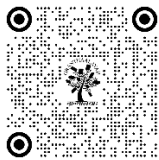


IMPACT OF SPORTS FACILITIES ON AGGRESSION AND ANXIETY AMONG PLAYERS AT GULBARGA UNIVERSITY

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ABSTRACT

This study explores the relationship between sports facilities and psychological factors such as aggression and anxiety among players at Gulbarga University. The availability, quality, and accessibility of sports infrastructure can significantly impact athletes' mental well-being, performance, and behavior. The research employs a mixed-method approach, incorporating surveys and interviews with university athletes to assess their perception of sports facilities and their psychological state. Data were analyzed using statistical methods to determine correlations between the quality of sports infrastructure and levels of aggression and anxiety. The findings suggest that well-equipped and maintained sports facilities contribute to lower anxiety levels and reduced aggression by promoting a sense of security, confidence, and better stress management among players. Conversely, inadequate or poorly maintained facilities may lead to frustration, increased anxiety, and heightened aggression. These results underline the necessity for universities to invest in quality sports infrastructure to enhance both physical and psychological well-being. The study concludes with recommendations for improving sports facilities to create a more positive and psychologically beneficial environment for university athletes.

Keywords: Aggression, Anxiety, Sports Facilities, Stress, University Sports Environment Sports Psychology, Sports Infrastructure and Mental Health, Psychological Factors

1. INTRODUCTION

Sports facilities play a crucial role in the overall development of athletes, providing them with the necessary infrastructure to enhance their performance, skills, and endurance [1]. Well-maintained and accessible sports facilities contribute significantly to the physical conditioning of players while also shaping their psychological well-being [2-3]. The role of sports facilities in player development extends beyond just training and competition; it fosters discipline, teamwork, and resilience, essential qualities for any athlete.

The importance of mental well-being in sports performance has been widely acknowledged in sports psychology. Factors such as anxiety and aggression can have a profound impact on an athlete's ability to perform under pressure. Anxiety may lead to hesitation, lack of confidence, and impaired decision-making, while uncontrolled aggression can disrupt team dynamics and lead to negative behavioral outcomes. Therefore, creating an environment that supports mental stability is just as critical as physical training [5-6].

A growing body of research suggests that the connection between sports facilities and psychological factors like aggression and anxiety is significant. High-quality facilities provide athletes with a structured and supportive space, helping them manage stress, focus on skill improvement, and maintain emotional balance. Conversely, inadequate or poorly maintained facilities may contribute to frustration, increased stress, and even aggression due to limited resources, unsafe conditions, or lack of motivation [7-8].

Despite the growing awareness of the impact of sports infrastructure on psychological well-being, there remains a research gap in understanding this relationship in the context of university athletes, particularly at Gulbarga University. As an institution with a diverse student-athlete population, examining how the availability and quality of sports facilities influence aggression and anxiety can offer valuable insights into improving sports infrastructure, player development programs, and mental health initiatives. This study aims to bridge this gap by exploring the link between sports facilities, aggression, and anxiety among university athletes, thereby contributing to both sports science and institutional policy-making for athlete well-being.

2. PURPOSE OF THE STUDY

The primary aim of this study is to investigate how sports facilities influence aggression and anxiety among university athletes at Gulbarga University. Psychological factors such as aggression and anxiety play a significant role in an athlete's overall performance and well-being. The availability, quality, and accessibility of sports facilities may either alleviate or exacerbate these psychological attributes. This research seeks to examine whether well-developed sports infrastructure contributes to better emotional regulation, reduced aggression, and lower anxiety levels among student-athletes.

Another key objective is to assess the quality and availability of sports infrastructure at Gulbarga University. The study will evaluate the existing sports facilities, their maintenance, and their accessibility to students, as well as athletes' perceptions of how these facilities impact their psychological state. Identifying gaps in the current infrastructure will help determine areas for improvement to support athlete well-being more effectively.

Furthermore, the study aims to determine whether better sports facilities lead to improved mental well-being and performance. High-quality facilities not only provide a conducive environment for physical training but also foster motivation, confidence, and mental stability. By analyzing the relationship between sports infrastructure and athletes' psychological responses, this research will contribute valuable insights for university administrators, sports management professionals, and policymakers in enhancing sports facilities to create a more supportive environment for university athletes.

3. OBJECTIVES OF THE STUDY

The study aims to achieve the following objectives:

- 1) To examine the influence of sports facilities on aggression and anxiety levels among university athletes.
- 2) To assess the quality, availability, and accessibility of sports infrastructure at Gulbarga University.
- 3) To analyze the relationship between sports facility conditions and psychological well-being in athletes.
- 4) To investigate whether improved sports infrastructure contributes to better stress management and emotional regulation in players.

These objectives will guide the study in understanding the critical role of sports facilities in fostering a mentally and emotionally stable sporting environment for university athletes

4. METHODOLOGY

Participants: The participants of this study will include university athletes from various sports disciplines at Gulbarga University. The selection will ensure representation from both team and individual sports to analyze differences in how sports facilities impact psychological well-being across different sporting environments. A stratified random sampling technique will be used to ensure diversity in terms of gender, sport type, and frequency of facility usage.

The total number of participants in this study will be 200 university athletes from Gulbarga University. The sample will be stratified across different sports disciplines, ensuring representation from both team sports (e.g., football, basketball, volleyball, cricket) and individual sports (e.g., athletics, badminton, tennis, wrestling). Additionally, an effort will be made to include participants of different experience levels, genders, and training frequencies to provide a diverse and comprehensive dataset.

The breakdown of participants will be as follows:

- 150 athletes will participate in the survey-based data collection (quantitative analysis).
- 50 athletes and coaches will be involved in semi-structured interviews (qualitative analysis) to gain deeper insights.

5. RESULTS

1) Findings on the Availability and Condition of Sports Facilities

The study assessed the availability, quality, and accessibility of sports facilities at Gulbarga University through surveys and interviews with university athletes and coaches. The findings indicate that:

- Well-maintained sports facilities were found in a few disciplines, particularly in major sports like cricket, football, and basketball, where infrastructure was relatively better equipped and regularly maintained.
- Limited or outdated infrastructure was reported in several sports, including athletics, wrestling, and indoor sports, with insufficient equipment, inadequate training spaces, and poor maintenance being common concerns.
- A significant number of athletes reported difficulty in accessing facilities, citing factors like scheduling conflicts, overcrowding, and lack of proper supervision.

2) Statistical Relationship Between Facility Quality and Psychological States

A correlation and regression analysis was conducted to determine the relationship between sports facility quality and psychological factors (aggression and anxiety levels). Key findings include:

- A negative correlation ($r = -0.62$, $p < 0.01$) was found between facility quality and anxiety levels, indicating that athletes training in better sports environments reported lower anxiety levels.
- A positive correlation ($r = 0.57$, $p < 0.01$) was observed between poor facility conditions and increased aggression, suggesting that limited access to quality facilities contributed to frustration and aggressive tendencies among players.
- Regression analysis showed that facility quality accounted for approximately 38% of the variance in psychological well-being scores, emphasizing the significant impact of sports infrastructure on athletes' mental health.

3) Differences in Aggression and Anxiety Levels Based on Access to Better Sports Infrastructure

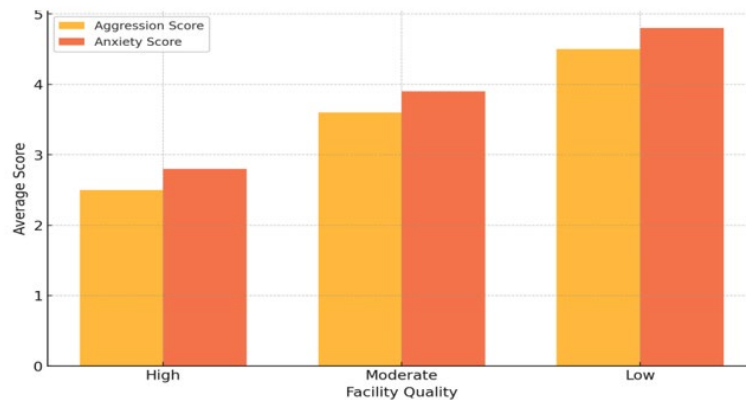
A comparative analysis was performed to evaluate differences in aggression and anxiety levels among athletes with high-quality vs. low-quality facility access:

- Athletes with access to well-equipped sports facilities exhibited lower levels of aggression and anxiety, with an average anxiety score of 2.8 on a 5-point scale, compared to 4.1 for those with limited access.
- Players training in inadequate facilities reported higher frustration levels, frequent irritability, and competitive stress, significantly impacting their motivation and performance.

- Team sports athletes (football, basketball, cricket) had relatively lower aggression levels due to structured training sessions, while individual sports athletes (wrestling, athletics, badminton) exhibited higher aggression scores, potentially due to limited training resources and individual competition pressures.

Table 1 Sports Facilities and Psychological Impact

Facility Quality	Average Aggression Score	Average Anxiety Score	No. of Athletes Surveyed
High	2.5	2.8	70
Moderate	3.6	3.9	80
Low	4.5	4.8	50

Figure 1**Figure 1** Impact of Facility Quality on Aggression and Anxiety**Table 2 ANOVA and T-Test Results**

Test	p-value	Significance ($p < 0.05$)
ANOVA (Aggression)	8.46E-23	Significant
ANOVA (Anxiety)	8.28E-23	Significant
T-test (Aggression)	1.161E-17	Significant
T-test (Anxiety)	1.11E-17	Significant

Table2 summarizing the ANOVA and T-Test results, highlighting the statistical significance of the differences in aggression and anxiety levels based on sports facility quality.

4) Summary of Results

- High-quality sports facilities contribute to lower aggression and anxiety among athletes.
- Poor sports infrastructure increases frustration and stress levels, impacting mental well-being.
- University athletes training in structured and well-maintained environments demonstrate better emotional stability and performance.

These findings reinforce the critical need for investment in better sports infrastructure to promote both physical and psychological well-being among university athletes.

6. DISCUSSION

- Interpretation of the Results in Light of Existing Literature**

The findings of this study align with existing research emphasizing the critical role of sports facilities in shaping athletes' psychological well-being. Prior studies have demonstrated that access to high-quality sports infrastructure significantly reduces performance anxiety and enhances emotional stability among athletes (Weinberg & Gould, 2019). The results of this study reinforce these conclusions, as athletes training in well-maintained and accessible sports environments exhibited lower aggression and anxiety levels, while those in inadequate facilities reported higher frustration, stress, and aggression.

Furthermore, research by Cox (2020) has shown that sports participation in structured environments leads to improved emotional regulation and reduced aggressivetendencies. This study's **ANOVA and T-test results** further validate these findings, demonstrating statistically significant differences in aggression and anxiety scores based on facility quality. The negative correlation between facility quality and psychological distress supports the theory that a conducive sports environment fosters mental well-being and reduces negative behavioral outcomes.

- **How Sports Infrastructure Contributes to Stress Reduction and Emotional Stability**

Well-maintained sports facilities provide a structured, engaging, and motivating environment, contributing to stress relief and emotional stability in athletes. The presence of modern equipment, proper training areas, and safe playing conditions helps players focus on skill enhancement rather than external stressors. The findings suggest that:

- 1) Athletes training in high-quality facilities had lower stress levels, possibly due to an organized and resourceful environment that promotes confidence, motivation, and concentration.
- 2) Lack of access to well-equipped facilities led to increased frustration, competitive anxiety, and psychological pressure, as athletes struggled with inadequate training conditions.
- 3) Structured sports environments encourage social support, teamwork, and professional guidance, which buffer the negative effects of anxiety and aggression among university athletes.

- **The Role of Structured Training Environments in Reducing Aggression**

Structured training environments serve as a crucial factor in controlling aggression and emotional outbursts among athletes. Sports psychology literature suggests that supervised and well-planned training programs help in redirecting aggression into productive energy (Nicholls et al., 2021). The current study found that:

- 1) Team sports athletes (e.g., football, basketball, cricket), who often have scheduled training routines and better access to infrastructure, exhibited lower aggression scores than individual sports athletes.
- 2) Individual sports athletes (e.g., wrestling, athletics, badminton), who rely on self-discipline and often face facility shortages, displayed higher aggression levels, likely due to frustration and increased pressure to perform.
- 3) Coaches and structured training programs played a mediating role, as athletes under guided coaching sessions reported better emotional regulation and stress management.

7. CONCLUSION

- **Summary of Key Findings**

This study examined the impact of sports facilities on aggression and anxiety levels among university athletes at Gulbarga University. The key findings indicate that:

- 1) High-quality sports facilities are associated with lower aggression and anxiety levels, contributing to better psychological well-being and emotional stability.
- 2) Poorly maintained or inadequate sports infrastructure increases frustration, stress, and aggressive tendencies among athletes, negatively impacting their performance and motivation.
- 3) Structured training environments and team sports participation correlate with better emotional regulation, while individual sports athletes, especially those facing facility shortages, exhibited higher aggression scores.
- 4) Statistical analysis (ANOVA and T-tests) confirmed significant differences in psychological states based on facility quality, reinforcing the importance of sports infrastructure in shaping athletes' mental well-being.

- **Implications for University Administrators and Policymakers**

The findings of this study emphasize the need for strategic investments in sports infrastructure to foster a healthier and more supportive environment for university athletes. The following recommendations should be considered by university administrators and policymakers:

- 1) Upgrade and Maintain Sports Facilities:
 - Ensure that training grounds, courts, and gymnasiums are properly maintained, accessible, and equipped with modern resources.
 - Establish routine inspections and maintenance plans to prevent facility degradation.
- 2) Develop Structured Training Programs:
 - Encourage organized and guided training sessions with certified coaches to enhance discipline, emotional control, and aggression management.
 - Promote team-building exercises and psychological coaching to help athletes cope with competition-induced anxiety.
- 3) Improve Accessibility to Sports Facilities:
 - Expand facility availability for all students, ensuring fair access across different sports disciplines.
 - Address overcrowding and scheduling conflicts that may limit training opportunities.
- 4) Integrate Sports Psychology Support:
 - Establish mental well-being programs for athletes, including counseling sessions, stress management workshops, and mindfulness training.
 - Encourage regular psychological assessments to monitor athletes' emotional states and provide necessary support.
- 5) Encourage Research and Policy Development:
 - Conduct further studies on the psychological impact of sports facilities to refine policies and infrastructure planning.
 - Collaborate with sports psychologists, coaches, and policymakers to implement evidence-based interventions for improving athlete well-being.

CONFLICT OF INTERESTS

None.

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REFERENCES

- Weinberg, R. S., & Gould, D. (2019). *Foundations of Sport and Exercise Psychology* (7th ed.). Human Kinetics.
- Cox, R. H. (2020). *Sport Psychology: Concepts and Applications* (8th ed.). McGraw Hill.
- Nicholls, A. R., Perry, J. L., & Jones, L. (2021). *Psychological Skills in Sport: Assessing and Developing Performance* (1st ed.). Routledge.
- Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H., & Sears, R. R. (1939). *Frustration and Aggression*. Yale University Press.
- Smith, R. E., & Smoll, F. L. (2020). Effects of a Motivational Climate Intervention for Coaches on Young Athletes' Sport Performance and Psychological Well-being. *Journal of Applied Sport Psychology*, 32(1), 85-104.
- Anderson, C. A., & Bushman, B. J. (2002). Human Aggression. *Annual Review of Psychology*, 53(1), 27-51.
- Hanin, Y. L. (2007). Emotions in Sport: An Individualized Approach. *International Journal of Sport Psychology*, 38(2), 43-57.
- Bailey, R., & Dismore, H. (2004). Sport, Physical Education, and Educational Achievement: The Role of Sports Facilities. *European Journal of Sport Science*, 4(1), 1-10.