

# A comparative study of adjustment and aggression among combat and non-combat female players in Dehradun District, Uttarakhand .

Mrs. Geeta Deori - Research Scholar/Physical Education Teacher, Sharada Mandir, Banasthali Vidyapeeth, Rajasthan

Dr. Prahlad Kumar Sharma, Assistant Professor, Department of Physical Education, Banasthali Vidyapeeth, Rajasthan.

## Summary:

A comparative study was conducted to find out the difference between combat and non combat female players in their aggression and adjustment levels. The sample comprised of six hundred female players from Dehradun district of Uttarakhand. Combat female players (N=300) and non combat female players (N=300) participants. Dr. G.P. Mathur and Dr. R.K. Bhatnagar (2004) (Questionnaire) and Bell's Adjustment Inventory (Student Form) Dr. R.K. Ojha (2006) were used for the present research to assess the level of aggression and adjustment among female players respectively. It was hypothesized that combat and non combat female players will not differ in their aggression and adjustment levels. The results of the 'Z' test ( $Z=1.8139$ , .01) reject the null hypothesis and state that aggression is different among combat and non combat female players. In terms of adjustment (family, health, social and emotional), the results show an insignificant difference between combat and non-combat female athletes ( $Z= -0.245$ , -0.36, 0.27, 0.390, .01). Thus, the null hypothesis is supported in terms of adjustment outcome.

**Keywords:** aggression and adjustment, combat and non combat sports.

## Introduction:

The term 'aggression' has a plethora of meanings, ranging from a direct response that delivers harmful stimuli to another organism to an internal state such as a personality trait (Hind, 1974). A broad definition of aggression would include all self-assertive and well-known types of behavior: "Aggression is the entire spectrum of assertive, intrusive, and attacking behavior"; (Daniels, Gilula, & Ochberg, 1970). In stricto sensu, aggression is used to define any manifest behavior intended to inflict an adverse effect on a target either a personal injury - this need not be physical damage; it may be psychological damage, such as verbal hostility, devaluation or degradation-, or destruction of property. For Berkowitz (1962), "aggression serves only to injure; the intention to be potentially harmful would be its essential aspect". Bandura (1973) suggests that it would be more accurate to distinguish aggressive actions in terms of their functional value, and to recognize that the infliction of suffering is, at most, a secondary motive of aggression; the aggressor, in hurting the victim, produces a variety of desired consequences that cannot be achieved otherwise; for example, status-conferring value, to gain control over other people, to secure resources, and to force changes in social behavior. Bandura characterizes 'aggression' as a socially harmful and destructive behavior defined as aggressive based on a variety of factors, some of which reside in the performer and others in the evaluator.

The concept of adjustment is given by Darwin with the concept of adapting to our conditions. Ecologists use the term adjustment for the changing conditions of interpersonal relationships in society. For example, for some adjustment may not be happiness and freedom from personal problems. For others, it means unhappiness in conforming to the demands and expectations of the group.

Adjustment can also be defined as the interaction of an individual with his surroundings, each individual constantly strives to meet his needs in order to reach his goals. Adjustment involves the harmonization of personnel and environmental demands, which may be external or internal. Adjustment is dynamic rather than static in quality. As

change occurs our environment also changes and so does our relationship with the environment. Sometimes the efforts to do justice to some spheres of life may seem minimal; sometime they may be of heroic proportions. Weather minimal or heroic, the efforts never end. An individual's adjustment can be expected to change from one situation to another and it can also be expected that a particular situation may change over a period of time. Adjustment is a two-way process; we influence our environment and are also influenced by it.

### Objective of the Study:

The objective of the study was to compare the aggregation and adjustment ability among combat and non combat female sportspersons in Dehradun district of Uttarakhand.

### Hypothesis:

Null hypothesis: There was no difference in aggregation and adjustment ability of combat female sportspersons participating in combat and non combat.

### Methodology:

All sportspersons studying in H.N.B Garhwali University (Dehradun) who are professionally or commercially engaged in any combat and non combat sports were considered as the population of the study. The selected 600 sportspersons were classified into different categories namely combat and non combat sports. Combat sports (N=300) and non combat sports (N=300) as the sample of the study. The appreciation of students was assessed by Akram Akta scale developed and standardized by Dr. G.P. Mathur and Dr. R.K. Bhatnagar (2004) and I Dr. R.K. Bhatnagar (2006). Hourly Adjustment Inventory (student form) by Ojha was administered to collect the data.

### Results:

In this study, Z-test was applied to test the significance of between-group differences. Also, the data was represented in a diagram wherever possible and necessary.

### Aggression:

Table No. 1

	<b>Combat Games</b>	<b>Non-Combat Games</b>
<b>Mean</b>	1.850000	1.756667
<b>Variance</b>	0.4155518	0.3787179
<b>Observations</b>	300	300
<b>Hypothesized mean difference</b>	0	
<b>Z</b>	1.8139	
<b>P(Z&lt;=z) one tail</b>	0.03485	
<b>z Critical one tail</b>	1.644854	
<b>P(Z&lt;=z) two tail</b>	0.06969	
<b>z Critical two tail</b>	1.959964	

Graph representing Z-test for aggression between combat and non-combat players.

### Interpretation of Data:

The 'Z' score table indicates a negative score of 1.8139, indicating that the raw score is above the average, mean. Since the p-value is less than the alpha level, there is a difference between the aggregation of dialectic and non-dialectical women. We reject the null hypothesis that combat and non-combat sports show different aggression between players.

Graphical representation of aggression between combat and non-combat players.

### Adjustment:

The instrument of adjustment is divided into four components called family adjustment, health adjustment, social adjustment, and emotional adjustment. The table given below expresses the factors independently rather than collectively.

#### a) Family Adjustment Table No. - 2

The table representing the Z-test for family adjustment between combat and non-combat female players.

	<b>Combat Games</b>	<b>Non-Combat Games</b>
<b>Mean</b>	3.59	3.57
<b>Variance</b>	0.9182943	1.075351
<b>Observations</b>	300	300
<b>Hypothesized mean difference</b>	0	
<b>Z</b>	0.24534	
<b>P(Z&lt;=z) one tail</b>	0.4031	
<b>z Critical one tail</b>	1.644854	
<b>P(Z&lt;=z) two tail</b>	0.8062	
<b>z Critical two tail</b>	1.959964	

### Interpretation of Data:

The 'Z' score table indicates that the positive score of 0.24534 indicates that the raw score is above the average. Since the p-value is greater than alpha, there is no difference in family adjustment between dual and non-duel players. We accept the position of the accepted hypothesis that family adjustment is the same between combat and non-combat players.

**Graph No. -2**

Graphical representation of family adjustment among combat and non combat female players

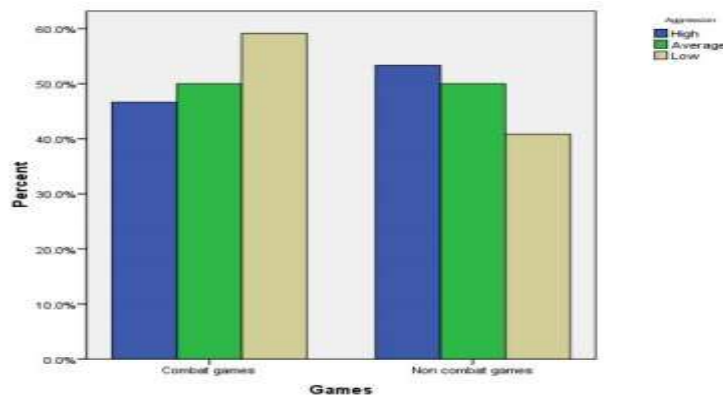
**b) Health adjustment Table No. -3**

Table representing Z-test for health adjustment among combat and non combat female players.

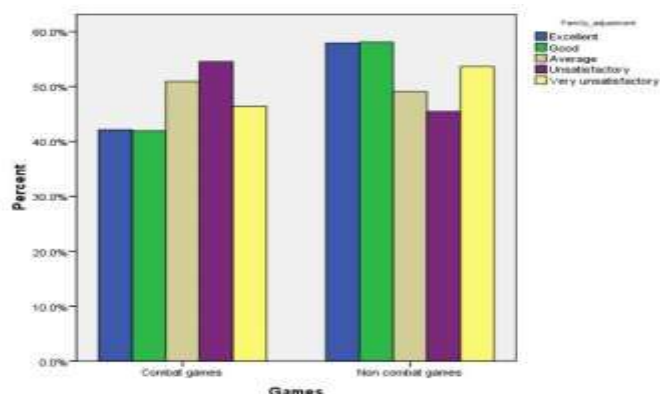
	Combat Games	Non-Combat Games
Mean	3.663333	3.693333
Variance	0.9264103	1.056143
Observations	300	300
Hypothesized mean difference	0	
Z	-0.36904	
P(Z<=z) one tail	0.3561	
z Critical one tail	1.644854	
P(Z<=z) two tail	0.7121	
z Critical two tail	1.959964	

**Interpretation of Data:**

The 'Z' score table indicates a negative score of 1.36904, it indicates that the raw score is below average, mean. As the 'P' - value turned out to be greater than the alpha level to indicate that there is no difference in health adjustment among combat and non combat players, we accept the condition of the null hypothesis that the health adjustment ability among combat and non combat game players is the same.

**Graph No.-3**

Graphical representation of health adjustment among combat and non combat female players



## c) Social adjustment

Table No.-4

Table representing the 'Z' test for social adjustment among combat and non combat female players

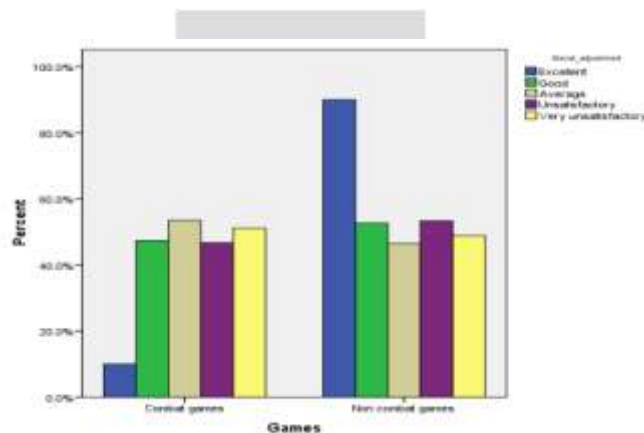
	Combat Games	Non-Combat Games
Mean	3.69	3.67
Variance	0.7430435	0.8907358
Observations	300	300
Hypothesized mean difference	0	
Z	0.27102	
P(Z<=z) one tail	0.3932	
z Critical one tail	1.644854	
P(Z<=z) two tail	0.7864	
z Critical two tail	1.959964	

## Interpretation of Z:

The 'Z' score table indicates that the negative score of 0.27102 indicates that the raw score is above average. As the p-value turned out to be greater than the alpha level, so that there is no difference in social adjustment between combat and non combat players. We accept the condition of the null hypothesis that social adjustment is the same between combat and non combat sports players.

Graph No. -4

Graphical representation of social adjustment among combat and non combat female players



## d) Emotional adjustment

Table No. 5

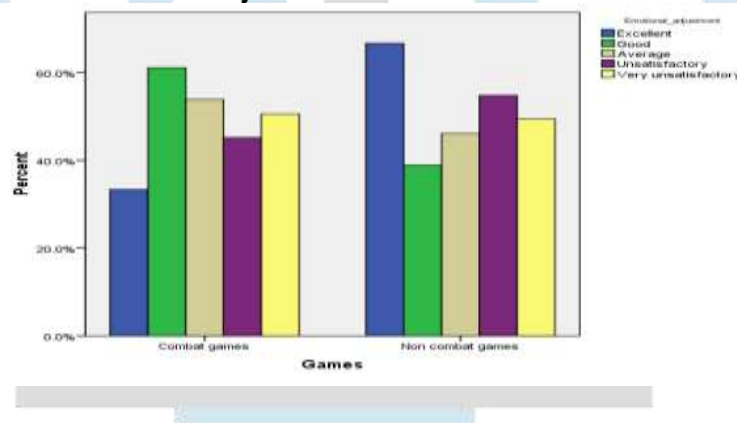
	Combat Games	Non-Combat Games
Mean	3.816667	3.840000
Variance	0.9462096	0.9910368

<b>Observations</b>	300	300
<b>Hypothesized mean difference</b>	0	
<b>Z</b>	-0.29037	
<b>P(Z&lt;=z) one tail</b>	0.3858	
<b>z Critical one tail</b>	1.644854	
<b>P(Z&lt;=z) two tail</b>	0.7715	
<b>z Critical two tail</b>	1.959964	

The table representing the 'Z' test for emotional adjustment among combat and non combat female players indicates that the negative score of -0.29037 indicates that the raw score is below the mean, average. As the value turned out to be greater than the alpha level, so that there is no difference in emotional adjustment among combat and non combat players. We accept the condition of the Sunni hypothesis that emotional adjustment among combat and non combat players is the same.

**Graph No. - 5**

**Graphical representation of emotional adjustment between combat and non combat female players**



### Findings Discussion of the Study:

It was hypothesized that there will be no difference between combat and non combat female players in terms of aggression. As per the findings from the statistical analysis, the data collected shows that there is a significant difference in aggression between combat and non combat female players. So that the null hypothesis is rejected and clearly establishes the position that combat has a level of aggression which is different from non combat players.

It was hypothesized that there will be no difference between combat and non combat female players in terms of adjustment, all the four types of adjustment have been taken into consideration individually i.e. social adjustment, family adjustment, health adjustment, and emotional adjustment.

1. According to the findings of statistical analysis, the data collected showed that there was a significant difference in social adjustment between combat female players and non-combat female players. So that the null hypothesis can be accepted and it can be clearly stated that the social adjustment ability is not different between combat and non-combat female players.

2. According to the findings of statistical analysis, the data collected showed that there was a negligible difference in family adjustment between combat and non-combat female players. So that the hypothesis can be accepted and it can be clearly stated that the ability to adjustment to family was not different between combat and non-combat players, it is the same.



3. According to the findings of statistical analysis, the data collected showed that there was a negligible difference in health adjustment between combat and non-combat female players. So that the hypothesis can be accepted and it can be clearly stated that the ability to adjust to health is not different between combat and non-combat players.

4. According to the findings of the statistical analysis, the data collected shows that there is a significant difference in emotional adjustment between combat and non-combat female players. So that the null hypothesis can be accepted and it can be clearly stated that the ability of emotional adjustment is not different between combat and non-combat female players.

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