



## COMPARATIVE STUDY ON ANXIETY AND AGGRESSION BETWEEN INTER-UNIVERSITY HOCKEY PLAYERS OF JIWAJI UNIVERSITY AND LNIPE GWALIOR

**Mr. Vikas Singh**, Research Scholar,  
Department of Physical Education, LNIPE, Gwalior (M.P.)  
**Dr. Brij Kishore Prasad**, Associate Professor  
LNIPE, Gwalior (M.P.)

### Abstract

The study aims to explore the psychological dimensions of anxiety and aggression among male hockey players from two prominent university in Gwalior Madhya Pradesh. A sample of 32 players, aged 18-25, was selected, with equal representation from Jiwaji University, Gwalior (M.P.) and LNIPE Gwalior (M.P.). Standardized questionnaires were used to assess anxiety and aggression levels, and the data were analyzed using independent samples t-tests at a 0.05 significance level. The findings revealed no significant differences in anxiety and aggression levels between players from the two universities. The mean anxiety scores were 18.37 for Jiwaji University players and 18.12 for LNIPE players, with standard deviations of 3.64 and 4.33, respectively. Similarly, aggression levels showed mean scores of 80.18 for Jiwaji University players and 83.43 for LNIPE players, with standard deviations of 16.52 and 12.22, respectively. These results suggest that hockey players exhibit similar levels of anxiety and aggression, potentially due to their comparable training regimens and competitive experiences. The study underscores the importance of psychological resilience in sports and provides insights for coaches and sports psychologists to develop targeted interventions for managing anxiety and aggression among athletes.

**Keywords:** Anxiety, Aggression, Hockey Players, Sports Psychology and Psychological Assessment

### Introduction

In recent years, physical education has gained significant attention for its role in the holistic development of individuals. The aim of physical education extends beyond physical fitness, encompassing the mental and emotional well-being of individuals. Sports and physical activities play a crucial role in maintaining psychological health by providing an outlet for stress and promoting resilience. In competitive sports, psychological factors like anxiety and aggression play a significant role in influencing athletic performance. Anxiety and aggression both are part of sports and game and It has both positive as well as negative effect. The one who get control on these factors and makes it usable for performance during competition can get a better results. Understanding these factors is crucial, particularly in team sports, where the interplay between individual emotions and team dynamics can significantly impact the outcome of a game. Anxiety in athletes can manifest as performance , which is characterized by feelings of nervousness, worry, and apprehension before or during competitions. Aggression, on the other hand, can be either instrumental, used as a means to achieve a goal within the rules of the game, or hostile, which is aimed at inflicting harm on an opponent. Hockey, being a highly competitive and physically demanding sport, often subjects players to high-pressure situations that can influence their psychological state, particularly in terms of anxiety and aggression. Anxiety in sports is characterized by an unpleasant inner state



where athletes anticipate potential failure or negative outcomes, triggering a 'fight or flight' response that can affect performance (Smith, 2020). Similarly, aggression in sports can be both positive and negative; while it can enhance performance by increasing motivation and competitiveness, it can also lead to negative outcomes if it results in harmful behavior towards others (Jones, 2018). Previous research has highlighted the importance of psychological factors in sports performance. For instance, Dureha et al. (2010) compared national and international hockey players and found significant differences in sports competition anxiety but not in incentive motivation or achievement motivation. Similarly, studies by Rathore and Singh (2012) on volleyball players and by Dr. Subhabrata Kar (2013) on college athletes have shown varying levels of anxiety based on the level of competition and gender differences. Aggression in sports has been another area of focus, with studies indicating that the level and type of aggression can differ based on the level of play and the specific sports context. For example, Gyanendra Bhai and Dr. Vijay Kumar Chaurasiya (2021) found that unplanned hostile aggression was higher in female hockey players who won bronze and silver medals compared to those who won gold medals, suggesting that higher aggression levels might be linked to lower performance outcomes.

This study aims to compare the levels of anxiety and aggression among different prominent inter university hockey players from Jiwaji university and the LNIPE Gwalior. The significance of this comparison lies in understanding how these psychological factors vary across different competitive environments and how they might affect players' performance and behavior on the field.

## Methodology

Subjects for this study were selected considering the relevance of the study. The study was conceptualized to investigate the difference between the anxiety and aggression level of Jiwaji University and LNIPE inter university hockey players. For the purpose of this study 32 subjects Age ranges in between 18-25 years were selected out of which 16 were from Jiwaji University Gwalior and 16 were from LNIPE Gwalior randomly selected on the performance basis.

### Selection of Variables and Criterion Measures:

Based on the conceptualization and formulation of this study, two primary psychological variables were selected to evaluate their status among two different inter university hockey players. These variables were considered highly relevant for examining their impact on team performance during games. The selection process involved extensive literature reviews, discussions, and consultations with field experts and the supervisor. Anxiety was measured using the Sports Competition Anxiety Test (Martens, 1977), while aggression was assessed using the Buss Perry Aggression Questionnaire (BPAQ, 1992).

To measure the subjects' anxiety, the Sports Competition Anxiety Test (SCAT) questionnaire developed by Martens in 1977 was used. This questionnaire consists of 15 questions and utilizes a three-point Likert scale: Rarely, Sometimes, Often. Scoring was done according to the instructions provided in the test manual. To calculate the total score, all individual item scores were summed and recorded in the designated space on the questionnaire. The total score on the SCAT ranges from 9 to 36, with higher scores indicating higher levels of anxiety and lower scores indicating lower levels. To measure the subjects' aggression, the Aggression Questionnaire (BPAQ) developed by Buss & Perry in 1992 was used. This questionnaire



consists of 29 questions and utilizes a five-point Likert scale. The responses are rated as: extremely uncharacteristic, somewhat uncharacteristic, neither uncharacteristic nor characteristic, somewhat characteristic, and extremely characteristic..

The Aggression scale consists of 4 factors:

- i. Physical Aggression (PA), 09 items.
- ii. Verbal Aggression (VA), 05 items.
- iii. Anger (A), 8 items.
- iv. Hostility (H), 8 items.

The Aggression scale consists of 4 factors ranked from 0-1, with 1 being the maximum. While there is no numerical cutoff, higher scores indicate increasing severity.

To compare the selected variables level Independent t-test was used as the statistical technique to find out significant differences between the groups. The level of significance will be set at 0.05.

## Results

TABLE NO. 01  
COMPARATIVE ANALYSIS OF ANXIETY AMONG JIWAJI UNIVERSITY AND LNIPE HOCKEY PLAYERS

Groups	Mean	Std. Dev.	df	Mean Diff	Std. Error Mean	T-Value	P-Value
Jiwaji Uni	18.37	3.64	30	.25	.91	.177	.861
LNIPE	18.12	4.33					

Significant at 0.05 level of Significance  $t_{(30)(0.05)} = 2.042$

The independent samples t-test for "anxiety" revealed no statistically significant difference between the Jiwaji and LNIPE groups. The t-statistic of 0.177, with 30 degrees of freedom, resulted in a p-value of 0.861, surpassing the conventional significance level of 0.05. Graphical representation of above table is given in figure no. 01.

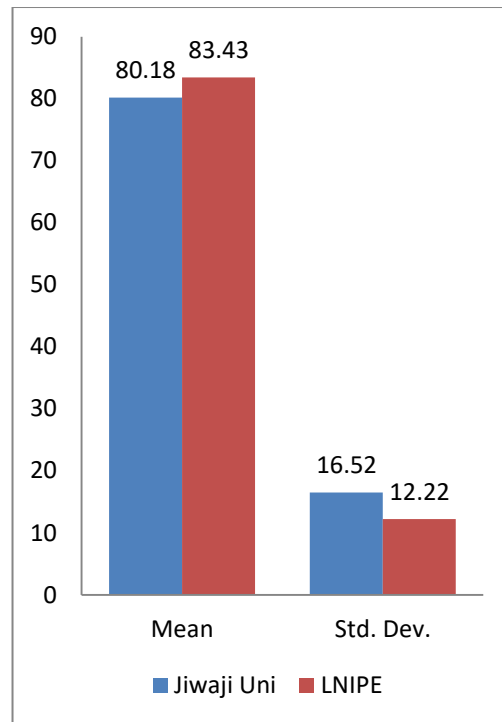


Fig. no 01: Mean and Standard Deviation values of Jiwaji university and LNIPE Gwalior hockey players of Anxiety

TABLE NO. 2  
COMPARATIVE ANALYSIS OF AGGRESSION AMONG JIWAJI UNIVERSITY AND LNIPE HOCKEY PLAYERS

Groups	Mean	Std. Dev.	df	Mean Diff	Std. Error Mean	T-Value	P-Value
Jiwaji Uni	80.18	16.52	30	0.25	3.05	.633	.532
LNIPE	83.43	12.22					

Significant at 0.05 level of Significance  $t_{(30)(0.05)} = 2.042$

The independent samples t-test for "aggression" revealed no statistically significant difference between the Jiwaji and LNIPE groups. The t-statistic of 0.633, with 30 degrees of freedom, resulted in a p-value of 0.532, surpassing the conventional significance level of 0.05. Graphical representation of above table is given in figure no. 02.

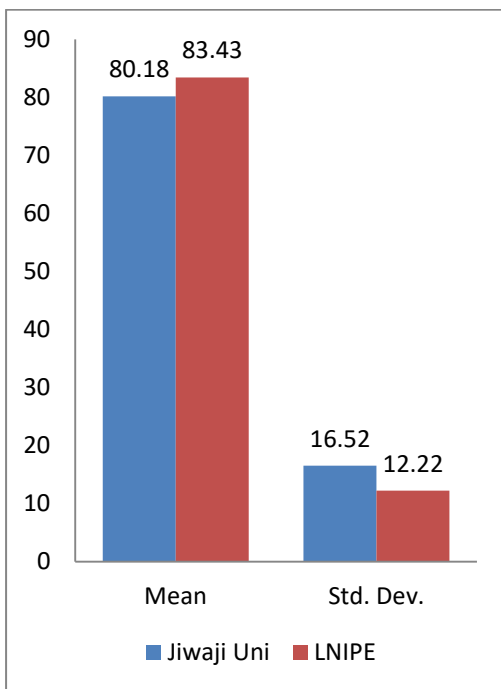


Fig. no 02: Mean and Standard Deviation values of Jiwaji University and LNIPE Gwalior hockey players of Aggression

### Discussion of findings

The purpose of this study was to investigate the anxiety and aggression level between Jiwaji university and LNIPE Gwalior hockey players. For this study 32 male hockey players were selected (16 players from Jiwaji university and 16 from LNIPE ). The mean and standard deviation of Jiwaji university hockey players on the variable anxiety were 18.37 and 3.64 respectively and Incase of LNIPE hockey players mean and standard deviation on the variable anxiety were 18.12 and 4.33 respectively. Whereas the mean and standard deviation of Jiwaji university hockey players on the variable aggression were 80.18 and 16.52 respectively and incase of LNIPE hockey players mean and standard deviation on the variable aggression were 83.43 and 12.22 respectively. The statistical results of the study revealed no significant difference between

anxiety and aggression levels of Jiwaji university and LNIPE hockey players.

### Conclusion

The study concluded that there are no significant differences in anxiety and aggression levels between hockey players from Jiwaji University and LNIPE Gwalior. Statistical results revealed no significant differences in the anxiety and aggression levels of the players from both universities. Several factors might explain these findings. Both universities likely have similar training regimens, which contribute to comparable physical and mental preparation among players. The competitive nature of university-level hockey provides a similar psychological environment, influencing anxiety and aggression levels equally among players from both institutions. Additionally, both universities may offer equivalent levels of support, including coaching, counseling, and team-building activities, which help manage stress and aggression. Lastly, the homogeneity in the sample, consisting solely of male hockey players, may have contributed to the lack of significant differences observed in the study. previous researches also supports these finding as one of a comparative study of state anxiety between university and national level hockey players in Uttar Pradesh, revealing no significant difference in state anxiety levels between the two groups(Khan & Zafar,).



### References:

- Dureha, D.K., Singh, M., yaduvanshi, S., & Mishra, P.(2010). A comperetive study of incentive motivation, achievement and anxiety level between national and international hockey players.a
- Rathore, V. S, Singh, A. B. (2012) did a comparative study of multidimensional trait anxiety between intervarsity and LNIPE volleyball players of Chattisgarh.
- Dr.SubhabrataKar(2013) did research on Measurement of Competition Level Anxiety of College Level Athletes.
- Khan MT, Zafar Mohd (2014). A study to compare the level of state anxiety between university filed hockey players of Uttar Pradesh, india.
- Inder kerkettab (2015). The purpose of the study was comparing sports competition anxiety between volleyball and soccer male players LNIPE volleyball players of Chattisgarh.
- Kunvar singh (2015). The Purpose of the study was to compare the degree of aggression between intervarsity level Football and hockey players.
- Abatkun, Z., & Mohan, N. V. (2017). A study to find out the Anxiety and Self Confidence level of Ethiopian sports academy male soccer players.
- Mahesh Kumar (2017), AComparative Study of Aggressive Among the Sports Person of Different Semi - Content Games.
- Varun Singh, Sonu Punia (2018). A research on Measurement of competition level anxiety of university level players by using scat in north zone in India.
- Dr. A Arun Mozhi and Dr. W Vinu(2019)The purpose of this study was to compare the psychological variable namely aggression between men and women kabaddi and kho-kho players.
- Sandeep Singh (2021) This research study is aimed at to know and compare the level of aggression among the male university players.
- Gyanendra Bhai and Vijay Kumar Chaurasiya (2021) The study analysed unplanned hostile aggression in national female hockey players from gold, silver and bronze medal-winning teams.
- Alia, Sundus Iftikhar, Noor Muhammad Marwat, Habib Ullah, Muhammad Anees and Zeeshan Javed (2021).Comparative study was conducted to compare the aggression levelamong young and adult athletesof both genders.
- Mayank Sharma and Dr. Rahul Kanojiya(2022)The aim of the study is to compare the anxiety and aggression level between university and LNIPE volleyball players.
- Pradeep Kumar Saroj (2022) The aim of the present study was to compare the aggression and mental health among tennis players of different colleges of Chandigarh.