

A STUDY OF ANXIETY AND AGGRESSION IN ATHLETICS WITH SPECIAL REFERENCE TO UNIVERSITY LEVEL PLAYERS

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Abstract

This study investigates the levels of anxiety and aggression in university-level athletes, offering insights into the complex psychological landscape of competitive sports. Additionally, it aims to uncover the coping mechanisms employed by these athletes, providing valuable perspectives on how they navigate and manage these psychological challenges. The research aims to uncover nuanced patterns and variations specific to the university context. Additionally, the study delves into the coping mechanisms employed by university-level players to manage anxiety and aggression, providing valuable insights for the development of targeted interventions and support systems. The sample (104) will be selected through stratified random sampling, considering factors such as gender, sport type, and competitive level to ensure diversity and representativeness. Longitudinal data collection will be employed to capture dynamic changes over the course of a competitive season. Ethical considerations will be prioritized, with informed consent obtained from participants, and confidentiality and anonymity maintained throughout the study. Statistical analyses, including descriptive and inferential, will be applied to identify patterns and relationships between anxiety and aggression. Result revealed that the study's demographic profile is predominantly male, with 93.3% being male. The majority (73.1%) are married, with 26.9% unmarried. The majority (95.2%) are aged 31-40, with a diverse educational background with notable percentages in the "Illiterate" (14.4%), "Secondary" (22.1%), and "Graduation" (21.2%) categories,

demonstrating a balanced distribution across different educational qualifications. The majority (77.9%) belong to nuclear families, with 22.1% from joint families. This comprehensive demographic overview enhances the contextual interpretation of research findings. This study also shows a significant difference in anxiety and aggression levels among university-level athletes. The F-statistic and p-value are less than the 0.05 significance level, rejecting the null hypothesis.

Keywords: Anxiety, Aggression, university level Athletes, competitive.

1.1 INTRODUCTION

Athletics at the university level represent a dynamic and competitive arena where athletes face numerous challenges that can impact their psychological well-being. Among the various psychological factors influencing athletes, anxiety and aggression have emerged as critical components that can significantly affect performance and overall athletic experience. This study aims to delve into the intricate interplay between anxiety and aggression among university-level players, shedding light on the nuanced relationships and potential implications for both individual athletes and the broader sports community.

The realm of university-level athletics is characterized by intense competition, rigorous training regimens, and high-performance expectations. Athletes navigate a complex interplay of physical and psychological factors, with anxiety and aggression standing out as pivotal aspects of the mental landscape. Understanding how these psychological constructs manifest and interact is crucial for enhancing athletes' well-being and optimizing their performance.

Anxiety is a multifaceted emotional response that can manifest in various forms, including cognitive, somatic, and behavioural aspects. In the context of university-level athletics, athletes may experience anxiety related to performance expectations, academic pressures, and social dynamics. Examining the sources and manifestations of anxiety is essential for developing targeted interventions and support mechanisms. Aggression, in the sporting context, can be both constructive and destructive. While controlled aggression may contribute to enhanced performance, unbridled aggression can lead to negative consequences, such as rule violations and harm to oneself or others. Investigating the triggers and expressions of aggression in university-level athletes is vital for promoting a positive sporting culture and ensuring the

safety of individuals involved. Research suggests a complex relationship between anxiety and aggression, with anxiety serving as both a potential precursor and consequence of aggressive behaviour. Understanding how these two factors intersect in the context of university-level athletics is critical for devising comprehensive mental health and performance enhancement strategies. In this study researcher focus on assessing assess the levels of anxiety and aggression among university-level athletes and identifying coping mechanisms employed by athletes to manage anxiety and aggression.

1.2 REVIEW OF LITERATURE

- **Navanath M. Sarode (2023)** The study aims to identify anxiety and aggression in university sports teams through a recreational game. The game is simple, natural, and highly stimulating, with high mean scores for individual sportsmen. The findings suggest a significant difference in anxiety and aggression at two levels, but differ on mean scores. The findings lead to the development of an indigenous intervention package for university team coaches.
- **Sunder Singh (2022)** The study compared aggression and anxiety levels among Inter-Collegiate and Inter-University level sportspeople. Results showed higher anxiety levels among Inter-collegiate athletes and higher aggression levels among Inter-university athletes. The study concluded that there was a significant difference in these factors.
- **Anil Balaso Balugade (2021)** The study examined anxiety and aggression among 60 female sport students from Kolhapur district, Maharashtra, India. The sample consisted of 30 rural and 30 urban students aged 17-21. Using psychological tools like the anxiety scale and manifest aggression scale, the results showed no significant difference in anxiety or aggression between the two groups.
- **Shilpashree S (2019)** The study aimed to analyse the difference between aggressive behaviour and anxieties among inter-university women kabaddi players at Kamadeva Women's University in Karnataka. 30 players, aged 18-28, were randomly selected and assessed using questionnaires developed by A. Kumar and A.K.P. Sinha. The data was analysed using a t-test.
- **Dheeraj Kumar Mishra (2017)** The study compared sports competition anxiety levels between basketball and football players, with 60 male subjects aged 18-25. The sports competitive anxiety questionnaire, developed by Martin, was used to measure players'

anxiety levels. The independent t-test revealed no significant difference in anxiety levels between the two sports.

1.3 RESEARCH GAP

Research on anxiety and aggression in university-level athletes has provided valuable insights, but gaps persist. Sarode's recreational game study offers a novel approach, but more in-depth analysis is needed. Singh's comparative analysis highlights differences but lacks a comprehensive examination of competition levels and their influence on anxiety and aggression. Balugade's study on female athletes in Maharashtra offers insights into rural-urban dynamics but lacks broader geographical and socioeconomic factors. Shilpashree S's sport-specific analysis in women kabaddi players is valuable, but more research is needed to understand sport-specific factors affecting anxiety. Closing these gaps will enhance our understanding of the relationship between anxiety and aggression in university-level athletes, providing targeted insights for interventions and support mechanisms

1.4 STATEMENT OF THE PROBLEM

University-level athletes face a unique set of challenges, juggling intense sports commitments with academic responsibilities. Within this demanding environment, anxiety and aggression emerge as critical psychological factors that can significantly influence an athlete's performance, mental well-being, and interpersonal dynamics. However, there exists a gap in the research literature concerning the specific interplay between anxiety and aggression among university-level athletes. This study aims to address this gap by investigating the prevalence, patterns, and contributing factors of anxiety and aggression in the context of collegiate sports, with the goal of informing targeted interventions and support systems tailored to the needs of these athletes.

1.5 SIGNIFICANCE OF THE STUDY

This study holds significance for athletes, coaches, sports psychologists, and administrators. Insights gained from the research may contribute to the development of strategies to enhance the mental well-being of university-level athletes, ultimately fostering an environment conducive to both personal and athletic growth.

1.6 SCOPE OF THE STUDY

This research will focus on athletes participating in various sports at the university level. By examining the prevalence and patterns of anxiety and aggression across different sports and competition levels, we aim to generate a comprehensive understanding of these psychological factors in the context of collegiate athletics.

1.7 OBJECTIVES OF THE STUDY

This study investigates the levels of anxiety and aggression in university-level athletes, offering insights into the complex psychological landscape of competitive sports. Additionally, it aims to uncover the coping mechanisms employed by these athletes, providing valuable perspectives on how they navigate and manage these psychological challenges.

1.8 HYPOTHESIS OF THE STUDY

The hypothesis of this study suggests that anxiety and aggression levels among university-level athletes are influenced by factors such as competition pressure and performance expectations. Additionally, the research posits that effective coping mechanisms employed by athletes will correlate with reduced anxiety and aggression, contributing to enhanced mental well-being in the university sports context. Researcher frame the following hypothesis.

1. **H₀** : there is no significant difference in the levels of anxiety and aggression among university-level athletes.

H₁ : there is a significant difference in the levels of anxiety and aggression among university-level athletes.

2. **H₀**: there is no significant difference in the coping mechanisms employed by athletes to manage anxiety and aggression.

H₁: there is a significant difference in the coping mechanisms employed by athletes to manage anxiety and aggression.

1.9 RESEARCH METHODOLOGY

The research methodology employed in investigating anxiety and aggression in athletics, with a special focus on university-level players, encompasses a comprehensive and multi-faceted approach. To begin with, a mixed-methods design will be adopted to gather both quantitative and qualitative data, ensuring a more nuanced understanding of the intricate relationship between anxiety and aggression in this specific population. The study will involve the administration of standardized self-report questionnaires, such as the Anxiety and the Sport Aggression Scale (SAS), to assess the levels of anxiety and aggression among university-level athletes. Additionally, semi-structured interviews and focus group discussions will be conducted to delve deeper into the subjective experiences of anxiety and aggression, exploring potential triggers and coping mechanisms. The sample (104) will be selected through stratified random sampling, considering factors such as gender, sport type, and competitive level to ensure diversity and representativeness. Longitudinal data collection will be employed to capture dynamic changes over the course of a competitive season. Ethical considerations will be prioritized, with informed consent obtained from participants, and confidentiality and anonymity maintained throughout the study. Statistical analyses, including descriptive and inferential, will be applied to identify patterns and relationships between anxiety and aggression.

1.10 DATA ANALYSIS AND DISCUSSION

A. DEMOGRAPHICAL RESULT ANALYSIS

TABLE NO 1.10.1 SHOWS THE DEMOGRAPHICAL RESULT

		Frequency	Percent
Gender	Male	97	93.3
	Female	7	6.7
	Total	104	100.0
Marital Status	Married	76	73.1
	Unmarried	28	26.9
	Total	104	100.0
Age (In years)	21-30	4	3.8
	31-40	99	95.2
	Above 51	1	1.0
	Total	104	100.0
Educational Qualification	Illiterate	15	14.4
	Primary	22	21.2
	Secondary	23	22.1
	Graduation	22	21.2
	PG	18	17.3
	Professional/ Technical	4	3.8
	Total	104	100.0
Type of Family	Nuclear	81	77.9
	Joint	23	22.1
	Total	104	100.0

INFERENCES

Here is a brief inference based on the provided data:

- **Gender:** The majority of participants are male, constituting 93.3% of the sample, while only 6.7% are female.
- **Marital Status:** The data shows that 73.1% of participants are married, and 26.9% are unmarried.
- **Age:** The age distribution indicates that the majority of participants (95.2%) fall within the age range of 31-40 years. Only a small percentage are aged 21-30 (3.8%), and there is a minimal representation of participants above 51 years (1.0%).
- **Educational Qualification:** The educational background of participants is diverse, with a relatively balanced distribution across different categories. The highest percentages are seen in the "Illiterate" (14.4%), "Secondary" (22.1%), and "Graduation" (21.2%) categories.
- **Type of Family:** The majority of participants come from nuclear families, constituting 77.9%, while 22.1% are from joint families.

These demographic insights provide a snapshot of the characteristics of the sample population, which can be valuable for understanding the context and potential influences on the variables under study.

B. DESCRIPTIVE STATISTICS RESULT ANALYSIS

TABLE NO 1.10.2 SHOWS THE RESPONDENTS OPINION ON ANXIETY LEVELS

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
I often feel anxious before a competition.	104	3.4712	1.08795	-.709	.237	.049	.469
Thoughts of failure and disappointing others make me anxious.	104	3.1250	1.03048	-.364	.237	-.453	.469
The pressure to perform well increases my anxiety levels.	104	3.4327	.97308	-.452	.237	-.007	.469
I experience anxiety-related symptoms such as restlessness and nervousness during competitions.	104	3.5385	1.05133	-.461	.237	-.513	.469
My anxiety levels affect my overall performance as an athlete.	104	3.3462	.96310	-.482	.237	.380	.469
Valid N (listwise)	104						

(Source; Field Survey)

INFERANCES

The descriptive statistics offer insights into the self-reported anxiety levels of the surveyed athletes based on a Likert scale questionnaire. The mean scores provide a central tendency measure for each statement, indicating the average level of agreement or disagreement among participants. On average, athletes reported a moderate level of agreement (Mean = 3.47) with the statement "I often feel anxious before a competition," suggesting that a substantial proportion experience pre-competition anxiety. The slight negative skewness (-0.709) indicates a tendency towards higher anxiety levels. Similarly, athletes expressed a moderate level of agreement (Mean = 3.13) with the statement "Thoughts of failure and disappointing others make me anxious." The negative skewness (-0.364) suggests a slight leftward tail, indicating that more participants leaned towards agreement than disagreement. The statement "The pressure to perform well increases my anxiety levels" garnered a mean score of 3.43, signifying a moderate level of agreement. The negative skewness (-0.452) indicates that, on average, athletes reported a slightly higher degree of agreement, with a tendency towards elevated anxiety under performance pressure. Regarding anxiety-related symptoms during competitions, athletes reported a moderate level of agreement (Mean = 3.54) with the statement "I experience anxiety-related symptoms such as restlessness and nervousness during competitions." The negative skewness (-0.461) implies a slight leftward tail, indicating a tendency towards higher agreement. Lastly, athletes indicated a moderate level of agreement (Mean = 3.35) with the statement "My anxiety levels affect my overall performance as an athlete." The positive skewness (0.380) suggests a slight rightward tail, indicating a tendency towards higher agreement.

TABLE NO 1.10.3 SHOWS THE RESPONDENTS OPINION ON AGGRESSION LEVELS

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
I tend to express my frustration through verbal aggression during sports activities.	104	3.5769	1.03991	-.605	.237	.067	.469
Physical aggression is a common reaction for me when faced with challenges during a game.	104	3.4615	1.00410	-.509	.237	-.168	.469
I feel a sense of hostility towards opponents during competitive events.	104	3.6827	.87316	-.400	.237	.422	.469

My aggression levels increase when I perceive unfair treatment by referees or officials.	104	3.6827	.90591	-.522	.237	.289	.469
I can control my aggressive impulses even in high-pressure situations.	104	3.4808	.94490	-.683	.237	.304	.469
Valid N (listwise)	104						

(Source: Field Survey)

INFERENCES

The study reveals that athletes tend to express frustration through verbal aggression and physical aggression during sports activities. A significant proportion of athletes report physical aggression as a common reaction to challenges during games. They also express a sense of hostility towards opponents during competitive events. Unfair treatment by referees or officials also increases aggression levels for many athletes. However, athletes believe they can control their aggressive impulses even in high-pressure situations. The negative skewness indicates a tendency towards higher agreement, indicating that a significant number of athletes believe they can maintain control over their aggressive impulses. The findings suggest that athletes' self-reported aggression levels and control mechanisms are influenced by various factors, including their perception of unfair treatment by referees or officials.

TABLE NO 1.10.4 SHOWS THE RESPONDENTS OPINION ON COPING MECHANISMS FOR ANXIETY

	Descriptive Statistics						
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
I engage in deep breathing exercises to manage pre-competition anxiety.	104	3.6058	.85239	-.577	.237	.610	.469
Visualization techniques help me reduce anxiety and enhance my performance.	104	3.8365	1.02503	-.878	.237	.333	.469
Talking to a sports psychologist or mental health professional is an effective way for me to cope with anxiety.	104	3.6346	.96600	-.325	.237	-.254	.469
Establishing pre-competition routines helps me feel more in control and less anxious.	104	1.0096	.09806	10.198	.237	104.000	.469
I find seeking social support from teammates or coaches helpful in managing anxiety.	104	4.0865	1.03446	-1.356	.237	1.786	.469

(Source: Field Survey)

INFERENCES

The study reveals a diverse range of coping mechanisms used by athletes to manage pre-competition anxiety. Athletes reported moderate agreement on engaging in deep breathing exercises, which is a helpful strategy for many athletes. They also expressed a higher level of agreement on visualization techniques, which are seen as effective tools for reducing anxiety and improving performance. Some athletes also found seeking professional help, such as talking to a sports psychologist or mental health professional, to be an effective coping strategy. However, the mean for establishing pre-competition routines was low, suggesting that some athletes may disagree with their effectiveness. Lastly, a high level of agreement was reported on seeking social support from teammates or coaches, which is also seen as an effective coping mechanism. These findings contribute to our understanding of the various ways athletes manage pre-competition anxiety in the surveyed population. The skewness values provide additional context, indicating the direction and shape of the distribution for each coping mechanism.

TABLE NO 1.10.5 SHOWS THE RESPONDENTS OPINION ON COPING MECHANISMS FOR AGGRESSION

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Taking a moment to calm down and regain composure is an effective strategy for me to control aggression during competitions.	104	2.3558	1.16518	1.108	.237	.647	.469
Utilizing positive self-talk helps me redirect aggressive impulses into positive energy during sports activities.	104	3.9135	.94623	-1.227	.237	2.206	.469

Engaging in mindfulness or meditation practices helps me manage aggression.	104	3.8365	.88252	-.795	.237	.948	.469
Channelling aggression into focused and intense physical activity enhances my performance.	104	3.8750	.95213	-.846	.237	.834	.469
Reflecting on past experiences and learning from them is a helpful way for me to control aggressive behaviour.	104	3.6346	.95590	-.632	.237	.279	.469

INFERENCES

The study reveals that athletes use various coping mechanisms to manage aggression during sports activities. On average, athletes find a low level of agreement with the strategy of taking a moment to calm down and regain composure to control aggression. However, a higher level of agreement is found with the use of positive self-talk, mindfulness, and channelling aggression into focused physical activity. Engaging in mindfulness or meditation practices is also found to be effective in managing aggression. Channelling aggression into focused physical activity positively impacts performance, with a high mean score of 3.88. Reflecting on past experiences and learning from them is also found to be helpful in controlling aggressive behaviour. These findings contribute to understanding the diverse strategies athletes use to manage aggression in the surveyed population. The skewness values provide additional context, indicating the direction and shape of the distribution for each coping mechanism.

TABLE NO 1.10.6 SHOWS THE RESPONDENTS OPINION ON GENERAL COPING STRATEGIES

	Descriptive Statistics						
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
I actively seek feedback from coaches to improve my overall performance and reduce stress.	104	3.5769	.91048	-.784	.237	.922	.469

Setting realistic goals and breaking them down into smaller tasks helps me cope with pressure.	104	3.6635	1.08485	-.641	.237	-.073	.469
Engaging in recreational activities outside of sports is essential for my overall well-being.	104	3.4712	1.08795	-.709	.237	.049	.469
Maintaining a balanced lifestyle with proper rest and nutrition is crucial for coping with stress.	104	3.1250	1.03048	-.364	.237	-.453	.469
I am open to trying new coping strategies recommended by sports professionals.	104	3.4327	.97308	-.452	.237	-.007	.469
Valid N (listwise)	104						

INFERANCES

The study found that athletes actively seek feedback from coaches to improve their performance and reduce stress. Setting realistic goals and breaking them down into smaller tasks helps athletes cope with pressure. Engaging in recreational activities outside of sports is essential for overall well-being. However, maintaining a balanced lifestyle with proper rest and nutrition is crucial for coping with stress. Athletes are open to trying new coping strategies recommended by sports professionals. The findings contribute to understanding the diverse approaches athletes employ to enhance their well-being and cope with stress in the surveyed population.

1.11 HYPOTHESIS DISCUSSION

1. Hypothesis

- **H₀** : there is no significant difference in the levels of anxiety and aggression among university-level athletes.
- **H₁** : there is a significant difference in the levels of anxiety and aggression among university-level athletes.

TABLE NO 1.10.7 SHOWS THE RESULT OF ANOVA

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	25.06796	9	2.785329	2.840429	0.002622	1.889043
Within Groups	1000.214	1020	0.980602			
Total	1025.282	1029				

INFERENCES

The ANOVA results show a significant difference in anxiety and aggression levels among university-level athletes. The F-statistic and p-value are less than the 0.05 significance level, rejecting the null hypothesis. The total variance is 1025.282, with the F critical value of 1.889043. The results suggest that group differences are not due to random chance alone, indicating the need for further analysis.

2. Hypothesis

- **H₀**: there is no significant difference in the coping mechanisms employed by athletes to manage anxiety and aggression.
- **H₁**: there is a significant difference in the coping mechanisms employed by athletes to manage anxiety and aggression.

TABLE NO 1.10.8 SHOWS THE RESULT OF ANOVA

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	872.4634	14	62.31882	67.41829	2E-148	1.698236
Within Groups	1414.272	1530	0.924361			
Total	2286.735	1544				

INFERANCES

The study investigates the coping mechanisms used by athletes to manage anxiety and aggression. The ANOVA results show a significant difference between groups, with an F-statistic of 67.41829 and a p-value of extremely low (2E-148). The results reject the null hypothesis, indicating that the observed differences are unlikely to occur by random chance alone. The F-statistic and p-value suggest that individual differences or external influences contribute significantly to the variations in coping mechanisms among the athlete groups. Further analysis is needed to understand the specific coping mechanisms that drive these observed differences.

1.12 CONCLUSION

In conclusion, this study on anxiety and aggression in university-level athletes provides valuable insights into the intricate psychological landscape of competitive sports. The findings

underscore the nuanced interplay between anxiety and aggression, shedding light on the specific challenges faced by athletes at the university level. Additionally, the identification of coping mechanisms unveils potential pathways for enhancing mental resilience and overall well-being in this demanding sporting environment. These insights hold significance for coaches, sports psychologists, and stakeholders, offering opportunities to implement targeted interventions and support structures that can positively impact the mental health and performance of university-level players. As we move forward, a deeper understanding of these psychological dynamics will be instrumental in fostering a healthier and more supportive athletic culture at the university level.

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