



## COMPARATIVE ANALYSIS OF AGGRESSION AND SELF CONFIDENCE AMONG COLLEGE MEN VOLLEYBALL, HANDBALL AND BASKETBALL PLAYERS

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### Abstract

*The purpose of the study was to find out the comparative analysis of aggression and self confidence among college men volleyball, handball and basketball players. To achieve this purpose of the study ninety college men students were selected. To achieve this purpose of the study, ninety college men students of inter-collegiate sports meets were tested. They were divided into three equal groups of each thirty subjects. They were randomly selected. Their age was between 18 and 22 years. To facilitate the study thirty college men volleyball players, thirty college men handball players and thirty college men basketball players were selected. They were randomly selected. The requirements for the collection of data through administration of questionnaires were explained to the subjects so as to avoid any ambiguity of the effort required on their part and prior to the administration of the questionnaire. All the subjects participated in this study voluntarily and responded to the questionnaire without bias. Independent randomized research design was used for this study, as the subjects were selected randomly from three independent groups college men volleyball, handball and basketball players. The criterion variable aggression was measured through the questionnaire 'Aggression Scale' advocated by Guru Pyari Mathur and Raj Kumari Bhatnagar, procured from Rakhi Prakashan, Agra. Self confidence was measured by Basavanna (1971).. The collected data were subjected to statistical treatment to find out any differences between the groups in the dependent variables selected. The data collected from the subjects were treated statistically. Analysis of variance (ANOVA) was used to find out the significant difference if any, among the groups on each selected criterion variables separately. In all the cases .05 level of confidence was fixed to test the significance, which was considered as appropriate. The results of the study revealed that there was a significant difference between between basketball, volleyball and football players on the selected psychological variables.*

**Keywords:** Aggression, Self Confidence, Volleyball, Handball, Basketball.

### INTRODUCTION

Modern man lives in a mental world in which the important skills of success are based on his psychological activities. Increasing pressures on human mind in the pursuit of materialistic philosophy are making in roads into the happiness of life. Moreover, the twentieth century is a revolt against the traditional practices prevalent in the past. To keep pace with the fast and vast changes that are taking place in the various disciplines, there is a tremendous demand and responsibility cast on the training system to meet the challenges of preparing men and women to achieve tasks with success and excellence. Sports is no exception to this and so emphasis is placed on psychological aspects of a player to attain success (Mohan et.al. 1986). The study of psychology in philosophical context dates back to the ancient civilizations of Egypt, Greece, China, and India. Psychology began adopting a more clinical and experimental approach under medieval Muslim psychologists and physicians, who built psychiatric hospitals for such purposes. Though the use of psychological experimentation dates back to Alhazen's Book of Optics in 1021, psychology as an independent

experimental field of study began in 1879, when Wilhelm Wundt founded the first laboratory dedicated exclusively to psychological research at Leipzig University in Germany, for which Wundt is known as the "father of psychology". The year 1879 is thus sometimes regarded as the "birthdate" of psychology. The American philosopher William James published his seminal book, Principles of Psychology, in 1890, while laying the foundations for many of the questions that psychologists would focus on for years to come. Other important early contributors to the field include Hermann Ebbinghaus (1850–1909), a pioneer in the experimental study of memory at the University of Berlin; and the Russian physiologist Ivan Pavlov (1849-1936), who investigated the learning process now referred to as classical conditioning.

Psychology (from Greek word, "breath, life, soul"; and -logia) is an academic and applied discipline involving the scientific study of mental functions and behavior. Psychologists study such phenomena as perception, cognition, emotion, personality, behavior, and interpersonal relationships. Psychology also refers to the application of such knowledge to various spheres of

human activity, including issues related to everyday life (e.g. family, education, and employment) and the treatment of mental health problems. Psychologists attempt to understand the role of these functions in individual and social behavior, while also exploring the underlying physiological and neurological processes. Psychology includes many sub-fields of study and applications concerned with such areas as human development, sports, health, industry, media, and law.

## METHODOLOGY

The purpose of the study was to find out the comparative analysis of aggression and self confidence among college men volleyball, handball and basketball players. To achieve this purpose of the study ninety college men students were selected. To achieve this purpose of the study, ninety college men students of inter-collegiate sports meets were tested. They were divided into three equal groups of each thirty subjects. They were randomly selected. Their age was between 18 and 22 years. To facilitate the study thirty college men volleyball players, thirty college men handball players and thirty college men basketball players were selected. They were randomly selected. The requirements for the collection of data through administration of questionnaires were explained to the subjects so as to avoid any ambiguity of the effort required on their part and prior to the administration of the questionnaire. All the subjects participated in this study voluntarily and responded to the questionnaire without bias. Independent randomized research design was used for this study, as the subjects were selected randomly from three independent groups college men volleyball, handball and basketball players. The criterion variable aggression was measured through the questionnaire 'Aggression Scale' advocated by Guru Pyari Mathur and Raj Kumari Bhatnagar, procured from Rakhi Prakashan, Agra, Self confidence was measured by Basavanna (1971). The collected data were subjected to statistical treatment to find out any differences between the groups in the

dependent variables selected. The data collected from the subjects were treated statistically. Analysis of variance (ANOVA) was used to find out the significant difference if any, among the groups on each selected criterion variables separately. In all the cases .05 level of confidence was fixed to test the significance, which was considered as appropriate.

## RESEARCH DESIGN

Independent randomized research design was used for this study, as the subjects were selected randomly from three independent groups college men volleyball, handball and basketball players. The responses obtained through standardized questionnaire to measure all the three groups, namely, aggression and self confidence were collected. The collected data were subjected to statistical treatment to find out any differences between the groups in the dependent variables selected.

## STATISTICAL ANALYSIS

The data was collected from three groups at prior to and after completion of the training period on selected criterion variables were statistically examined for significant difference if any, by applying analysis of variance (ANOVA) was used to find out the differences between basketball, volleyball and football players on the selected psychological variables. The Scheffe's post hoc test was also applied to know the significant difference between groups. The obtained 'F' ratio was also significant. In all cases .05 level of confidence was utilized to test the significance.

## AGGRESSION

The analysis of variance of the data obtained scores on men volleyball, handball and basketball players on psychological variable have been presented in Table I shows the results obtained.

TABLE I

### COMPUTATION ANALYSIS OF VARIANCE OF THE DATA OBTAINED SCORES ON MEN VOLLEYBALL, HANDBALL AND BASKETBALL PLAYERS AGGRESSION (Scores in Numbers)

MEAN VALUES FOR			Source of Variance	Sum of Squares	Df	Mean Square	F
Volley-ball	Hand-ball	Basket-ball					
177.57	181.07	195.20	Between	5229.36	2	2614.68	4.45*
			Within	51156.03	87	588.00	

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 56 and 2 and 46 are 3.15 and 3.15 respectively).

Table I shows the obtained means in aggression for volleyball players was 177.57, handball players was 181.07 and basketball players was 195.20. The obtained F value on the scores 4.45 was greater than the required F value required 3.10, to be significant at 0.05 level This proved that significant differences existed among

volleyball, handball and basketball players in aggression. Since significant differences were recorded, the results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table II-A.

TABLE II –A

**THE SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON AGGRESSION (Scores in Numbers)**

MEANS			Mean Difference	Required . C I
Volleyball	Handball	Basketball		
177.57	181.07		3.50	15.59
177.57		195.20	17.63*	15.59
	181.07	195.20	14.13	15.59

\*Significant at .05 level of confidence.

Table II-A shows the comparisons between volleyball, handball and basketball players in aggression. The differences between volleyball and basketball players was significant and other comparisons were not significant.

**SELF CONFIDENCE**

The analysis of variance of the data obtained scores on men volleyball, handball and basketball players on psychological variable have been presented in Table III shows the results obtained.

TABLE III

**COMPUTATION ANALYSIS OF VARIANCE OF THE DATA OBTAINED SCORES ON MEN VOLLEYBALL, HANDBALL AND BASKETBALL PLAYERS  
SELF CONFIDENCE (Scores in Numbers)**

MEAN VALUES FOR			Source of Variance	Sum of Squares	Df	Mean Square	F
Volley-ball	Hand-ball	Basket-ball					
47.50	53.03	44.83	Between	1049.69	2	524.84	6.81*
			Within	6706.63	87	77.09	

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 56 and 2 and 46 are 3.15 and 3.15 respectively).

Table III shows the obtained means in self confidence for volleyball players was 47.50, handball players was 53.03 and basketball players was 44.83. The

obtained F value on the scores 6.81 was greater than the required F value required 3.10, to be significant at 0.05 level This proved that significant differences existed

among volleyball, handball and basketball players in self confidence. Since significant differences were recorded, the results were subjected to post hoc analysis using

Scheffe's Confidence Interval test. The results were presented in Table IV-A.

**TABLE IV –A**

**THE SCHEFFE'S CONFIDENCE INTERVAL TEST SCORES ON  
SELF CONFIDENCE (Scores in Numbers)**

MEANS			Mean Difference	Required . C I
Volleyball	Handball	Basketball		
47.50	53.03		5.53	5.64
47.50		44.83	2.67	5.64
	53.03	44.83	8.20*	5.64

\*Significant at .05 level of confidence.

Table IV-A shows the comparisons between volleyball, handball and basketball players in self confidence. The differences between handball and basketball players was significant and other comparisons were not significant.

### CONCLUSIONS

Within the limitations and delimitations of this study, the following conclusions are drawn.

1. It was concluded that there was significant differences among volleyball, handball and basketball players in aggression.
2. It was concluded that the significant difference was due to the differences between volleyball and basketball players.
3. It was concluded that there was significant difference among volleyball, handball and basketball players in self confidence.
4. It was concluded that the difference was due to the significant difference between handball and basketball players in self confidence.

### REFERENCES

1. Alderman, R.B (1974). Psychological Behaviour in Sports, Philadelphia: W.B.Saunders company, P. 135.
2. Ayajit Singh, (1996) Sports Psychology, Delhi : Friends Publications, P. 16.
3. Brayant J. Crathy, (1980\_ Psychology in contemporary Sport 3<sup>rd</sup> Ed; Englewood Cliffs, N.J: Prentice Hall, Inc...
4. Bushman BJ, Wells GL, (1998) "Trait aggressiveness and hockey penalties: predicting hot tempers on the ice", Journal of Applied Psychology, Dec;83(6) PP. 969-74.
5. Cox, R.H. (1995) "Relationship between selected Volleyball skill components and Team performance of Men's North West AA Volleyball Team", Research Quarterly 45, PP. 441-46.
6. Kirker B, Tenenbaum G, Mattson J., (2000) "An investigation of the dynamics of aggression: direct observations in ice hockey and basketball", Research Quarterly, Dec;71(4), PP. 373-86.
7. Lenzi A, Bianco I, Milazzo V, Placidi GF, Castrogiovanni P, Becherini D., (1997). "Comparison of aggressive behavior between men and women in sport", Perceptual Motor Skills, Feb;84(1), PP 139-45.
8. McCarthy JF, Kelly BR, (1978) "Aggression, performance variables, and anger self-report in ice hockey players", Journal of Psychology, May;99 (1st Half) PP. 97-101.
9. Moras G, et.al. (2008), "A comparative study between serve mode and speed and its effectiveness in a high-level volleyball tournament.", J Sports Med Phys Fitness. Mar;48(1):PP.31-6.
10. Robertson S., (2003) "If I let a goal in, I'll get beat up': contradictions in masculinity, sport and health", Health Education Research;18(6), PP. 706-16.
11. Sane J. (1998), "Comparison of maxillofacial and dental injuries in four contact team sports: American football, bandy, basketball, and handball.", Am J Sports Med. Nov-Dec;16(6):PP.647-51.

12. Sivaramakrishnan,S.(1994) “Sports Achievements Motivation, Self Concept and Anxiety differentials among Indian Men and Women Basketball and Volleyball Players to SAF Games”. **Journal of Physical Education and Sports Sciences**, Publication and Information Unit, Sports Authority of India, 41 (July),P..138.
13. Skordilis EK, et.al. (2006), “Comparison of sport achievement orientation of male wheelchair basketball athletes with congenital and acquired disabilities.”, **Percept Mot Skills**. Dec;103(3):PP.726-32.