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Aim of NIJ

To publish high-quality original research articles in the field of nursing that are novel and innovative in their findings that make substantial theoretical and practical advances in the nursing profession.

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The Nursing Innovators Journal (NIJ) publishes authors' views, which do not necessarily reflect the editorial board's or affiliated institutions' official stance.



From the Editor's desk. "Charting New Horizons in Nursing Research and Practice"

It is with great pleasure to present the January-June issue 2026 of the Nursing Innovators Journal (NIJ), an open-access, double-blinded, peer-reviewed international journal.

As an open-access e-journal, we are committed to providing quality nursing research content that drives innovation in the nursing profession. Each article has gone through rigorous editorial review, including a plagiarism scan, an AI detection scan, double-blinded peer reviews, and final editing. In this issue, we also commemorate International Nurses Day 2026 by recognizing the enduring legacy of Florence Nightingale and aligning with the global vision of empowering nurses to lead transformative changes in healthcare.

This January-June 2026 Volume 2, Issue 1, highlights the contemporary priorities in the field of nursing practice, education, patient safety, community health, and AI in nursing practice. Themes such as stroke prevention, breastfeeding promotion, anaemia awareness, pain management, mindfulness, patient safety, sports-related anxiety, and artificial intelligence readiness reflect the expanding scope of nursing research in addressing emerging healthcare challenges. Together, these contributions underscore the nursing profession's commitment to innovation, compassionate care, health promotion, and the advancement of quality healthcare delivery across diverse populations.

In this era of rapid technological advancement, rising global health emergencies, economic crisis, climate-related health risks, and growing mental health concerns, researchers must be prepared to undertake issues that are forward-looking, informed, resilient, and innovative, and health care practices adaptable to the changing landscape. Nurse research needs to chart a new horizon of care that is adaptive, evolving in scope, and humane in approach. Finding the right balance within this kaleidoscope of human needs is the fundamental question that nurse researchers must seek to answer. It is time to chart a new horizon.

NIJ and its editorial board are committed to providing genuine content for the readers that is based on authentic and original research and academic expertise. We ensure this commitment through our double-blinded peer-reviewed process and stringent SOP editorial process to bring out issues of high-quality academic research based on methodological rigor and its findings for the profession and public at large.

The views and opinions expressed in the published articles are solely those of the authors and do not necessarily reflect the views of the editor, editorial board, publisher, or affiliated institutions. The journal assumes no responsibility for any consequences arising from the use of the published content. On behalf of the editorial team, I extend our sincere appreciation to all contributors and readers for their continued support.

Warm regards,

Prof. Laishangbam Bijayalakshmi Devi

Editor, Nursing Innovators Journal, MKSSSBTINE, Pune

Exploration and description of sports-specific cognitive and somatic anxiety in collegiate women aged 18–25 years.

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Abstract: Anxiety is a common psychological experience among student-athletes and may present as somatic symptoms (physical manifestations) and cognitive symptoms (worry and concentration disruption). This study aimed to assess the levels of somatic and cognitive anxiety among women college athletes and examine their relationship with selected socio-demographic and sports-related variables. A descriptive correlational design was adopted with a sample of 345 women student-athletes. Data were collected using a structured background questionnaire and a standardized sport anxiety scale measuring somatic and cognitive components. Descriptive statistics and Pearson's correlation analysis were applied. Findings revealed that most participants experienced mild somatic anxiety (62.3%) and mild cognitive anxiety (64.9%), while severe anxiety was reported by only 1 - 2% of students, respectively. Most participants were aged 18–20 years (56.2%), enrolled in professional degree programs (76.2%), and actively engaged in team (80.6%) and outdoor sports (75.4%), primarily at the local competition level. Somatic anxiety showed significant correlations with age ($r = 0.024$), course/program ($r = 0.021$), education level ($r = 0.017$), year of study ($r = 0.052$), and previous sports experience ($r = 0.027$). These values indicate that demographic and academic characteristics have a significant association with somatic anxiety levels among athletes. No correlations with the type of family, frequency of participation, or type of sport. Cognitive anxiety demonstrated a weak negative correlation with previous sports experience ($r = -0.160$), indicating that greater competitive experience may slightly reduce cognitive anxiety. A Positive relationship was found with a previous history of anxiety or stress ($r = 0.025$). Overall, cognitive anxiety is more strongly influenced by previous history of anxiety or stress than by academic progression and competitive exposure, and by basic demographic factors. The study concludes that mild anxiety is prevalent and highlights the need for psychological skill development programs to support women athletes' well-being and performance.

Keywords: Sport Anxiety; Somatic Anxiety; Cognitive Anxiety; Concentration Disruption; Women Student-Athletes; College Athletes; Competitive Sports; Psychological Well-being; Sports Participation; Correlational Study.

I. Introduction:

Sports competition environments place athletes under significant psychological pressure, particularly at the collegiate level, where athletic, academic, and social demands converge. Anxiety is one of the most frequently studied psychological constructs in sport due to its consistent relationship with performance outcomes and athlete well-being¹. Female collegiate athletes have been shown to experience higher levels of competitive anxiety compared to their male counterparts².

Sports-specific anxiety refers to anxiety responses that arise in competitive athletic contexts and is divided into cognitive and somatic components³. The age range of 18–25 years represents a critical developmental period marked by identity formation, increased autonomy, and heightened performance expectations. This study aims to explore and describe the manifestations of cognitive and somatic anxiety in collegiate women athletes within this age group.

II. Background:

Anxiety in sports is multidimensional, typically categorized into Somatic Anxiety (the physiological "fight or flight" response) and Cognitive Anxiety (the mental component involving worry and concentration disruption). Cognitive anxiety involves mental processes such as worry, negative self-talk, and fear of evaluation, whereas somatic anxiety refers to physiological responses, including increased heart rate, muscle tension, and sweating.

Among college athletes participating in intercollegiate sports competitions, anxiety is prominent due to the complex demands placed upon them. These athletes must balance academic responsibilities with rigorous training schedules,

performance expectations, and competitive pressures. Previous studies have indicated that competition-related anxiety tends to intensify as the importance of the event increases, particularly in high-stakes intercollegiate tournaments where performance outcomes may influence scholarships, team selection, and future career opportunities⁴.

III. Need for the study:

While general anxiety is well-documented, sports-specific anxiety requires more exploration for several reasons:

- **Performance Impact:** Cognitive anxiety (worry) tends to have a linear negative relationship with performance, whereas somatic anxiety (arousal) often follows an inverted-U pattern.
- **Gender-Specific Data:** Much of the foundational sports psychology literature was historically centred on male athletes. There is a need for contemporary data specifically focused on women in the current collegiate landscape.
- **Mental Health Advocacy:** Identifying how these two types of anxiety manifest can help athletic departments move beyond "toughing it out" and toward targeted psychological interventions, such as mindfulness (for cognitive) or progressive muscle relaxation (for somatic).

Existing literature suggests that college athletes may experience unique stressors, including academic evaluation, social adjustment, and transitional life challenges, which can interact with competitive anxiety and affect both performance and mental well-being⁵.

There is a need to explore how cognitive and somatic anxiety manifest in this population and how these anxiety dimensions vary across factors such as gender, type of sport, and competitive experience. Understanding these variations can help coaches, sports psychologists, and educators design targeted psychological interventions and support systems⁶.

Additionally, increasing awareness of mental health concerns in collegiate sports underscores the importance of empirical investigations into anxiety-related issues. Identifying the prevalence and nature of cognitive and somatic anxiety among intercollegiate athletes can contribute to early identification of at-risk individuals and promote the development of effective coping strategies⁷.

Therefore, the present study seeks to address these gaps in the literature by systematically examining cognitive and somatic anxiety among college students participating in intercollegiate sports competitions. The findings are expected to provide valuable insights for enhancing athletic performance, psychological resilience, and overall well-being within collegiate sports programs.

Aim of the study:

The primary aim of this research is to explore and describe the prevalence and intensity of cognitive and somatic anxiety among collegiate female athletes aged 18–25.

Objectives of the study:

1. Assess the level of sport-specific cognitive anxiety among collegiate women athletes aged 18–25 years.
2. Assess the level of sport-specific somatic anxiety among collegiate women athletes aged 18–25 years.
3. Associate sports-specific cognitive anxiety with selected background variables among collegiate women athletes aged 18–25 years.
4. Associate sports-specific somatic anxiety with selected background variables among collegiate women athletes aged 18–25 years.

Sports-Specific Anxiety:

Cognitive Anxiety:

Cognitive anxiety encompasses the mental aspects of anxiety associated with performance evaluation. It includes worry, negative expectations, fear of failure, and difficulty concentrating.

Somatic Anxiety:

Somatic anxiety refers to the physiological symptoms associated with anxiety, such as increased heart rate, muscle tension, sweating, trembling, and gastrointestinal discomfort³. These symptoms are typically more pronounced immediately before or during competition and are linked to activation of the autonomic nervous system.

Measurement of Cognitive and Somatic Anxiety:

In this study, the Sports-specific anxiety was assessed using a validated self-report instrument, the Sport Anxiety Scale-2 (SAS-2), for measuring cognitive and somatic anxiety, which assesses trait anxiety specific to sport performance.

IV. Review of literature:

Sport anxiety has emerged as a significant psychological factor influencing both athletic performance and overall well-being among student-athletes. Beyond competition outcomes, elevated anxiety interferes with concentration, coping capacity, and emotional health, thereby affecting academic and sport functioning simultaneously. Using Grounded in Self-Determination Theory, Zhang et al. demonstrated that sport anxiety negatively predicts subjective happiness among college athletes, with concentration disruption showing the strongest detrimental effect. Satisfaction of basic psychological needs—competence, autonomy, and relatedness—partially mediated this relationship, indicating that psychological need fulfilment buffers the adverse impact of anxiety on well-being. Gender and sport-type differences were also observed, with females and team-sport athletes reporting higher anxiety levels⁸. Similarly, Contreras et al. identified significant positive associations between sport anxiety, perceived stress, and neuroticism in NCAA student-athletes. Anxiety and stress predicted dysfunctional coping strategies, while problem-focused coping remained unaffected, suggesting that heightened anxiety contributes to maladaptive psychological responses⁹. Research by Mercader-Rubio et al. further emphasized motivational mechanisms, reporting that self-efficacy and satisfaction of basic psychological needs were strongly interrelated. Autonomous motivation was associated with better performance and lower somatic anxiety, whereas controlled motivation contributed to increased anxiety, underscoring the protective role of self-determined behaviour in competitive contexts¹⁰. Expanding the social dimension of sport participation, Gabrys and Wontorczyk found that fear of negative evaluation and worry predicted athletes' sensitivity to supporters' behaviours. Athletes with lower freedom from worry were more reactive to negative social feedback, indicating that cognitive components of anxiety amplify environmental stressors¹¹. Psychological skills have also been identified as important moderators. Sagar and Nethravathi reported that mental skills such as self-talk, confidence building, and goal setting were associated with lower anxiety levels among indoor and outdoor sports players, highlighting the value of psychological training interventions¹². Gender and sport-type differences have been consistently documented. Correia and Rosado observed that female athletes and those participating in individual sports exhibited higher general sport anxiety, suggesting that personal responsibility and performance pressure may heighten vulnerability¹³. Supporting the multidimensional nature of anxiety, Grossbard et al. validated the three-factor structure of the Sport Anxiety Scale-2—somatic anxiety, worry, and concentration disruption—across age and gender groups, confirming the construct's stability in youth populations¹⁴. Cross-cultural evidence also indicates contextual influences. A comparative study of Indian and Polish athletes revealed higher anxiety levels among those with elevated body mass index, suggesting that physical health and lifestyle factors interact with competitive anxiety, particularly in post-pandemic settings¹⁵. Collectively, these findings indicate that sport anxiety is multidimensional and linked with stress, personality traits, coping styles, and social evaluation. However, protective factors such as self-efficacy, psychological need satisfaction, and mental skills training consistently mitigate its negative effects. Thus, interventions that foster autonomy support, competence, and adaptive coping may enhance both performance and psychological well-being among athletes.

V. Methodology:

Research Design:

The present study is a descriptive and correlational research design to explore sport-specific cognitive and somatic anxiety among collegiate women athletes.

Sample Population:

The study population consisted of collegiate women athletes aged 18–25 years who actively participated in intercollegiate sports competitions.

Sample Size:

A sample of 345 collegiate women athletes was selected for the study, depending on availability and inclusion criteria.

Sampling Technique:

The sample will be selected using purposive sampling, ensuring that participants meet the criteria of age, gender, and active participation in sports competition.

Inclusion Criteria:

1. Female athletes aged between 18 and 25 years
2. Actively representing their college in sports competitions.
3. Participation in at least one sports competition event during the data collection period.
4. Those who are willing to participate in the research study.

Exclusion criteria:

1. Athletes with current injuries preventing competition
2. Athletes undergoing psychological treatment for anxiety disorders
3. Those who are not willing to participate in the research study.

Ethical considerations:

Participation will be voluntary.

Confidentiality and anonymity will be strictly maintained.

Data will be used solely for academic and research purposes.

Permission for this study was obtained at the Institutional Ethical Committee meeting.

Tools for data collection:

Section-I Demographic profile

Section-II Standardized Sports Anxiety Scale-2 (SAS-2)

The Sports Anxiety Scale-2 (SAS-2), developed by Smith et al., was used to measure sport-specific anxiety¹. The scale consists of twenty-one items divided into three subscales:

- Somatic Anxiety
- Worry / Cognitive Anxiety
- Concentration Disruption

Responses were recorded on a 4-point Likert scale ranging from Not at all¹ to Very much⁴. Higher scores indicate higher levels of sport-specific anxiety. The SAS-2 has demonstrated strong reliability and validity among adolescent and collegiate athlete populations^{1,2}. Permission was obtained from the tool's authors to use the instrument in the present study.

Procedure:

Permission was obtained from college authorities and sports teachers before data collection. Participants were informed about the purpose of the study and assured of confidentiality. Written informed consent will be obtained. The Google Form was sent to the sports teachers and administered before the competition. Participants were instructed to respond honestly about how they felt before the competition. The questionnaire was administered in a quiet setting and completed within 10–15 minutes.

V. Statistical result:

The data will be analysed using descriptive statistics and inferential statistics.

Table No. 1: Background variables

N = 345			
Item No	Item	Frequency (f)	Percentage (%)
1. Age in years			
	<18	10	2.9
	18–20	194	56.2
	20–22	127	36.8
	More than 22	14	4.1
2. Course/Program of study			
	Arts	20	5.8
	Science	35	10.1

Commerce	27	7.8
Professional	263	76.2
3. Education level		
Diploma	59	17.1
Degree	267	77.4
4. Year of study		
First Year	118	34.2
Second Year	111	32.2
Third Year	89	25.8
5. Place of residence		
Urban	195	56.5
Rural	122	35.4
Semi-urban	28	8.1
6. Type of family		
Nuclear	184	53.3
Joint	145	42
Extended	3	0.9
Single parent	3	0.9
7. Living with family during studies		
Yes	176	51
No (MKSSS Hostel/ Private hostel)	169	49
8. Nature of Sports		
Individual sport	67	19.4
Team sport	278	80.6
9. Type of sports		
Indoor	85	24.6
Outdoor	260	75.4
10. Name of the Sports		
Chess	12	5.4
Cross country	23	10.4
Discuss throw	15	6.8
Long jump	9	4.1
100 m running	20	9
Short put	12	5.4
Basketball	14	6.3
Badminton	10	4.5
Cricket	63	28.4
Kho-Kho	47	21.2
Volleyball	38	17.1
4*100 m relay	22	9.9
Surya namaskar	31	14
Yog asana	17	7.7
Carrom	14	6.3
11. Previous experience in sports competitions		
Yes	264	76.5
No	81	23.5
12. Level of competition		
Local	289	83.8
State	45	3
National	9	2.6

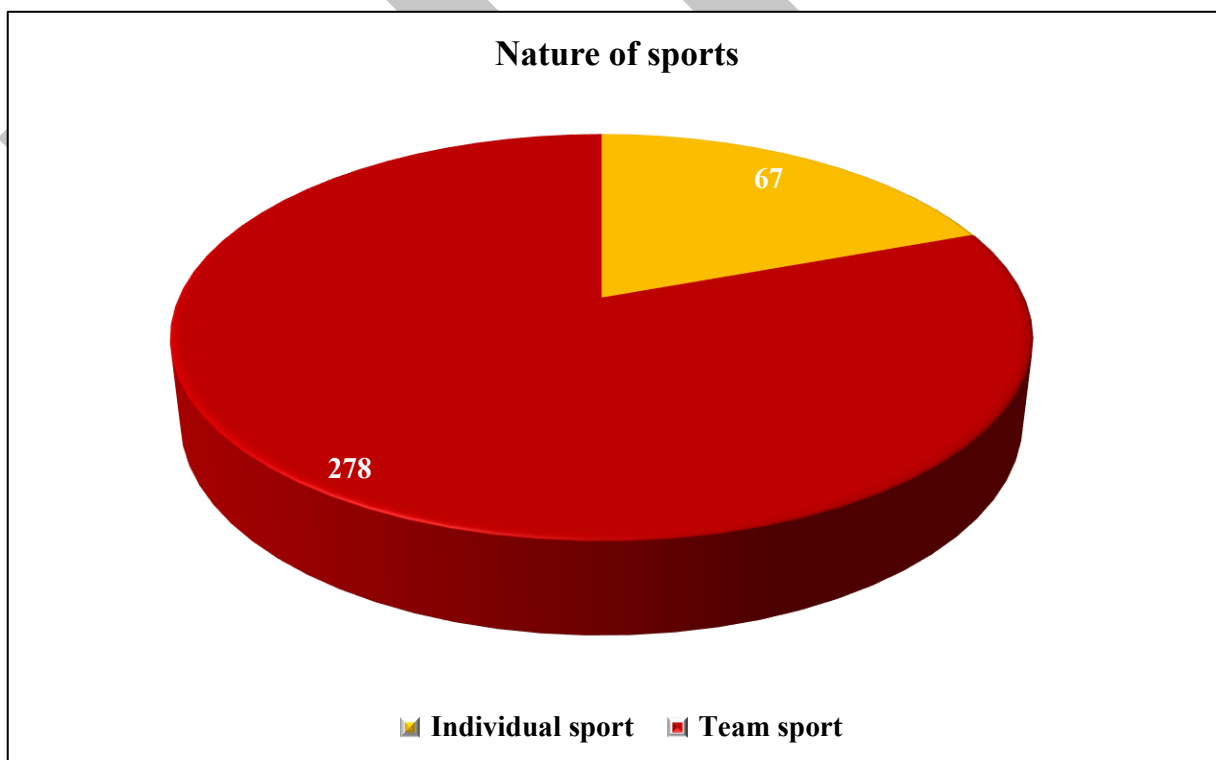
International	2	0.6
13. Frequency of participation in sports competitions		
First time	70	20.3
Occasionally	142	41.2
Regularly	133	38.6

14. Any previous history of anxiety or stress (self-reported)

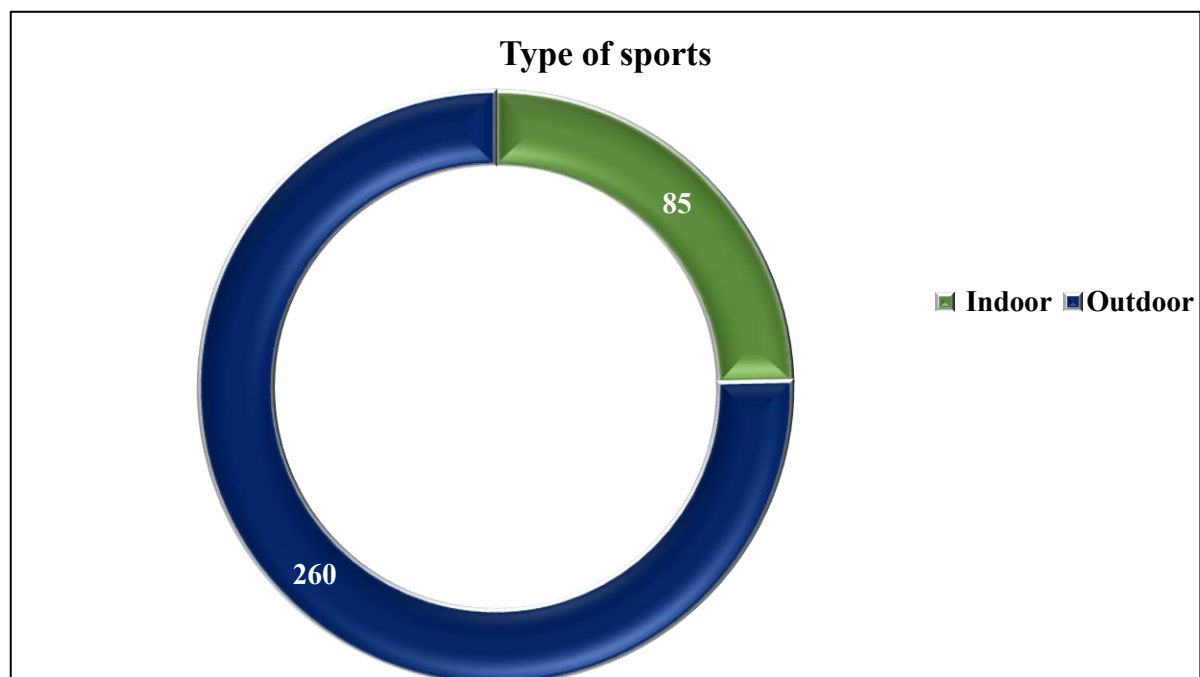
Yes	309	89.6
No	36	10.4

The study included 345 college student-athletes, aged 18–20 years (56.2%), followed by 20–22 years (36.8%), indicating that most participants were in the undergraduate age group. A large majority were enrolled in professional courses (76.2%) and pursuing degree programs (77.4%). Students were fairly distributed across years of study, with first-year students forming the largest group (34.2%).

More than half of the participants were from urban areas (56.5%) and from nuclear families (53.3%). About 51% lived with their families, while 49% stayed in hostels, suggesting a balance in living arrangements that may influence social support and stress levels. Sports participation was team-based (80.6%) and outdoor-oriented (75.4%). Cricket (28.4%), Kho-Kho (21.2%), and Volleyball (17.1%) were the most played sports. Most students (76.5%) had previous competition experience, primarily at the local level (83.8%). Participation was mostly occasional (41.2%) or regular (38.6%). Notably, 89.6% of participants reported a previous history of anxiety or stress, highlighting a high prevalence of psychological concerns among college athletes and underscoring the need for mental health support within sports settings.



Graph no 1: Participation in individual and team sports.



Graph no 2: Participation in indoor and outdoor sports.

Section-II

Somatic anxiety in athletes

Table no 2: Somatic anxiety in athletes

N = 345			
Score	Somatic Scale	Frequency (f)	Percentage (%)
0-9	No anxiety	95	27.5
10-18	Mild	215	62.3
19-27	Moderate	31	8.9
28-36	Severe	4	1.1

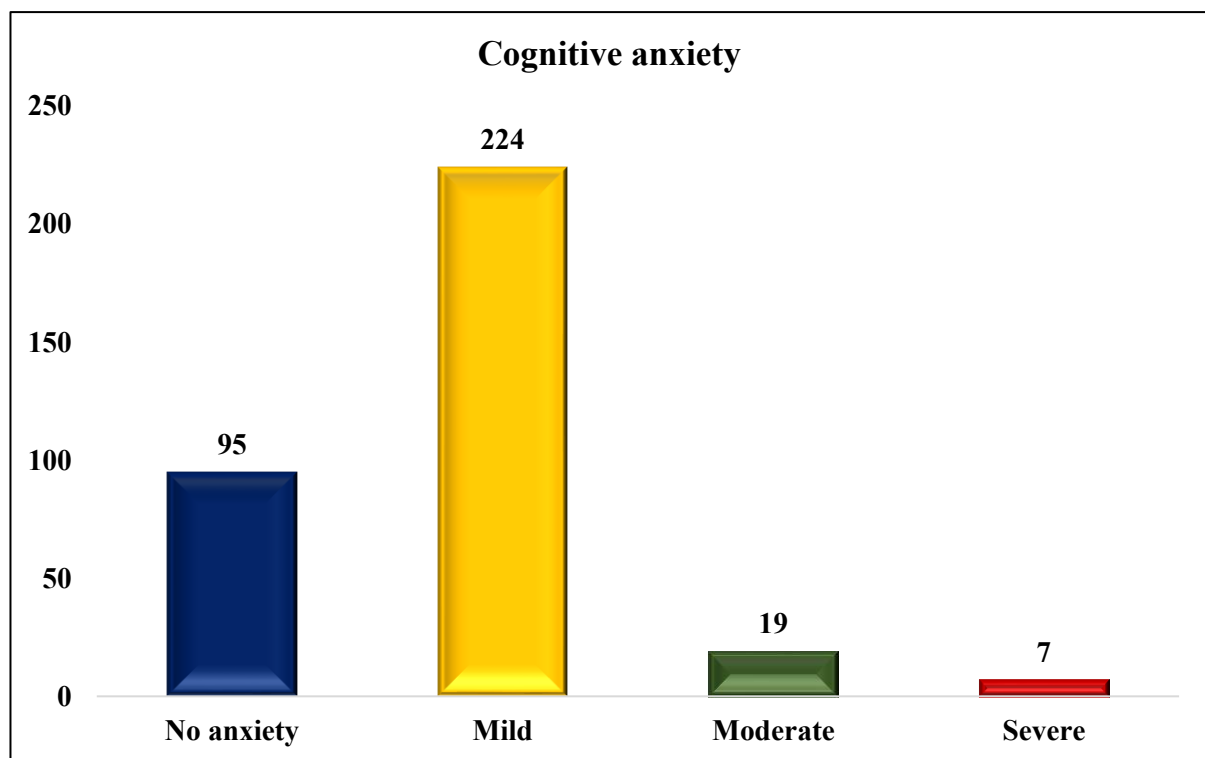
The table presents respondents' levels of somatic anxiety (physical symptoms of anxiety). The distribution of somatic anxiety scores shows that most participants experienced mild somatic anxiety. Out of the total sample, 215 students (62.3%) fell within the mild range (scores 10–18), indicating the presence of physical symptoms of anxiety such as increased heart rate, sweating, or muscle tension at a manageable level. About 95 participants (27.5%) reported no somatic anxiety (scores 0–9), suggesting that over one-fourth of the athletes did not experience noticeable physical anxiety symptoms. A smaller proportion, 31 students (8.9%), experienced moderate anxiety (scores 19–27), reflecting more pronounced physical symptoms that could potentially interfere with performance. Only 4 participants (1.1%) reported severe somatic anxiety (scores 28–36), indicating very high levels of physical distress. Overall, while severe anxiety is rare, a considerable majority of students experience at least mild somatic symptoms, highlighting the importance of monitoring physical manifestations of anxiety among college athletes to prevent performance impairment and promote well-being.



Cognitive anxiety in athletes

Table no 3: Cognitive anxiety in athletes

The table above presents the distribution of respondents across four levels of anxiety based on their cognitive scale scores. (0–48) The distribution of cognitive anxiety (concentration disruption) among athletes shows that most participants experienced mild levels of cognitive symptoms. A majority of 224 students (64.9%) scored in the mild range (13–24), indicating occasional difficulties with concentration, intrusive thoughts, or minor performance-related worries that may not severely impair functioning. Approximately 95 participants (27.5%) reported no cognitive anxiety (0–12), suggesting that over one-fourth of the athletes maintained stable focus and minimal worry during sports participation. A smaller proportion, 19 students (5.5%), experienced moderate cognitive anxiety (25–36), reflecting noticeable concentration problems and heightened worry that could interfere with decision-making and performance. Only seven participants (2.0%) fell into the severe category (37–48), indicating significant cognitive disruption and persistent worry that may affect athletic performance. Overall, while severe cognitive anxiety is low, two-thirds of athletes experience mild cognitive symptoms. This suggests that worry and concentration disruption are common but manageable among college athletes, highlighting the importance of psychological skills training, such as focus enhancement and cognitive restructuring, to optimize performance and mental well-being.



Graph no 4: Cognitive anxiety.

Table no. 4 Correlation of somatic anxiety with background variables

Domain	r
Age (in years)	0.024
Course/Program of study	0.021
Education level	0.017
Year of study	0.052
Place of residence	0.338
Type of family	0.427
Living with family during studies	0.354
Nature of sports	0.380
Type of sport	0.378
Previous experience in sports competitions	0.027
Level of competition	0.316
Frequency of participation in sports competitions	0.382
Any previous history of anxiety or stress (self-reported)	0.094

Correlation of somatic anxiety with background variables:

The Pearson correlation analysis between somatic anxiety and selected background variables shows low to moderate relationships. Significant correlations were observed with age ($r = 0.024$), course/program ($r = 0.021$), education level ($r = 0.017$), year of study ($r = 0.052$), and previous sports experience ($r = 0.027$). These values indicate that demographic and academic characteristics have a significant association with somatic anxiety levels among athletes.

No correlation was found with previous history of anxiety or stress ($r = 0.094$), suggesting no relationship between past psychological concerns and current somatic symptoms. No correlations were observed with sport-related and environmental variables, such as: Type of family ($r = 0.427$), Frequency of participation in competitions ($r = 0.382$),

Participating in (team/individual) ($r = 0.380$), Type of sport ($r = 0.378$), Living with family ($r = 0.354$), Place of residence ($r = 0.338$) and Level of competition ($r = 0.316$)

These findings suggest that somatic anxiety is not influenced by sports participation patterns, competition exposure, and family/social environment as much as by basic demographic factors. Overall, sports context and social background have no stronger relationship with physical anxiety symptoms among college athletes.

Table no. 5: Correlation of cognitive anxiety with background variables

Domain	r
Age (in years)	0.244
Course/Program of study	0.457
Education level	0.239
Year of study	0.536
Type of family	0.241
Living with family during studies	0.332
Nature of sports	0.228
Type of sports	0.258
Previous experience in sports competitions	-0.160
Level of competition	0.282
Frequency of participation in sports competitions	0.380
Any previous history of anxiety or stress (self-reported)	0.025

Correlation of cognitive anxiety with background variables:

The Pearson correlation analysis indicates that cognitive anxiety (worry and concentration disruption) shows no strong associations with several academic and sports-related variables.

No correlation was observed with year of study ($r = 0.536$), suggesting that cognitive anxiety does not increase as students progress academically. Similarly, course/program of study ($r = 0.457$) shows no moderate-to-strong relationship, suggesting that the type of academic program may not influence levels of worry or concentration difficulties.

No correlations were found with: Frequency of participation in competitions ($r = 0.380$), Living with family during studies ($r = 0.332$), Level of competition ($r = 0.282$), Place of residence ($r = 0.271$), Type of sport ($r = 0.258$), Age ($r = 0.244$), Education level ($r = 0.239$), Type of family ($r = 0.241$), and participating in (team/individual event) ($r = 0.228$). A weak negative correlation was observed with previous sports experience ($r = -0.160$), indicating that greater competitive experience may slightly reduce cognitive anxiety. A Positive relationship was found with a previous history of anxiety or stress ($r = 0.025$).

Overall, cognitive anxiety is more strongly influenced by previous history of anxiety or stress than by academic progression and competitive exposure, and by basic demographic factors.

VI. Discussion:

Several studies have reported mild to moderate levels of somatic and cognitive anxiety among women student-athletes, particularly in competitive settings. Research using the Sport Anxiety Scale-2 (SAS-2) demonstrated that female collegiate athletes commonly report symptoms of worry and concentration disruption, with most scores falling in the mild to moderate range rather than severe categories¹⁶. These findings align with the study. Similarly, validation studies of the SAS-2 across young athletes confirmed that cognitive anxiety (worry) and somatic anxiety are distinct but co-occurring components in sport settings, with female athletes often showing slightly elevated but non-clinical levels¹⁷. Studies using the Competitive State Anxiety Inventory-2 (CSAI-2) among female college athletes have also shown that somatic anxiety (e.g., sweating, muscle tension) and cognitive anxiety (e.g., negative expectations, self-doubt) are typically present at manageable intensities before competition (18). Research on female soccer players aged 18–25 years found moderate mean scores in both somatic and cognitive dimensions, suggesting that anxiety symptoms are common but not severe¹⁹.

Systematic reviews on gender differences in sport anxiety indicate that women athletes report higher cognitive worry than men, yet most fall within mild to moderate ranges rather than clinical severity²⁰. Research using the Sport Anxiety

Scale-2 (SAS-2) has shown that younger athletes report higher somatic anxiety compared to older athletes, suggesting that age is inversely related to physical symptoms such as muscle tension and increased heart rate before competition¹⁶. Similarly, Grossbard et al. found that competitive anxiety dimensions, including somatic anxiety, vary across developmental stages, with younger and less experienced athletes demonstrating higher scores¹⁷.

Educational level has also been associated with anxiety differences. Studies indicate that athletes with higher academic levels tend to report lower overall competitive anxiety, due to better coping skills and emotional regulation²¹. Academic demands related to course type (e.g., professional programs) have been linked to elevated stress levels, which may contribute to somatic anxiety manifestations in women students²².

Regarding the previous history of anxiety, research suggests that individuals with prior anxiety symptoms are more likely to experience heightened somatic responses during competitive situations²³. Pre-existing anxiety vulnerability may intensify physiological arousal in sports contexts. Overall, evidence indicates that younger age, lower educational level, demanding academic programs, and prior anxiety history are associated with increased somatic sports anxiety among women athletes. In this study, students' history of previous anxiety was positively correlated with cognitive anxiety. Research examining female student-athletes found that self-reported anxiety symptoms were positively correlated with cognitive components of sport anxiety, indicating that athletes who acknowledged past anxiety episodes exhibited higher levels of worry and intrusive thoughts in competitive contexts²⁴.

A longitudinal study involving elite adolescent athletes found that baseline anxiety symptoms predicted greater cognitive anxiety responses over time, especially in female athletes, illustrating that previous psychological distress contributes to sport-specific cognitive anxiety²⁵. Meta-analytic evidence on anxiety in athletes also indicates that individuals with a history of anxiety disorders exhibit higher cognitive anxiety and concentration disruption compared to those without such a history, with consistent patterns across sports and competitive levels²⁰.

VII. Conclusion:

Mild to moderate sports-specific cognitive and somatic anxiety are prevalent psychological experiences among collegiate women aged 18–25 years. Findings revealed that most participants experienced mild somatic anxiety and mild cognitive anxiety. Somatic anxiety showed significant correlations with age, course/program, education level, year of study, and previous sports experience. This indicates that demographic and academic characteristics have a significant association with somatic anxiety levels among athletes. No correlations with family type, participation frequency, or sport type. Cognitive anxiety demonstrated a weak negative correlation with previous sports experience, indicating that greater competitive experience may slightly reduce cognitive anxiety. A Positive relationship was found with a previous history of anxiety or stress. Overall, cognitive anxiety is more strongly influenced by previous history of anxiety or stress than by academic progression and competitive exposure, and by basic demographic factors. The study concludes that mild anxiety is prevalent and highlights the need for psychological skill development programs to support women athletes' well-being and performance.

Consent to participate: Informed consent was obtained from the participants. All methods were performed in accordance with the relevant guidelines and regulations.

Conflicts of interest: None.

Acknowledgement: The authors would like to express their appreciation to all students for taking the time to participate in the research study and sharing their experiences.

Individual author contribution statement: Dr. Meena Ganapathy was the primary author and was involved in all stages of the study, including conceptualization, methodology, data analysis, and manuscript drafting. Mrs. Shailaja Mathews and Mrs. Shital Padalkar performed the statistical analysis, created the figures, literature review, and wrote the manuscript. All authors read and approved the final manuscript.

Declaration of generative AI and AI-assisted technologies in the writing process: During the preparation of this work, the authors have used ChatGPT (OpenAI) to improve readability and language.

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