meaningful physical task.

## METHODOLOGY

Total two hundred players (100 combative sports players & 100 non combative sports players) were selected for this study. These selected player had participated at All India Inter University level combative and non-combative sports representing Lakshmibai National University of Physical Education, Gwalior (M.P.) and Jiwaji University, Gwalior (M.P.). Average age of players was 22.1 with the range of 17-25 years old players.

### Selected Sports

**Combative Sports:** Football, Hockey, Basketball, Judo, Boxing and Handball.

**Non Combative Sports:** Volleyball, Swimming, Badminton and Track & Field.

## Research Design

To carry out this study Single Short research design was used to compare the intelligence level among combative and non-combative sportsmen.

## Criterion Measure

Criterion measure chosen to test the hypothesis was measured by "Group Test of Intelligence" developed by Dr. S. Jalota in the year 1975.

## Statistical Procedure

The statistical procedure applied was Independent Sample 'Student' T-test to compare the intelligence level among combative and non-combative sports. Level of significance was set at 0.05.

## ANALYSIS OF DATA

Collected data on 200 player who use to play combative and non-combative sports was analysis with the help of descriptive analysis and Independent Sample 'Student' t-test.

TABLE – 1

### Descriptive Analysis of Intelligence Level of Combative and Non-Combative Sports

Sports	Mean	Standard Deviation	Min	Max	Range
Combative	37.05	12.05	12	65	55
Non	33.12	9.12	12	52	39
Combative					

Table 1 shows the descriptive analysis of intelligence level among combative and non-combative sportsmen. Mean of intelligence among combative sportsmen i.e., 37.05 is much higher than non-combative sportsmen i.e., 33.12. Same as with standard deviation among player combative sportsmen was 12.05 and non-combative sportsmen was 9.12. There is huge difference in range of combative sportsmen (55) and non-combative sportsmen (39). Graphical representation of above table is made in figure.

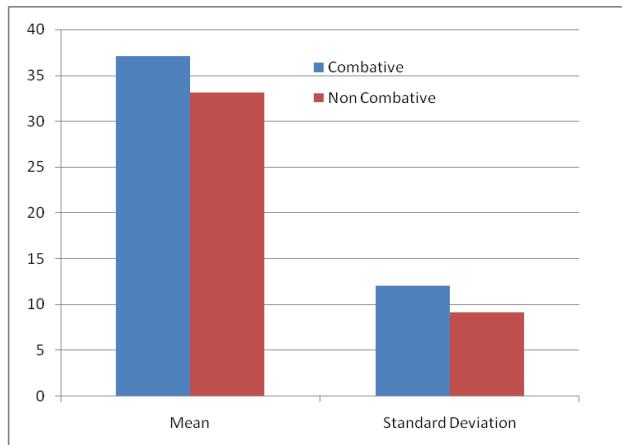


Fig: Mean and Standard Deviation values of combative and non-combative sportsmen.

TABLE – 2

### Comparative Analysis of Combative and Non-Combative Sportsmen

Sports	Mean	Mean Difference	Standard Error	t-ratio
Combative	32.52	5.82	2.47	2.35*
Non Combative	38.35			

\*Significant at 0.05 level of Significance (N-2) 198 = ????

Above table 02, indicates that there is significant difference found among combative and non-combative sports intelligence as calculate 't' value 2.35 is great than tabulated 't' value ??? at 0.05 level of significance. It also shows, that intelligence level among combative sportsmen was more than non-combative sportsmen.

## DISCUSSION OF FINDINGS

It found that there is significant difference between combative sports (Wrestling, Judo, Boxing, Kabaddi, and Taekando) and non-combative sports (Volleyball, Swimming, Badminton, Shooting and Track & Field) that may be due to so many factors that influence the intelligence level of sportsmen.

Winning, in case of combative sports depend upon the individual own capability to performance under different conditions. Psychological makeup especially mental preparation, self-control, rational and critical thinking develops automatically in case of combative sportsmen. Whereas, in case non-combative sports these

psychological components are not that much contributory in sportsmen's performance.

Non-combative sportsmen have more self-confidence level and also have a good amount of decisiveness because they are totally depended upon themselves. Whatever be the result, they are responsible for it on their own. And that's why this responsibility and experience works as intensive motivation for them.

All the combative sports require great amount of strength, endurance, aggression, decision making, critical thinking and killing spirit to overcome the opponent where as it not so in non-combative sports.

This well-known fact that players who participate in combative sports do work on all factors which are responsible whether it psychological, technical and tactical which is not so prominently covered by non-combative sportsmen.

## CONCLUSIONS

On the basis of finding and the limitations impose; the following conclusions may be down.

1. It is found that intelligence level among combative sportsmen is more than non-combative sportsmen.
2. There is significant difference of intelligence level among combative and non-combative sportsmen.
3. It is found that winning or losing in combative sports largely depend upon sportsmen own performance in comparison to that of team games.

## REFERENCES:

Barker, John W. (1965). "The Relationship of Physical Fitness be Intelligence Academic Achievement and motional Adjustment among Educable Mental Retarded boys" Completed Researcher in Health, Physical Education and Recreation 7: 107.

Boespugl, Leray R. (1968). "The relationship between Physical Fitness social acceptability, social adjustment, intelligence and academic achievement of junior high school boys." Completed Research in Health of Physical Education and Recreation 10: 147.

Bond, Marjorie Helen (1959). "Rhythmic performance and gross motor performance", Research Quarterly 30: pp. 259-65.

Burley, Lloyd R and Anderson, Roy Lcnard (1955). "Relation of Jump and Reach Measures of power to Intelligence scores and Athletic performance," Research Quarterly 26: p. 28.

Cattell, R. B. (1971). Abilities: Their structure, growth and action, (Bision: Houghton Mifflin, 1971).

Charles, Taulor Thomas (1978). "A study of the relationship of intelligence Bio-Rhythm and high school students mental ability test scores" Dissertation Abstracts International 38 (April 1978): 6028 – A.

Corbin, Charles B. (1967). "Effect of mental practice on skill development after controlled practice", Research Quarterly 38 (December 1967): p. 534.

Danel, D. B. Van. (1942). "A study of the relationship that exists between physical skill as measured and the general intelligence of college students", Research Quarterly 13(March 1942):57.

Garret, Henry E. (1961). General Psychology (India: Eurasia Publishing House Ltd. 1961).

Gottfreldson, Linda S. (1997). "Intelligence and Social Policy", Intelligence is Multi-Disciplinary Journal Vol. 24, No 1, 1997 (Ablex Publication Corporation, Greenwich, Connecticut, USA).

Hart, Edward D. (1970). "Relationship between physical fitness test score, intelligence quotients and grade points average for selected high school students," Completed Research in Health, Physical Education and Recreation 12 (1970): p. 87.

Jalota, S. (1975). The Group Test of Intelligence (Agra: National Psychological Corporation, 1975).

Ruffer, W. A. (1976). Three studies of personality undergraduate students in physical education," Perception and more skills 42:43 (October, 1976).

Start, K. B. (1962). The relationship between the games performance of a grammar school boy and his intelligence and streaming", Research quarterly, 33 (March 1962): 155.

Thore, Jo Anne (1969). "Intelligence and skill in relation to success in singles competition in Badminton and Tennis," Research Quarterly 38 (March 1969): p. 119.

Vernon, Philip Anthomy (1982). "Speed of information processing and general intelligence." *Dissertation Abstracts International* 42 (June 1982): p. 4922 – A.

Wechsler, D. (1943). *The Measurement Adult Intelligence* (New York: Williams and Wilkins Company, 1943).

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