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A COMPARATIVE ANALYSIS OF AGGRESSION AMONG MALE AND FEMALE ATHLETES AND ITS IMPACT ON SPORTS PERFORMANCE IN VOLLEYBALL AT COLLEGE LEVEL

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ABSTRACT

Human aggression has a significant effect in sports performance. This study focuses on a comparative analysis of aggression among male and female athletes and its impact on sports performance in volleyball at college level. This study examines the influence of physical aggression, emotional aggression, anger, and hostility of volleyball on sports performance. A sample of 200 male and female players their age 15 to 21 years were selected from the colleges of district Kasur through Stratified sampling technique. Descriptive survey research methods with cross sectional approach were adopted for the study in hand. Two types of questionnaire were used to data collection to measure aggression level and sports performance level. To compare the aggression between male and female athletes' test was applied as a statistical tool, the level of significance was set as 0.05. The findings of the present study demonstrated that there was no significant difference in aggression among male and female athletes. Based on the interpretation, the t-value for aggression is 4.76, and the p-value is 0.744. Since the p-value is also greater than 0.05, there is no significant difference in aggression scores between male and female athletes.

Keywords: Aggression, Sports performance, College level, volleyball, Gender differences.

Introduction

Aggression in sports refers to behavior exhibited by athletes that is forceful, assertive, and often competitive in nature. This behavior can manifest physically, verbally, or emotionally and is typically aims at gaining an advantage over opponents, asserting dominance, or achieving specific performance goals.

In psychology, aggression refers to behavior that can inflict physical or psychological harm on oneself, others, or objects in the surroundings. This behavior is primarily aims at causing harm to another person, either physically or mentally. Research suggests that there is a positive correlation between aggression and sports performance up to a certain point. However, beyond this threshold, increasing aggression can actually decrease performance rather than enhance it. Excessive aggression is often link to emotional imbalance and outbursts of anger, which can impair one's cognitive processes and ability to concentrate (Dattatraya Mahadeo Birajda, 2021).

Additionally, research has pointed to differences in how male and female athletes respond to situational provocations. A 2024 study found that while male athletes may show more immediate and visible signs of aggression when provoked during competition, female athletes often engage in more complex emotional regulation, where their aggression might manifest through mental toughness and determination rather than physical aggression (Baker & Williams, 2024). This growing body of literature highlights the importance of gender as a key factor in understanding how aggression affects performance in sports like volleyball, suggesting

that a nuanced, context-specific approach is essential for fostering healthy competition and performance development in both male and female athletes.

Sports psychology focuses on examining how the mind influences physical activity and athletic performance. According to the American Psychological Association, it encompasses the relationships between psychology and sports performance, including the psychological components of achieving peak athletic performance, the mental health and well-being of athletes, coaches, and sports organizations, and the interplay between physical and psychological functioning (Towseef Ahmad Taily, 2023).

Specialized literature distinguishes between instrumental aggression and hostile aggression in the context of sports psychology. Instrumental aggression is characterized by its deliberate and rational nature, aimed at achieving specific objectives within the framework of the game or sport. Athletes often employ instrumental aggression strategically to gain a competitive advantage, and it operates within the accepted rules and norms of the sport. On the other hand, hostile aggression involves the primary intent to harm or injure another person. Unlike instrumental aggression, which is goal-oriented and regulated, hostile aggression is driven by hostility and a desire to inflict harm beyond what is permissible in the sport's rules. This type of aggression is considered antisocial and can lead to disciplinary actions and negative consequences for both the athlete and the sport environment (Radu Predoiu et al., 2022).

Exercise can positively predict mental health, which is consistent with previous studies and physical activity can improve general health and happiness. Current study shows that the yoga and sports exercise plays a role to reduce the stress and aggression level of students. (Soniha Aslam, Noman Ahmed, Javed Ali Memon, 2023).

Aggressive behavior can be categorized based on the primary goal or reward sought through the action. Hostile aggression occurs when the main objective is to cause harm to another person for the sake of it. In contrast, instrumental aggression refers to instances where the primary aim is to attain a specific goal, with aggression being a means to that end. For example, an athlete may use aggression to injure an opponent, but the main goal is to win the competition, earn recognition from the coach, or achieve similar objectives (Gershon Tenenbaum, 2024).

Aggression is an inherent aspect of human behavior and is essential for individuals striving for higher achievements. The quest for supremacy, dominance, and excellence in sports often involves aggression. This aggression can benefit an athlete's performance by motivating them to exert more effort for the team's success. However, athletes must learn to manage and control their aggression to remain calm and perform optimally. An appropriate level of aggression, within the rules of the game, can enhance skills

and effort. Conversely, excessively high or low levels of aggression can impede and diminish sports performance (Urvesh Sharma, 2022).

Problem Statement

On a basis sports aggression can be categorized as instrumental and hostile (Silva, 1983). Instrumental aggression is aimed towards the achievement of a goal, whereas hostile aggression is aimed towards harming the opponent. For instance, in volleyball aggression, the player is focused on tackling the ball rather than injuring the opposing team's player. This aggressive behavior might originate as a reaction to being provoked, or even without aggravation. This study aims to investigate the comparative analysis of aggression among male and female athletes and its impact on sports performance in volleyball at college level, and explore whether there are any differences in the relationship between aggression and sports performance between genders.

Objectives

1- Compare aggression level of male and female volleyball player's performance.

Review of Literature

Aggression is a complex and multifaceted construct that has been studied in various contexts, including sports. In collegiate volleyball, understanding the impact of aggression on sports performance is crucial for optimizing team and individual success. This literature review aims to provide a comprehensive analysis of the existing research on aggression and its effects on sports performance in collegiate volleyball.

Aggression, in its broadest sense, refers to behavior or a tendency toward behavior that is forceful, hostile, or attacking. It can occur either with or without provocation. In more specific terms, commonly used in psychology and other social and behavioral sciences, aggression involves the intention to cause harm. It differs from assertiveness, though the terms are often used interchangeably by laypeople, such as describing an "aggressive salesperson." Aggression among humans is as old as humanity itself. From the biblical account of Cain's murder of Abel to historical tribal wars, ethnic and religious conflicts, and worldwide battles, humans have consistently engaged in aggressive behaviors. In sports, aggression can have a positive influence on performance outcomes. Aggressive behavior might harm the opposition either physically or psychologically, weakening their resources. It can also enhance a team's performance by improving the group's processes. Aggressive behavior is notably visible in sports (Potop Valadimir, 2021).

Aggression has been defined in various ways, largely because what is considered aggressive behavior can vary across different societies and cultures. The causes of aggression are also interpreted differently. The occurrence of aggression in various aspects of life has led to ongoing research on the topic. Aggression

is a type of behavior aimed at causing harm, injury, or suffering to oneself or others. It is often linked with traits such as psychoticism, social distancing, antisocial behavior, and a lack of empathy toward others. Aggression can be categorized into two types: active and passive. Active aggression involves direct actions, while passive aggression is characterized by inaction but with the intent to cause harm (Ahmet Veziroglu, 2020)

Aggressive behavior often comes with negative emotions like fear, frustration, guilt, and anger. It can manifest physically (e.g., tackling someone) or verbally (e.g., trash talking) and is classified as either hostile or instrumental. Hostile aggression aims to harm someone, while instrumental aggression is directing towards achieving a specific goal and is generally more socially acceptable than hostile aggression (Luca Bovolon et al., 2023).

Many female athletes feel that sports offer them a chance to challenge traditional gender norms, especially since cultural expectations often dictate that women should be gentle and nurturing. However, there is a fine line between assertiveness and being perceived as "masculine," which can be detrimental to female athletes. In contrast, men are often expected to display aggressive behavior in sports, and if they do not meet these expectations, they may face ridicule and be labeled as "soft" (Kalana Pinnagodagei & T.P Liyanage, 2024)

Buss and Perry (1992) proposed a theory that categorizes aggression into four dimensions and developed an instrument to measure them. The four dimensions are physical aggression, verbal aggression, anger, and hostility. The first two dimensions represent instrumental components, while anger reflects physiological activation, and hostility refers to feelings of opposition and injustice.

Materials and Methods

The present research was quantitative study in which sources of aggression in sports performance had taken into consideration among male and female players.

Plan of Work and Methodology Adopted

Through the stratified random sampling technique was use. Two Hundred (200) target populations were select. The sample was select from the colleges of District kasur, which is the city of Punjab province.

Parameters/Variables to be Studied

Independent Variable: Aggression

Dependent Variable: Performance

Methods of Data Collection

In this research, survey methodology was use. To measure relationship between aggression and sports performance the quantitative research method was used to find the results of this study by using survey technique. The studies were dividing into two parts. The first part of study deal with sources of aggression second part deal with performance. Aggression questionnaire (Buss

&Perry, 1992) of Five-Likert scale was adopted as a research tool. The Aggression scale consists of four factors, Physical Aggression (PA), Verbal Aggression (VA), Anger (A) and Hostility (H). The total score for Aggression is the sum of the factor scores (Buss, A.H., & Perry1992) and the performance scale were used Wolanin, A.T. (2005).

Results and Discussion

This chapter provides an analysis of the data and discusses the findings in relation to the study's objectives. The results focus on two primary scales: one measuring aggression and the other evaluating sports performance. The participants were volleyball players, and demographic details such as age, gender, locality, and level of sports were records. The main objective of the study was to examine the differences in approach between male and female athletes at the college level. Data was collects from several colleges in District Kasur.

Results

Table 4.1: Reliability Assessment of Aggression and Sports Performance scales

Scale	No. of items	Cronbach's Alpha
Aggression Scale	27	0.720
Physical Aggression	9	0.485
Anger	6	0.560
Verbal Aggression	5	0.109
Hostility	7	0.443
Performance Scale	11	0.636
Over all	38	0.670

Note: Table 1 presents the reliability analysis of the relationship between aggression and sports performance in male and female college athletes. The aggression and sports performance scales show Cronbach's alpha values of 0.720 and 0.636, respectively, indicating good reliability for both scales.

The aggression scale, with a Cronbach's alpha of 0.720, is further divide into four sub-scales: Physical Aggression ($\alpha = 0.485$), Anger ($\alpha = 0.560$), Verbal Aggression ($\alpha = 0.109$), and Hostility ($\alpha = 0.443$). These sub-scales exhibit varying levels of reliability, with Verbal Aggression showing the lowest alpha value, suggesting it may require further refinement.

The overall reliability of the scales, with a combined Cronbach's alpha of 0.670, is consider acceptable, confirming the reliability of the data collected in this study.

Table 4.2: Normality Check of Aggression and Sports Performance Scale (N=200)

Scales	Shapiro-Wilk		
	Statistic	df	Sig.
Aggression Scale	0.976	200	0.002
Sports Performance	0.937	200	<.001

Note: The Shapiro-Wilk test was used for analyzing the normality of Aggression and Sports Performance scale. Shapiro Wilk test is significant value of aggression scale, which is 0.976 and (SP) scale is 0.937, which is greater than 0.05 that shows the data is normal.

Table 4.5: Mean Comparison of Male and Female Players on Aggression and Sports Performance Scale. (N=200)

Variables	Male		Female		t-value	p-value
	Means	S.D	Means	S.D		
Sports Performance	43.15	4.74	42.73	5.45	.581	.365
Aggression	84.35	11.90	76.85	10.30	4.76	.744

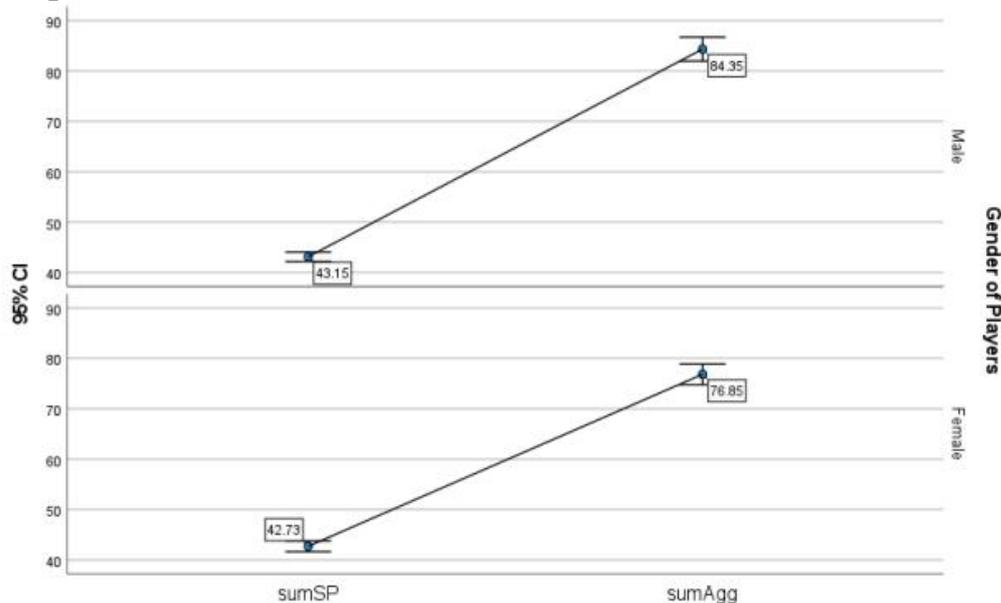
Sports-Performance

The mean score for male athletes is 43.15 with a standard deviation of 4.74, while for female athletes, the mean is 42.73 with a standard deviation of 5.45. The t-value for sports performance is 0.581, and the p-value is 0.365. Since the p-value is greater than 0.05, there is no significant difference between male and female athletes in terms of sports performance.

Aggression

The mean aggression score for male athletes is 84.35 with a standard deviation of 11.90, while for female athletes, the mean is 76.85 with a standard deviation of 10.30. The t-value for aggression is 4.76, and the p-value is 0.744. Since the p-value is also greater than 0.05, there is no significant difference in aggression scores between male and female athletes.

Graph



Discussion & Conclusion

The study provides valuable insights into the relationship between aggression and sports performance among male and female volleyball players at the college level. While the aggression scale and sports performance scale has found to be reliable, the results show that aggression, particularly verbal aggression, has a weak negative correlation with sports performance, with significant results only for female athletes. However, gender differences in aggression and sports performance were not significant in this sample.

The lack of significant findings between male and female athletes in terms of both sports performance and aggression suggests that these factors may not vary significantly based on gender at the college level in volleyball. The weak correlations and lack of statistical significance imply that further research with a larger sample size and additional variables (such as psychological traits, training experience, or competition level) may be necessary better understand the role of aggression in sports performance.

Another important aspect of coaching is taking care of the players. Coaches deliberately plan discussions on specific topics and provide opportunities for all their athletes to participate for reduce the aggression. They actively share information about themselves in these discussions and by informing their players and enhance their performance. (Hummira Farah, Shahzaman Khan, Sharin Adeel, 2021).

Mean Comparison of aggression and sports performance between male and female athletes revealed no significant differences. Male athletes had a mean aggression score of 84.35, while female scored 76.85, and these differences were not statistically significant ($p = 0.744$). Similarly, the t-value for sports performance (0.581) and aggression (4.76) indicated no meaningful

difference between male and female athletes' performance and aggression levels. Both male and female athletes displayed similar sports performance scores, with only a slight difference in means (43.15 for males and 42.73 for females), but again, this difference was not statistically significant ($p = 0.365$).

In conclusion, while aggression is an important psychological factor in sports, its relationship with performance appears to be more complex than initially hypothesized. Both male and female college-level volleyball players in this study exhibited similar aggression levels and performance outcomes, suggesting that aggression may not be the defining factor in sports performance at this level. Further research is necessary to explore other factors that could more significantly influence athlete performance.

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