



SOURCES OF SPORTS ANXIETY OF SENIOR HIGH SCHOOL ATHLETES IN THEIR SPORTS PERFORMANCE: BASIS FOR PROGRAM INTERVENTION

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Abstract:

Sports anxiety is one of the reasons why the performance of senior high school student-athletes might be affected. The purpose of this study is to identify the different sources of the sports anxiety of senior high school athletes in Metro Manila. It also sought to answer if there are significant differences among these sources. This quantitative research utilized a standard questionnaire namely Competitive Sport Anxiety Inventory-2 (CSAI-2) developed by Rainer Martens *et al.* (1990). The research used the snowball technique to choose a sample from the population. The study utilized weighted mean, and analysis of variance (ANOVA) to address the problem. The study confirms that sources of sports anxiety in terms of cognitive anxiety and self-confidence are often experienced with a general weighted mean of 3.11 and 3.05, respectively while somatic anxiety is rarely experienced with a weighted mean of 2.42. The study confirmed that there are no significant differences among these sources of sports anxiety.

Keywords: sports anxiety, student-athletes, cognitive anxiety, somatic anxiety, self-confidence

1. Introduction

Anxiety is always part of the daily lives of the students whether it's taking examinations, reciting in front of the class, doing practical assessments, and many more. It is an inevitable feeling towards doing something whether we are familiar or not. After the pandemic when all the schools are slowly getting back on track, one aspect of student's lives that opened is their extra-curricular activities, specifically competitive sports. Competitive sports transcend the mere necessity of physical fitness in order to participate. Athletes who engage in such competitions must contend with the rigors of

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their training regimen and tournament preparation, personal baggage, and the pressure of representing their team. In the case of student-athletes, these challenges are compounded by the academic and school pride pressures they must endure. Consequently, they are required to be well-rounded athletes, meaning they must possess not only the physical stamina to perform admirably but also the mental and emotional fortitude to handle all of their obligations.

Competitive sports anxiety encompasses the emotional states of apprehension, unease, or distress that athletes may encounter prior to, during, or subsequent to their involvement in athletic competitions or events. Athletes frequently encounter apprehension while participating in competitive sports; this fact is not unforeseen. It may be the result of pressure, anxiety, anxiousness, or stress brought on by participation in a tournament or competition. Although anxiety manifests in physical manifestations such as trembling hands and legs, sweaty forehead, and palpitations, it transcends mere affective states and thoughts. The study by Baldock *et al.* (2020) reveals that anxiety about participating in competitive sports is prevalent among athletes, particularly those in high school. This is a psychosocial phenomenon that has the potential to significantly impact the mental health and overall well-being of the athlete. The comprehension of competitive sport anxiety is crucial in the field of sports psychology due to its capacity to impact not only immediate athletic performance but also the wider psychological environment of adolescent athletes.

According to Khurram *et al.* (2021), anxiety may, in fact, result in a lack of motivation, demotivation, and excessive pondering, all of which have the potential to negatively impact an athlete's overall condition and performance during a competition. However, it should be noted that anxiety is among the psychological characteristics that significantly impair an athlete's overall performance in competitive sports.

Mental performance pressure, high expectations, self-doubt, excessive preoccupation with one's thoughts, the significance of the occasion, and an overwhelming fear of uncertainty can all have an impact on an athlete's physical and mental well-being, thereby impeding their ability to concentrate and deliver optimal performance (Rubio *et al.*, 2023). Anatomy distinct from an athlete's experience comprises cognitive, somatic, and self-confidence anxieties within the realm of sports psychology.

Cognitive anxiety pertains to mental operations. It encompasses anxieties, pessimistic reflections, or apprehension regarding an athlete's potential lack of success. Cognitive anxiety may present itself in the form of heightened concern regarding one's performance, apprehension regarding potential errors, or challenges with maintaining focus as a result of rapid thinking. An athlete's capabilities and perception of concentration are fundamentally impacted by the psychological component of anxiety. Somatic anxiety encompasses the physiological manifestations of anxiety that an athlete may experience, such as tachycardia, perspiration, muscle strain, vertigo, or trembling. The body frequently experiences these bodily sensations as an outcome of tension or anxiety preceding or throughout a sporting event. Somatic anxiety has the potential to impair an athlete's performance through the impairment of their physical capabilities or

coordination. Self-confidence pertains to the attribute wherein an athlete is certain of their own capabilities. In sports, low self-confidence can contribute to apprehension. Athletes who experience low self-confidence or uncertainty regarding their abilities may encounter a surge in anxiety, which in turn may result in performance-related concerns and heightened tension levels throughout competitions. On the contrary, an athlete's performance can be enhanced and apprehension can be mitigated through the provision of a strong sense of self-assurance in their own capabilities.

Senior high school athletes' performance is significantly impacted by anxiety. Therefore, in order to provide these athletes with useful coping techniques both prior to and during competition days, it is imperative to identify the origins of anxiety in them. The way in which students manage their anxiety can have a significant impact on their welfare, performance, and overall experience.

A multitude of research endeavors have been devoted to examining the psychological repercussions of competitive sport anxiety among athletes. Higher levels of apprehension regarding competitive sports were associated with lower levels of self-efficacy and self-esteem, according to a study by Gotwals *et al.* (2016).

The term 'anxiety' has attained considerable prominence in the twenty-first century on account of its pervasiveness. It may be a condition or experience that the vast majority, if not all, individuals have encountered at some point in their lives, irrespective of age or occupation. Consequently, student-athletes remain susceptible to anxiety, particularly competitive sports anxiety, notwithstanding their perpetual exposure to physical training and pressure. Competitive sports anxiety pertains to the distress experienced by athletes during their engagement in athletic competitions. This may have an impact on their psychological, emotional, and physical health. Physical manifestations include physical limitations such as hand quivering, among others. It has the potential to impact the mental well-being of an athlete, as evidenced by the occurrence of negative sentiments. Emotional strength can be discerned in the morale of an athlete, which encompasses confidence in one's own capabilities. Therefore, this finding indicates that student-athletes, despite undergoing comprehensive training that includes mental, physical, and emotional aspects, remain susceptible to developing competitive sports anxiety.

2. Material & Methods

2.1 Participants

The sample for this study was selected from the population using the snowball technique. Bhat (2022) states that snowball sampling, sometimes referred to as chain-referral sampling, is a non-probability sampling technique that chooses samples with uncommon characteristics. Referral sampling is a type of sampling in which study participants who are currently involved indicate that further study participants be recruited in order to complete the research. Exponential non-discriminative snowball sampling, which entails selecting the initial participant who then offers multiple recommendations, was utilized

in this investigation. Until a sufficient number of participants is gathered for the sample, each subsequent referral adds more data to the referral process.

The research sample consists of seventy (70) Metro Manila senior high school athletes of represent their school in an inter-school tournament and a member of team sports such as basketball and volleyball. Respondents are 65% male and 35% female while respondents' residency distribution is Makati City and Pasay City- 21.43%, Manila City and Taguig City-20.00%, and Quezon City 17.14%.

2.2 Instruments

This study employed the Competitive Sport Anxiety Inventory-2 (CSAI-2) developed by Rainer Martens *et al.* (1990) to assess the sources of sports anxiety among senior high school athletes in Metro Manila. The three sections of the standard questionnaire are self-confidence, physical anxiety, and cognitive anxiety. There are nine questions in each area. A 4-Likert scale from Albener's (2012) study was used in the study; its validity and reliability were confirmed through pre-testing at Universidad De Manila. The weighted mean ranges for verbal interpretations of always, often, rare, and never are 4.00–3.50, 3.49–2.50, 2.49–1.50, and 1.49–1.00, respectively.

2.3 Data Collection

On social media, the researcher made a post requesting participants for the study. The questionnaire was sent to the respondents via email by the researcher a week later. The standard questionnaire, a letter of intent, and a letter of confidentiality are included in the email. Completing the data took three weeks. Following the retrieval of the data, the researcher sent all of the papers to a statistician for analysis of variance (ANOVA) and computation of the weighted mean. The researcher evaluates, assesses, and presents the data following the statistician's computation of the data. The researcher then formulates a conclusion and a suggestion.

2.4 Statistical Analysis

The researcher used weighted mean and analysis of variance (ANOVA) in this investigation. These statistical techniques were selected by the researcher because they will deal with the specified problem statement. According to Taylor (2023), the weighted mean can be calculated by simply adding all of the values and dividing the result by the total number of data. Consequently, we can use our subset (data, condition) and mean(data) functions to quickly compute the weighted means for each treatment group. Analyzing of variance (ANOVA) is a statistical technique that divides observed aggregate variability within a data set into systematic and random components, according to Kenton (2023). While the random components have no influence, the systematic factors statistically alter the provided data set. In a regression study, analysts utilize the ANOVA test to ascertain how independent factors affect the dependent variable.

3. Results

Table 1: Sources of Anxiety as to Cognitive State

Cognitive State Anxiety		
Items No.	Weighted Mean	Verbal Interpretation
1	3.34	Often
2	2.97	Often
3	3.09	Often
4	3.09	Often
5	2.97	Often
6	3.14	Often
7	3.46	Often
8	3.23	Often
9	2.67	Often
Total	3.11	Often

Table 1 shows that senior high school student-athletes often experience cognitive anxiety regarding their performances with a general weighted mean is 3.11. This can encompass feelings of worry related to underperforming or even experiencing a complete loss in the game. The findings indicate that individuals experience psychological stress, resulting in pessimistic views when engaging in competitive activities. Moreover, even with extensive training, data demonstrates that student-athletes are frequently susceptible to negative mental attitudes that can impact their performances. On the other hand, the table shows that item number 7 which is “I’m concerned about reaching my goal” was perceived as the highest source of athletes while item number 9 “I’m concerned I won’t be able to concentrate” was perceived as low when it comes to cognitive state anxiety.

Table 2: Sources of Anxiety as to Somatic State

Somatic State Anxiety		
Items No.	Weighted Mean	Verbal Interpretation
1	2.70	Often
2	2.50	Often
3	2.61	Often
4	2.21	Rare
5	2.56	Often
6	2.47	Rare
7	2.09	Rare
8	2.37	Rare
9	2.29	Rare
Total	2.42	Rare

Table 2 reveals that Metro Manila athletes are perceived as “rare” in experiencing somatic state anxiety with an overall weighted mean of 2.42. Items number 1, 2, 3, and 5 are perceived as “often” with a mean of 2.70, 2.50, 2.61, and 2.56, respectively while items number 4, 6, 7, 8, and 9 are perceived as “rare” with a mean of 2.21, 2.47, 2.09, 2.37, and

2.29, respectively. Table to also shows that item number 1 “I feel nervous” was perceived as the highest source while item number 7 “I feel my stomach sinking” was perceived as the lowest source of somatic anxiety.

Table 3: Sources of Anxiety as to Self-Confidence

Self Confidence		
Items No.	Weighted Mean	Verbal Interpretation
1	2.99	Often
2	3.14	Often
3	3.14	Often
4	3.03	Often
5	3.20	Often
6	2.91	Often
7	2.86	Often
8	3.20	Often
9	3.00	Often
Total	3.05	Often

Table 3 presents that senior high school student-athletes often demonstrate a level of self-assurance over their performances. This is shown with a general weighted mean of 3.05. Therefore, these athletes depend on their abilities and aptitude during competitions, which directly impact their performances. This is based on the fact that athletes rely solely on themselves, including their physical strength, abilities, and goals, when participating in tournaments. On the other hand, a weighted mean of 3.14 shows that in items number 2 and 3 “I’m confident I can meet the challenge and I’m confident because I mentally picture myself reaching my goal” perceived the highest form of self-confidence while item number 6 “I feel mentally relaxed” perceived low with a mean of 2.91.

Table 4: Sources of Sports Anxiety

Sources of Sports Anxiety	Mean	Verbal Interpretation
Cognitive State Anxiety	3.11	Often
Somatic State Anxiety	2.42	Rare
Self Confidence	3.05	Often

Table 4 reveals that Metro Manila athletes are experiencing “often” cognitive state anxiety and self-confidence anxiety with a weighted mean of 3.11 and 3.05, respectively while “rare” when it comes to somatic state anxiety with a weighted mean of 2.42. This shows that the highest source of anxiety of Metro Manila senior high school athletes is based on cognitive state anxiety.

Table 5: Significant Difference between Sources of Sports Anxiety

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2.604985185	2	1.302492593	36.226005	5.63378E-08	3.402826
Within Groups	0.862911111	24	c			
Total	3.467896296	26				

Table 5 illustrates how the sources of sports anxiety differ significantly from one another. The data indicates that the sum of squares is 2.604985185, the degree of freedom is 2, the mean square is 1.302492593, and the F-critical is 3.402826. As a result, the between-groups P-value is 5.63378E-08 and the F-critical is 3.402826. A sum of squares of 0.862911111, a degree of freedom of 24, and a mean square of 0.862911111 are displayed in the results for the within groups. Consequently, a total degree of freedom of 26 and a total sum of squares of 3.467896296 were found. The table unequivocally demonstrates that the null hypothesis's outcome is a statistical claim that there are no significant differences between a population parameter's estimated value from a sample taken from that population and its hypothesized value. There is already a condition, hence the probability value is greater than 0.05. The research's conclusions imply that the null hypothesis should be accepted and the alternative hypothesis should be rejected. As a result, there are no significant differences among the causes of sports anxiety.

4. Discussion

The study reveals that the athletes surveyed often experience anxiety when participating in competitive sports. The collected data has resulted in the conclusion that athletes often experience and entertain pessimistic ideas while participating in competitive sports, in contrast to engaging in recreational sports. According to the statistics, athletes are highly anxious about their performance, the potential disappointment of their peers, and their capacity to achieve their own goals.

According to Ford *et al.* (2017), the majority of athletes indicate that they encounter intense anxiety when participating in sports. Different studies in sport psychology have reached a consensus that competitive sports can lead to significant levels of stress and anxiety. According to Zhou *et al.* (2019), research suggests that competitive pressure can adversely affect athletes. The potential consequences encompass worry, hostile conduct, diminished contentment, and adverse impacts on both bodily and mental well-being, as well as competition outcomes. It is supported by Bali (2015), Stress can be viewed as a form of pressure caused by a stressor, which can negatively impact an athlete's performance, making it difficult to handle. According to Ford *et al.* (2017), sports-related anxiety can significantly affect athletic performance during practice and competitions, increase the likelihood of getting injured, impede recovery from injury, and raise the risk of being injured again during practice and competitions. This is apparent from the collected data since all the participants tend to experience cognitive anxiety when engaging in competitive sports, such as inter-school tournaments.

On the other hand, athletes rarely suffered somatic anxiety. Rubio *et al.* (2023) define somatic anxiety as the manifestation of bodily symptoms, like perspiration, palpitations, and difficulty breathing, that are a result of the individual's thoughts and feelings. The main theoretical implication of this study is the importance of an athlete's self-perception in relation to the negative impact it has on precompetitive physical distress. Thus, when the success criterion is self-referential and there is a deliberate

intention to practice, the work environment of interest also reduces the symptoms of physical anxiety for success in contexts such as university athletics.

Typical instances of physiological responses include increased sweating, breathing problems, higher heart rate, more frequent urination, reduced saliva production, muscle tension, and the sensation widely known as "*butterflies in the stomach*" (Parnabas *et al.*, 2013) while Pedersen (2022) defines somatic state anxiety as a type of anxiety that has physical effects on an individual, such as headaches, tense shoulders, stomach discomfort, or unusual tiredness. When it comes to sports, it is common for athletes to experience anxiety before a high-stakes competition. However, what sets athletes apart is how effectively they manage this anxiety. They can either harness it as motivation to enhance their performance or allow it to hinder their ability to perform at their peak. To mitigate the aforementioned repercussions, it is advisable to enhance the athletes' emotional regulation to exert influence over the impact of somatic state anxiety or any other manifestation of worry on their performance. Moreover, Hasanah *et al.* (2019) contend that there is a tendency for somatic anxiety levels to rise prior to the commencement of the game. However, while cognitive anxiety levels grow, physical anxiety levels decrease during the actual event.

Lastly, the study provides statistics on how athletes might enhance their self-confidence in accepting challenges and excelling under high-pressure conditions. These findings suggest that athletes can improve their performance by using proven techniques to effectively manage challenging situations in sports. Vealey (1986) suggests that when an athlete sets excessively high expectations for oneself and fails to effectively handle unfavorable performance outcomes, it can lead to a decrease in self-confidence. Some research suggests that poor self-esteem might be influenced by the accumulation of negatively viewed outcomes and causes. After achieving certain goals, the athletes might then revisit and resolve their problems. Athletes must evaluate scenarios in which they have experienced high or low self-confidence to thoroughly assess the influence of potential results. Being able to evaluate these elements of themselves in such situations will enable them to achieve a sense of equilibrium in their future self-assurance. Inadequate administration of internal control not only results in subpar performance but also diminishes focus and general physical well-being (Medrano, 2016). As per the research conducted by Lochbaum, M. *et al.* in 2022, certain athletes possess inherent confidence, whereas even the most self-assured athlete can have reduced self-confidence in specific circumstances. An athlete's performance can deviate to some degree from their perceived capabilities and how they handle pressure. Participating in such a competition might enhance an athlete's confidence due to the opportunities for exposure and encouragement they receive. The research conducted by Bang, H., *et al.* (2020) determined that participation in extracurricular activities and promoting school involvement contribute to the development of self-esteem.

5. Conclusion

The study shows the sources of sports anxiety among the participating senior high school student-athletes. The researcher successfully produced the subsequent discoveries such as; The athletes who take part in competitions frequently encounter cognitive anxiety. As a result, individuals frequently harbor pessimistic beliefs about their performance, focus, or even the competition as a whole. In addition, even if athletes are fully engaged in continuous training, they are nonetheless vulnerable to adopting negative mental outlooks. As stated by Dingley (2023), cognitive dissonance can also impact performance by causing a lack of concentration. Furthermore, the comprehensive results indicated that student-athletes seldom encounter somatic anxiety when participating in tournaments. This demonstrates that the majority of athletes continue to encounter bodily manifestations of worry. It may encompass symptoms such as heartburn, flushing of the neck, and similar effects. Finally, the results also indicated that the participating athletes frequently exhibit self-assurance during tournaments. Contrary to the notion, athletes possess natural self-confidence that arises from their dependence on their abilities. Kuloor and Kumar (2020) assert that athletes employ self-confidence to effectively demonstrate their physical ability in competitive settings. Furthermore, it is also a cognitive ability utilized with the conviction in an individual's training duration and physical abilities. In addition, an athlete's self-confidence also has an impact on their source of anxiety.

The significance of mental health is on the same level as physical health, particularly for individuals involved in sports or athletes. The correlation between these two characteristics is strong, and an individual's overall well-being is influenced by both features. Athletes should give equal importance to self-care and be conscientious about their mental well-being, just as they do with their physical health. Athletes frequently encounter the difficulty of competitive sports anxiety. Anxiety typically denotes the adverse emotion, such as uneasiness, experienced prior to or during a competitive event. An athlete's performance may be adversely affected by the sensation of nervousness. Physical fitness alone is not the sole determinant of an athlete's ability to showcase their strength. Therefore, the researcher recommends the following:

- *The availability of a sports psychologist*, sports organizations want to incorporate mental health assistance initiatives for its athletes. This includes the provision of a sports psychologist, counseling services, and teaching on mental health awareness.
- *Therapeutic Services*, individual therapists, or counseling services for athletes can be immensely beneficial, particularly for individuals who cannot assist themselves. It is essential to have on-site counseling services available to assist athletes who are experiencing worry and stress.
- *Providing mental health education* through workshops and seminars that specifically focus on addressing the mental health concerns of athletes. It is important to

address topics related to the management of stress and performance anxiety and to emphasize the importance of obtaining professional assistance.

Conflict of Interest Statement

The author declares no conflicts of interest.

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Mark Anthony B. Rosario is a RFT faculty member of Far Eastern University in The Philippines. He is under the Department of Undergraduate Studies of Institute of Education. The author teaches a variety of topics for professional courses that are relevant to physical education and sports science.

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