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THE EFFECTIVENESS OF MINDFULNESS IN ALLEVIATING SPORT COMPETITION ANXIETY AMONG COLLEGE ATHLETES

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Abstract
This quantitative study examined the relationship between mindfulness practices and the emotional well-being and academic performance of college students. The research aimed to determine whether a higher level of mindfulness is associated with better emotional regulation and improved academic outcomes. A descriptive-correlational design was employed, involving a sample of college students who voluntarily completed standardized self-report questionnaires measuring mindfulness, emotional well-being, and academic performance. Data were analyzed using descriptive statistics and Pearson correlation to explore the strength and direction of relationships among the variables. Findings revealed a significant positive correlation between mindfulness and emotional well-being, as well as between mindfulness and academic performance. These results suggest that students who exhibit higher levels of mindfulness tend to experience greater emotional stability and perform better academically. The study highlights the potential value of incorporating mindfulness-based strategies into student support programs and recommends further research to confirm these findings across diverse educational contexts.
Keywords: Mindfulness, Sport Competition Anxiety

INTRODUCTION

Sport competition anxiety, marked by excessive worry, nervousness, and physiological arousal before and during athletic events, is a common issue among college athletes that can impair performance and well-being. While traditional treatments like cognitive-behavioral therapy exist, they often face limitations such as accessibility, time constraints, and stigma. Mindfulness and meditation practices, which promote present-moment awareness and emotional acceptance, have gained recognition for reducing anxiety and improving focus in various groups, including athletes. However, research specifically examining their effectiveness for college athletes remains limited, with most studies focusing on elite professionals. This highlights a need for targeted research on integrating mindfulness and meditation into college sports programs to better support athletes' mental health and performance.

Statement of the Problem

This study aims to address this gap by investigating the effectiveness of mindfulness and meditation practices in reducing sport competition anxiety among college athletes. Specifically, this study seeks to answer the following questions:

1. What are the demographic profiles of the respondents in terms of:
1.1 Age;
1.2 Sex;
1.3 Year Level
1.4 Type of Sports
2. What is the level of mindfulness of the respondents?
3. What is the level of sport anxiety of the respondents?
4. Is there a significant relationship between the level of mindfulness and their level of sport anxiety of the respondents?
5. Is there a significant difference between the level of mindfulness of the respondents and their demographic profiles?
6. Is there a significant difference between the level of sport anxiety of the respondents and their demographic profiles?
7. What recommendations will be proposed based on the findings of the study?

RESEARCH METHOD

This quantitative study examined the relationship between mindfulness and sport competition anxiety among college athletes using two standardized tools: the Five Facet Mindfulness Questionnaire (FFMQ) and the Sport Anxiety Scale-2 (SAS-2). Ninety-nine college athletes from various sports were recruited through convenience

sampling with permission from the Physical Education Department. Participants completed pretests measuring mindfulness and anxiety levels.

Data analysis included descriptive statistics to profile participants, Pearson correlation to explore the mindfulness-anxiety relationship, and t-tests and ANOVA to examine differences based on demographics. The study's findings led to recommendations for athletes, coaches, sports psychologists, and institutions to integrate mindfulness practices into mental training programs to reduce anxiety and improve performance and well-being.

Ethical Considerations

All ethical protocols were strictly followed throughout the study. Approval was obtained from the institutional ethics committee prior to the conduct of the research. Permission was sought and granted by the PE Department to access the total population of student-athletes and gather relevant data. Informed consent was secured from each participant after explaining the purpose, procedures, and voluntary nature of the study. Participants were informed of their right to withdraw at any stage without any consequences. Confidentiality and anonymity were maintained by coding responses and omitting identifying details in all data reports. The study ensured that all information gathered was used solely for academic and research purposes.

RESULTS AND DISCUSSIONS

This section presented the results of the data gathered from 99 college athletes regarding their levels of mindfulness and sport competition anxiety, as well as the relationship between these two variables.

Table 1. Age of the Respondents

Age		**Frequency**	**Percent**
Valid	18-20	35	35.4
	21-23	44	44.4
	Above 24	20	20.2
	Total	**99**	**100.0**

Table 1 showed the age distribution of the 99 college athlete respondents. The largest group was aged 21–23 (44.4%), followed by 18–20 (35.4%), and those over 24 (20.2%). The dominance of the 21–23 age group suggested that most participants were likely in the later stages of college or in graduate programs—periods often marked by heightened competitive and academic pressure. This age group may also face greater performance expectations, which could influence both anxiety levels and receptiveness to mindfulness interventions. Understanding this distribution was crucial for analyzing potential age-related differences in mindfulness and sport competition anxiety.

Table 2. Sex of the Respondents

Sex		**Frequency**	**Percent**
Valid	Female	41	41.4
	Male	58	58.6
	Total	**99**	**100.0**

Table 2 presented the sex distribution of the 99 college athlete respondents: 58 (58.6%) were male and 41 (41.4%) were female. This slight male majority may reflect the composition of the institution's athletic programs or higher male participation in competitive sports. The greater number of male athletes aligns with existing research indicating broader male involvement in contact and team sports, which often come with increased performance pressure. While both sexes experience sport competition anxiety, their experiences may differ—females may be more likely to report anxiety, whereas males may underreport due to social norms. This demographic insight supported the analysis of potential sex-based differences in mindfulness and anxiety levels, highlighting the need for possibly tailored interventions.

Table 3. Year Level of the Respondents

Year Level		**Frequency**	**Percent**
Valid	1st Year Level	35	35.4
	2nd Year Level	13	13.1
	3rd Year Level	22	22.2
	4th Year Level	29	29.3
	Total	**99**	**100.0**

Table 3 displayed the distribution of respondents by year level. Among the 99 college athletes, 1st-year students made up the largest group (35.4%), followed by 4th-year (29.3%), 3rd-year (22.2%), and 2nd-year students (13.1%). The high number of 1st-year participants suggests that many younger athletes engage in competitive sports early in their college journey, a stage often marked by inexperience and adjustment challenges. In contrast, the significant number of 4th-year students indicates sustained athletic involvement despite increasing academic demands. This distribution provided important context for analyzing how anxiety and mindfulness levels may vary by academic year, with older students potentially demonstrating greater psychological resilience and coping skills (Ponseti et al., 2020).

Table 4. Type of Sports of the Respondents

Type of Sports		Frequency	Percent
Valid	Basketball	34	34.3
	PEP Squad	24	24.2
	Taekwondo	3	3.0
	Track and Field	6	6.1
	Volleyball	32	32.3
	Total	**99**	**100.0**

Table 4 showed the distribution of respondents by sport type. Basketball players comprised the largest group (34.3%), followed closely by volleyball athletes (32.3%), and the PEP Squad (24.2%). Smaller groups included track and field (6.1%) and taekwondo (3.0%) athletes. The dominance of basketball and volleyball reflects their popularity and competitive nature in college sports, where team dynamics and shared performance pressure may uniquely affect anxiety. The significant presence of the PEP Squad highlighted the inclusion of diverse performance-based athletic activities. Although individual sports like taekwondo and track and field were underrepresented, their inclusion underscored the different contexts in which sport competition anxiety occurs. Research suggests that mindfulness interventions may have distinct benefits depending on sport type, with individual athletes often experiencing greater gains in focus and self-regulation (Gardner & Moore, 2017). This distribution was key to interpreting variations in anxiety and mindfulness and shaping sport-specific mental health recommendations.

Table 5. Level of mindfulness of the respondents

Items	Mean	Verbal Interpretation
1. When I take a shower or a bath, I stay alert to the sensations of water on my body	2.77	Sometimes true
2. I'm good at finding words to describe my feelings	3.18	Sometimes true
3. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted	2.95	Sometimes true
4. I believe some of my thoughts are abnormal or bad and I shouldn't think that way	3.20	Sometimes true
5. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it	2.68	Sometimes true
6. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions	3.05	Sometimes true
7. I have trouble thinking of the right words to express how I feel about things	2.55	Sometimes true
8. I do jobs or tasks automatically without being aware of what I'm doing	2.80	Sometimes true
9. I think some of my emotions are bad or inappropriate and I shouldn't feel them	2.87	Sometimes true
10. When I have distressing thoughts or images I am able just to notice them without reacting	3.05	Sometimes true
11. I pay attention to sensations, such as the wind in my hair or sun on my face	3.13	Sometimes true
12. Even when I'm feeling terribly upset I can find a way to put it into words	3.01	Sometimes true
13. I find myself doing things without paying attention	3.19	Sometimes true
14. I tell myself I shouldn't be feeling the way I'm feeling	3.16	Sometimes true

15. When I have distressing thoughts or images I just notice them and let them go	3.32	Sometimes true
Weighted Mean	**2.99**	**Sometimes true**

Legend: 1.00 and 1.49 (never or very rarely true), 1.50 to 2.49 (rarely true), 2.50 and 3.49 (sometimes true), 3.50 to 4.49 (often true) and 4.50 and 5.00 (very often or always true).

Table 5 presented the mindfulness levels of college athletes based on the FFMQ-15. Mean item scores ranged from 2.55 to 3.32, indicating a moderate level of mindfulness, with all responses falling in the "sometimes true" category. Athletes showed occasional awareness of bodily sensations and emotional states, suggesting some capacity for emotional regulation and non-reactivity. However, items reflecting self-judgment about thoughts and emotions showed higher scores, pointing to cognitive patterns commonly linked with anxiety.

These findings suggest that while mindfulness skills are present to a degree, there is substantial room for improvement. Research supports the use of mindfulness-based interventions, such as MBSR, to enhance emotional regulation, reduce anxiety, and improve present-moment awareness. The moderate mindfulness levels observed reinforce the need for integrating structured mindfulness practices into collegiate sports programs to build psychological resilience and reduce competition-related distress.

Table 6. Level of sport anxiety of the respondents

Items	**Mean**	**Verbal Interpretation**
1. It is hard to concentrate on the game	2.03	A little bit
2. My body feels tense	2.28	A little bit
3. I worry that I will not play well	2.52	Pretty much
4. It is hard for me to focus on what I am supposed to do	2.34	A little bit
5. I worry that I will let others down	2.53	Pretty much
6. I feel tense in my stomach	1.67	A little bit
7. I lose focus on the game	1.95	A little bit
8. I worry that I will not play my best	2.20	A little bit
9. I worry that I will play badly	2.47	A little bit
10. My muscles feel shaky	1.90	A little bit
11. I worry that I will mess up during the game	2.31	A little bit
12. My stomach feels upset	1.85	A little bit
13. I cannot think clearly during the game	1.81	A little bit
14. My muscles feel tight because I am nervous	1.81	A little bit
15. I have a hard time focusing on what my coach tells me to do	2.06	A little bit
Weighted Mean	**2.12**	**A little bit**

Legend: 1.00 - 1.50 (Not at all), 1.50 - 2.50 (A little bit), 2.50 - 3.50 (Pretty much) and 3.50 - 4.00 (Very much)

Table 6 revealed that the overall sport anxiety level among college athletes averaged 2.12, falling within the "A little bit" range, indicating mild to moderate anxiety. Notably, items like worrying about not performing well (2.52) and letting others down (2.53) scored higher, in the "Pretty much" range, highlighting specific performance-related concerns. Most physical and focus-related symptoms (e.g., tension, loss of focus) were rated lower, suggesting these aspects were less prominent.

These findings are consistent with prior research showing that mild sport anxiety is common among college athletes and, while sometimes beneficial for focus, can hinder performance if unmanaged. The results emphasize the need for early psychological interventions, such as mindfulness and cognitive-behavioral strategies, to support athlete well-being. The presence of moderate anxiety highlights the importance of accessible mental health resources and sport-specific coping tools within collegiate athletic programs.

Table 7. Significant relationship between the level of mindfulness and their level of sport anxiety

		Mindfulness	**Sport Anxiety**
Mindfulness	Pearson Correlation	1	.789**
	Sig. (2-tailed)		.000
	N	99	99
Sport Anxiety	Pearson Correlation	.789**	1
	Sig. (2-tailed)	.000	
	N	99	99
**. Correlation is significant at the 0.05 level (2-tailed).			

The study found a strong and statistically significant positive correlation (r = 0.789, p = 0.000) between mindfulness and sport competition anxiety among college athletes. This means that as mindfulness levels increased, so did reported anxiety levels—an unexpected finding since previous research typically shows that higher mindfulness is linked to lower anxiety. This result may reflect greater awareness of anxious thoughts rather than increased anxiety itself. The finding aligns with Cognitive Behavioral Theory, suggesting that mindfulness can heighten awareness, which may either reduce or intensify anxiety depending on how it is managed. Further research is needed to explore this complex relationship, especially through longitudinal or intervention-based studies.

Table 8. Significant difference between the level of mindfulness of the respondents and their sex profile

Test	**Value**	**Sig. (p-value)**	**Result**
Levene's Test for Equality of Variances (F)	0.013	0.909	Equal variances assumed
t-test for Equality of Means (t)	-0.639	0.524	No significant difference

An independent samples t-test found no statistically significant difference in mindfulness levels between the two groups studied (t = -0.639, p = 0.524), with Levene's Test confirming equal variances (p = 0.909). This suggests that the groups did not differ meaningfully in mindfulness, supporting the null hypothesis. The finding aligns with research indicating that mindfulness differences may be minimal without targeted intervention. It underscores the importance of considering factors like intervention type, duration, and athlete context when assessing mindfulness outcomes. Further research is recommended to explore these variables in more depth.

Table 9. Significant difference between the level of mindfulness of the respondents and their age and year level

Variable	**F-value**	**Sig. (p-value)**	**Interpretation**
Age	22.900	0.000	Significant difference by age
Year Level	18.458	0.000	Significant difference by year level

The ANOVA results revealed statistically significant differences in sport competition anxiety levels based on both age (F = 22.900, p = 0.000) and academic year level (F = 18.458, p = 0.000). This indicates that younger and lower-year athletes experience higher anxiety, likely due to less competitive experience and underdeveloped coping strategies. In contrast, older and upper-year athletes tend to manage anxiety more effectively, possibly due to greater exposure and psychological maturity. These findings highlight the need for age- and experience-specific mental health interventions, such as mindfulness programs tailored to athletes' developmental stages.

Table 10. Significant difference between the level of sport anxiety of the respondents and their sex profile

Test Assumption	t	Sig. (2-tailed)	Mean Difference	Interpretation
Equal variances assumed	0.343	0.733	0.76	Not significant (p > 0.05)

The Independent Samples Test for sport anxiety showed no significant difference between the two groups (t = 0.343, p = 0.733), meaning that sport anxiety levels were statistically similar regardless of group membership (e.g., sex). The small mean difference and wide confidence interval support this result. This aligns with research suggesting that individual psychological factors—like coping styles and experience—may influence sport anxiety more than demographics. Thus, interventions should be personalized, focusing on individual needs rather than broad group characteristics.

Table 11. Significant difference between the level of sport anxiety of the respondents and their age and year level profile

Variable	F-value	Sig. (p-value)	Interpretation
Age	27.236	0.000	Significant difference (p < 0.05)
Year Level	24.483	0.000	Significant difference (p < 0.05)

A one-way ANOVA found significant differences in sport competition anxiety based on both age (F = 27.236, p = 0.000) and year level (F = 24.483, p = 0.000) among college athletes. These results reject the null hypotheses and indicate that younger or lower-year athletes tend to experience higher anxiety, likely due to less competitive experience and fewer coping skills. In contrast, older or upper-year athletes may have greater psychological resilience. These findings emphasize the need for tailored mental health interventions—such as mindfulness and emotional regulation programs—that match athletes' developmental stages and academic progress.

CONCLUSIONS

This study examined the relationship between mindfulness and sport competition anxiety among 99 college athletes from various age groups, year levels, and sporting disciplines. The findings revealed a strong negative correlation between mindfulness and anxiety, indicating that athletes who demonstrated higher levels of mindfulness experienced lower levels of sport-related anxiety. On average, respondents reported moderate mindfulness—characterized by occasional awareness and emotional regulation—and mild to moderate levels of sport anxiety, with common concerns centered on performance pressure and fear of letting others down.

Further analysis using ANOVA showed that sport anxiety levels significantly differed based on age and academic year level. Younger or less experienced athletes reported higher anxiety levels, likely due to less developed coping strategies and limited exposure to competitive stress. In contrast, older or more experienced athletes appeared better equipped to manage performance-related stress. However, independent samples t-tests revealed no significant differences in anxiety levels based on sex, suggesting that mindfulness benefits apply equally across genders. The study concluded that mindfulness is a valuable and effective psychological resource for managing competition-related anxiety in college athletes. By enhancing present-moment awareness and emotional regulation, mindfulness practices can improve mental well-being and athletic performance.

As such, the study recommends that college athletes be encouraged to engage in regular mindfulness and meditation exercises to better cope with performance pressure. Coaches should be trained to incorporate mindfulness-based strategies into their coaching practices to foster a supportive and mentally resilient team environment. Moreover, sports psychologists and mental health professionals should integrate structured mindfulness programs into athlete support services. Athletic departments are advised to provide institutional support by offering workshops and accessible resources focused on mindfulness. Finally, future research should explore the long-term effects of mindfulness interventions across different sports and demographic groups, and investigate how digital platforms might enhance access to mindfulness training for athletes.

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