



SURVEY OF ANXIETY LEVELS IN PENCAK SILAT IN GUNUNG KIDUL REGENCY, INDONESIA: PERCENTAGE ANALYSIS OF FEMALE ATHLETES

Danar Ariyanto¹,

Siswantoyo¹,

Trisnar Adi Prabowo²ⁱ

¹Faculty of Sport and Health,
Universitas Negeri Yogyakarta,
Indonesia

²Faculty of Education,
Universitas Muhammadiyah Brebes,
Indonesia

Abstract:

The purpose of this study was to analyze anxiety levels in female pencak silat athletes in Gunung Kidul Regency, Indonesia. This study was quantitative with a cross-sectional survey approach. The sample consisted of seven female pencak silat athletes aged 16–20 years. This research instrument uses the Competitive State Anxiety Inventory-2 Revised (CSAI-2R). Data analysis based on descriptive percentage with categories: 0% - 20% 'very low', 21% - 40% 'low', 41% - 60% 'sufficient', 61% - 80% 'high', 81% - 100% 'very high'. The results of this study are the level of anxiety in the category of female athletes in pencak silat of 59.78%. These findings indicate that athletes possess the psychological ability to adapt to the demands of training and competition, yet still face mental stress that can potentially impact optimal performance. Therefore, the role of coaches, parents, friends, sports organizations or clubs, and structured mental training are key factors in helping athletes manage anxiety adaptively. Future research is recommended to use longitudinal or experimental designs and incorporate other psychological variables to gain a more comprehensive understanding.

Keywords: athlete anxiety, athlete psychology, sports psychology, Pencak Silat

1. Introduction

Anxiety is a psychological condition characterized by feelings of worry, tension, and fear that arise in response to both real and subjective situations. In the context of sports,

ⁱ Correspondence: email trisnar.prabowo@umbs.ac.id

anxiety often arises when athletes face the demands of competition, performance pressure, coach expectations, and the consequences of match outcomes (Cahyo *et al.*, 2025). In the sport of pencak silat, anxiety has more complex characteristics because it involves direct physical contact, the risk of injury, and the need for quick decision-making in dynamic match situations (Rizal & Kasriman, 2022). The combination of technical and tactical aspects and direct duels with opponents makes pencak silat a sport that has the potential to trigger high levels of anxiety in athletes, especially before and during matches (Gani *et al.*, 2024).

Various studies in sports psychology have shown that anxiety levels and responses can differ based on gender (Mascaro *et al.*, 2023). Female athletes tend to report higher levels of anxiety than male athletes, particularly cognitive anxiety such as concerns about performance and social judgment (Beisecker *et al.*, 2024). In pencak silat, this distinction becomes even more relevant because the sport has historically been perceived as masculine, aggressive, and high-risk (Aga *et al.*, 2023), (Setiawan *et al.*, 2024). These conditions can affect female athletes' self-perception when facing a match, including their sense of self-confidence and mental readiness (Alisti *et al.*, 2025). Therefore, gender-based anxiety analysis in pencak silat is important to understand the psychological characteristics of athletes more specifically.

Female athletes in pencak silat face psychological challenges that arise not only from the demands of competition, but also from social and cultural factors (Remon, 2022). Pressure to perform optimally, concerns about injury, and environmental expectations can increase anxiety before and during matches (Yusup *et al.*, 2024). In addition, female athletes are often faced with role conflicts, such as academic, family, and social demands that go hand in hand with the demands of training and competition (Beisecker *et al.*, 2024). In pencak silat, anxiety that is not managed properly can negatively impact the concentration, technical accuracy, decision-making, and emotional stability of female athletes, ultimately affecting the outcome of the match (Pambudi *et al.*, 2025).

In recent years, women's pencak silat achievements in Gunung Kidul Regency have shown significant improvement, from cadet, student, to senior levels. However, this improvement in performance has not been accompanied by a systematic mapping of athletes' psychological well-being, particularly regarding anxiety levels. Empirical data on anxiety levels in female pencak silat athletes in Gunung Kidul Regency is still limited, leading coaches and sports administrators to focus more on physical and technical aspects. However, unidentified and unaddressed anxiety has the potential to hinder athletes' performance and sustained achievement (Sridana *et al.*, 2024). Therefore, this problem is very important to study as a basis for decision making in the mental development of female pencak silat athletes.

Based on the description above, this study aims to analyze the anxiety levels of female pencak silat athletes in Gunung Kidul Regency, Indonesia. This study is expected to provide an objective picture of the anxiety levels of female athletes as part of the psychological factors that influence sports performance. The novelty of this study lies in its focus, which specifically highlights female pencak silat athletes at the regional level

with a trend of increasing performance, which is rarely examined in previous research. The results of this study are expected to serve as a basis for developing mental training programs that are more focused, contextual, and based on the real needs of female pencak silat athletes.

2. Material and Methods

This research is quantitative with a cross-sectional survey approach. So this research was conducted by collecting data at one time, the aim being to conclude factors at one time in one population. The sample consisted of seven pencak silat athletes from Gunung Kidul Regency, Indonesia, aged 16–20 years. This sample was selected using total sampling, because the sample met the criteria of having won the national pencak silat championship consecutively from 2022–2025. The instrument used for data collection adopted the Competitive State Anxiety Inventory-2 Revised (CSAI-2R) revised by Cox *et al.*, (2023) from the CSAI-2R measuring instrument developed by Martns *et al.*, (1990). The instrument aspects are Cognitive, Somatic, and Confidence. The CSAI-2R has been successfully adapted into Indonesian, with RMSEA = .045, GFI = .919, CFI = .964, TLI = .955, PNFI = .717, and PGFI = .661 (Putra & Guntoro, 2022). The scale used in the questionnaire was 1–4. Data analysis for this study used the descriptive percentage method (Sugiyono, 2020).

Table 1: Reference for Percentage Results

Percentage	Category
81% - 100%	Very High
61% - 80%	High
41% - 60%	Sufficient
21% - 40%	Low
0% - 20%	Very Low

3. Results

The anxiety levels reported in this study were based on the accumulated scores obtained from seven samples. The resulting scores were then divided by the maximum score on the CSAI-2R. The following are the anxiety levels for female pencak silat athletes.

Table 2: Anxiety Level Percentage

Anxiety Aspect	Score Obtained	Maximum Score	Percentage	Category
Cognitive, Somatic, Confidence	226	378	59,78%	Sufficient

Based on calculations, the anxiety level of female pencak silat athletes aged 16-20 in Gunungkidul Regency was 59.78%, which is considered "sufficient" This result indicates that, in general, athletes have the ability to manage anxiety, but there are still various

psychological aspects that need to be improved to support optimal performance during competitions.

4. Discussion

The results of this study indicate that the general anxiety level of female pencak silat athletes in Gunung Kidul Regency is moderate. This finding indicates that the athletes are not experiencing low levels of anxiety, but they have not yet reached high levels of anxiety or become extremely disruptive.

Moderate levels of anxiety can have a dual impact on the performance of female pencak silat athletes. On the one hand, moderate anxiety has the potential to increase alertness, focus, and competitive readiness (Pambudi *et al.*, 2025). However, on the other hand, anxiety that is not managed well can reduce the quality of performance through decreased concentration, muscle tension, decreased self-confidence, and errors in decision-making during the match Beisecker *et al.*, 2024). In pencak silat, which demands fast reactions, technical precision, and emotional control, anxiety at a certain threshold can be a limiting factor in optimizing performance (Gani *et al.*, 2024), (Saniah *et al.*, 2024). especially in female athletes who are more sensitive to the psychological pressures of competition.

Coaches play a strategic role in managing and reducing anxiety in female pencak silat athletes. A supportive, communicative, and empathetic coaching approach can help athletes feel more psychologically secure in facing the demands of training and competition (Sridana *et al.*, 2024), (Indarto *et al.*, 2025). Coaches who are able to provide constructive feedback, set realistic targets, and create a positive training climate have the potential to reduce excessive anxiety in athletes (Setiawan *et al.*, 2023). (Yusup *et al.*, 2025). In the context of combat sports such as pencak silat, the role of the coach is not only as a teacher of techniques and tactics, but also as a figure who helps build self-confidence and mental readiness of female athletes.

In addition to coaches, social support from parents, peers, and sports organizations plays a significant role in reducing anxiety in female pencak silat athletes. Emotional, motivational, and instrumental support can help athletes manage the psychological stress that arises before and during competition (Latif *et al.*, 2024), (Imtihansyah *et al.*, 2024). A positive social environment allows athletes to feel valued, understood, and unburdened by excessive expectations. In combat sports, organizational support, such as clubs and sports officials, also plays a role in providing a safe and conducive training environment (Remon, 2022), (Abdhi *et al.*, 2024), so that female athletes' anxiety can be suppressed and directed into an adaptive form of mental readiness.

The results of this study emphasize the importance of implementing mental training as an integral part of a female pencak silat athlete development program. Mental training such as relaxation, visualization, positive self-talk, and emotional management can help athletes control anxiety and maintain a functional level (Haqiyah & Abidin,

2020), (Hadian *et al.*, 2024). For female athletes, mental training is crucial to increase self-confidence, emotional stability, and the ability to cope with the pressure of competition (Ayu P *et al.*, 2025). Systematic and continuous integration of mental training is expected to help athletes change anxiety from an inhibiting factor into a source of motivation, self-efficacy and readiness to compete (Widyastutu *et al.*, 2024).

Practically, this study provides implications for coaches, sports administrators, and pencak silat practitioners to pay more attention to psychological aspects, particularly anxiety in female athletes, in performance development programs. The results can be used as a basis for designing mental training interventions and coaching approaches that are more sensitive to the needs of female athletes. However, this study has several limitations, including the use of a descriptive survey design that cannot explain cause-and-effect relationships, the limited scope of the study area, which only focused on Gunung Kidul Regency, and the possibility of subjective bias in athletes' responses when completing the instrument. Therefore, further research is recommended to use a longitudinal or experimental design and include other psychological variables to gain a more comprehensive understanding.

5. Conclusion

This study concluded that the general anxiety level of female pencak silat athletes in Gunung Kidul Regency was moderate. This finding suggests that athletes possess the psychological capacity to adapt to the demands of training and competition, but still face mental stress that can potentially impact optimal performance. Moderate anxiety can be beneficial if managed well, but can become a limiting factor if not accompanied by appropriate management strategies. Furthermore, attention to psychological aspects is important in the development of female pencak silat athletes, especially in efforts to maintain and improve existing achievements. The role of coaches, social support from the surrounding environment, and the implementation of structured mental training are key factors in helping athletes manage anxiety adaptively. Therefore, integrating mental development into pencak silat training programs is crucial for female athletes to perform more confidently, emotionally stable, and consistently in facing competitive situations. This research is expected to form the basis for developing policies and programs to develop more holistic and sustainable female pencak silat athletes.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Danar Ariyanto is a Master's Program Student in Sports Coaching Education at Universitas Negeri Yogyakarta, Indonesia.

Siswantoyo is Siswantoyo is a Professor and Lecturer in Sports Coaching Education at Universitas Negeri Yogyakarta, Indonesia.

Scopus ID: 57193793527

Trisnar Adi Prabowo is a Lecturer in Physical Education with a Doctoral qualification, as well as a young researcher at Universitas Muhammadiyah Brebes, Indonesia.

Scopus ID: 58042724200

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