

# ANXIETY EXPERIENCES AND COPING STRATEGIES AMONG TGR PENCAK SILAT ATHLETES DURING COMPETITION : A QUALITATIVE STUDY

Yesi Setyaning Pambudi <sup>1</sup>, Kurniati Rahayuni<sup>2</sup> & Mohamad Nizam Mohamed Shapie <sup>3</sup>

<sup>1</sup>State University of Malang /Faculty of Sports Science /Department of Sport Coaching Education,  
Jl Semarang no.5, East Java, Indonesia

<sup>2</sup>State University of Malang /Faculty of Sports Science /Department of Sport Coaching Education,  
Jl Semarang no.5, East Java, Indonesia

<sup>3</sup>University Teknologi Mara/ Faculty of Sports Science,  
Shah Alam, Malaysia

\*Corresponding author's email: [yessysp01@gmail.com](mailto:yessysp01@gmail.com)

Published date: 15 March 2025

## ABSTRACT

This study investigated the dynamics of anxiety experienced by Indonesian pencak silat athletes leading up to competition. As part of Indonesia's global cultural heritage, pencak silat is often hampered by anxiety that affects athletes' performance. Psychological aspects such as the ability to overcome obstacles and maintain concentration are crucial in the management of this anxiety. Coaches have an important role in supporting athletes to recognise and address their anxiety patterns and in designing effective coping strategies. The research approach used was qualitative, with informal interviews as the main method to explore the athletes' experiences in depth. The research participants consisted of 10 Indonesian pencak silat athletes (6 males and 4 females) who had varying levels of experience and competition, including in singles, doubles, and team categories at the elite level. Data were collected through in-depth interviews as well as visual methods such as images and diagrams, which were then thematically analysed. The main objective of this study was to deepen the understanding of the fluctuations in anxiety experienced by athletes leading up to competitions and the coping strategies they use. Research findings revealed that female athletes tend to experience higher anxiety than male athletes, which is influenced by biological factors such as hormonal changes. At national and regional levels, athletes often feel pressure to perform and fulfil expectations, which is a major cause of their anxiety. With a creative visual approach, athletes can increase their understanding and ability to express their anxiety experiences, allowing coaches to gain greater insight to develop more effective coping strategies.

**Keywords:** *Pencak Silat, Athlete Anxiety, Coping Strategies, Qualitative Approach, Creative Visualisation*

## INTRODUCTION

Pencak silat, a traditional martial art that is Indonesia's cultural heritage, has a special place on the international sporting stage. Despite widespread recognition and appreciation, pencak silat athletes often face major psychological challenges, particularly in the form of pre-competition anxiety. This study aims to look at how anxiety experienced by Indonesian pencak silat athletes affects their performance ahead of competition and the coping strategies they use.

Anxiety plays an important role in affecting athlete performance, and its management is crucial to achieving maximum results. Psychological skills, including how to face obstacles and maintain focus, are important aspects of this anxiety management. In this regard, coaches play a very important role in helping athletes to recognise and overcome their anxiety patterns and develop efficient coping strategies. This study used qualitative methods, with informal interviews as the main tool to explore the athletes' in-depth experiences. The respondents in this study consisted of 10 Indonesian pencak silat athletes, with a composition of 6 males and 4 females, who have a variety of competition experiences, including singles, doubles, and teams at the elite level. Data were collected through in-depth interviews as well as visual approaches such as images and diagrams, which were then thematically analysed to find patterns and key insights.

The main focus of this study was to understand more about the fluctuations in anxiety that athletes experience before competing and how they cope with such anxiety. Findings showed that female athletes typically experience higher levels of anxiety than males, with the influence of biological factors such as hormonal changes. At national and regional levels, the pressure to perform well and fulfil expectations is often a major cause of their anxiety. Using creative visual approaches, athletes can improve their understanding and ability to express the experience of anxiety, thus providing coaches with greater insight to develop effective coping strategies.

## LITERATURE REVIEW

### *Anxiety*

Achievement is important for an athlete. The benchmark and goal of an athlete after following various kinds of training series and events that are followed is at the peak of achievement. Other factors that influence the process of achieving achievement are such as psychological or psychological factors and the thoughts of each individual athlete (Afifah, M et al., 2023). Despite being on the same team, everyone's psychological state, especially athletes, is not the same in terms of stability. There are various psychological disorders that affect an athlete's performance, one of which is anxiety. Aspects of psychology in pencak silat according to (Sholakhudin, M.S et al., 2021):

1. Overcoming obstacles
2. Acting under pressure
3. Goal setting or mental preparation
4. Focus (concentration)
5. Freedom from worry
6. Self-confidence and achievement motivation
7. Willingness to be coached

Anxiety can be defined as a feeling of worry, unease, uncertainty, or fear of real threats and perceived dangers. Anxiety is a condition in which feelings of discomfort arise. These feelings grow due to tension reactions in the body. Everyone has anxiety at certain times, one of which is often felt by athletes when going to compete. (Bowen J, 2019). According to Bourne, E. J., et al. (2016), based on facts in the field, pressure from various parties can cause anxiety in athletes such as demands from coaches, supporters, friends, family. Anxiety starts with fear, fear can be felt if there is a threat that is objective, specific, and centred ( K Moore, 2017). Anxious thought disorder includes worry, doubt, visions of defeat or feelings of shame. Both types of anxiety occur simultaneously.

To build a winning mentality, athletes also need to pay significant attention to mental training. It is good when providing information to the general public about the mental training programme created should be given and published in detail. In addition, the use of terms in the formulation of mental training programmes should use terms that are easy to understand (Cox, 2012). For example, the use of the terms general preparation, specialised preparation, precompetitive and competitive.

An athlete's level of confidence also affects anxiety levels. The higher an athlete's confidence level, the lower the level of anxiety they experience, and vice versa. Because elite athletes inevitably have high standards and more career concerns built up over the years.

### ***Factors Causing Anxiety***

Anxiety is a complex emotional condition that is influenced by various factors. This review discusses the causative factors of anxiety based on leading international books that provide deep insights into biological, psychological, social and environmental aspects.

#### ***Biological Factors***

Genetics and Family Inheritance:

Anxiety can be genetically inherited, they suggest that certain genetic variations may increase a person's susceptibility to anxiety disorders (Reay et al., 2022).

Neurotransmitters and Hormones:

Neurotransmitters such as serotonin and norepinephrine play an important role in controlling anxiety, and imbalances in these two neurotransmitters can lead to anxiety disorders (Sterratt et al., 2023).

#### ***Psychological Factors***

Cognition and Perception:

Negative thinking and cognitive distortions can trigger and exacerbate anxiety, and reveal how unhealthy thought patterns contribute to the emergence of anxiety disorders (Daumiller et al., 2024).

Childhood Trauma and Experiences :

Childhood trauma can have a significant impact on mental health, including anxiety disorders, by shaping and influencing later anxiety responses (Papaioannou & Hackfort, 2014).

#### ***Social Factors***

Social Support :

Social support can act as a protective barrier against anxiety, with social networks playing an important role in reducing the risk of anxiety disorders (Avcioğlu et al., 2019).

Stigma and Mental Health :

Stigma can deter individuals from seeking help and exacerbate anxiety, as well as affect overall mental health (RN. Singer, 2001).

#### ***Environmental Factors***

Environmental stressors, such as work pressure and academic load, can affect anxiety levels, and the relationship between these factors and anxiety disorders has been extensively researched. Major life changes, such as significant environmental changes, can also affect the risk of developing anxiety disorders and play a role in the development of anxiety.

#### ***Symptoms of Anxiety***

Anxiety symptoms cover a wide range of emotional, physical, cognitive and behavioural aspects that affect a person's quality of life. Feelings of excessive fear and uncontrollable worry are the main emotional symptoms, while feelings of being trapped or helpless are common in individuals with anxiety disorders (Muhammad et al., 2020). Physical symptoms include physiological signs such as heart palpitations and sleep and appetite disturbances. Cognitively, difficulty concentrating and negative thoughts that tend to become catastrophic are key symptoms. Behaviourally, social avoidance and isolation are common, and excessive anxiety towards daily activities can affect performance and social interactions (Papaioannou & Hackfort, 2014).

#### ***Coping***

So, how do TGR martial artists cope with anxiety? There is an adjustment mechanism that can be called 'coping'. Coping involves managing thoughts, emotions, and behaviours to reduce the adverse effects of anxiety. However, anxiety can be perceived as a danger signal that interferes with an athlete's performance and appropriate coping must be mastered. According to (Papaioannou & Hackfort, 2014), Coping has several types, including:

1. Problem-focused coping: Analysing the cause/problem and then taking steps to analyse it.

2. Emotion-focussed coping: Coping with anxiety by seeking supportive emotional support to reduce the adverse effects of anxiety.
3. Avoidance-focused coping: Withdrawing from the cause of anxiety, or avoiding the cause of anxiety.
4. Distraction-orientated coping: Diverting attention to other activities so that the athlete does not continue to interfere with their mental preparation.

This coping strategy can help athletes in dealing with problems, pressures, and anxieties experienced with different goals in each individual both verbally, behaviourally, and actions to achieve achievement goals. Coping is a handling to overcome the state of anxiety in a certain time. During development coping can change, the ways of coping as well as the individual and social resources brought are coping efforts that show fundamental changes and qualitative shifts (Papaioannou & Hackfort, 2014).

Coping arises from a person's self-adjustment in coping with things that burden them. With this, coping strategies arise from the emergence of incompatible circumstances (Maryam, 2017). Coping strategies are efforts made by individuals in dealing with stressful or threatening situations with the strengths they have to reduce the level of anxiety or pressure. Coping strategies as an attempt to prevent or reduce threats, dangers, and losses as well as difficulties associated with the situation (Yadi, 2022).

The purpose of coping mechanisms is to deal with demands and situations that are considered stressful, challenging, and burdensome and exceed available resources. Individual coping strategies to solve various problems that will be influenced by available coping resources (Rindi et al., 2022). Individuals must have the right solution in order to overcome the obstacles experienced. This is useful to alleviate pressing problems and can make a person better at completing tasks and responsibilities. One of the factors of coping strategies is influenced by self-confidence (R Russell, 2020).

At the university level, martial arts pencak silat is a popular and highly competitive sport. However, there are various cases and challenges, such as managing time between lectures and training (AG Papaioannou & D Hackfort, 2014). As a student who also doubles as an athlete, has the demand to maintain a stable balance between academic and non-academic. Therefore, evaluating athletes and coaches in order to improve athlete performance, it is necessary to record their achievements and problems during competition. Track records of athletes' psychological anxiety levels before competing can also be a visual benchmark and can be presented in the form of diagrams (Rahayuni, 2021).

### ***The Role of Social Support***

Social support plays an important role in improving mental and physical health and in dealing with crisis and trauma. Support from friends, family and community can reduce stress, improve psychological well-being, strengthen the immune system and reduce the risk of cardiovascular disease (Avcioğlu et al., 2019). In addition, social support is also important in recovery from trauma and chronic disease management. Cultural and social factors influence the way social support is given and received, suggesting that different social contexts can affect the effectiveness of this support (R et al., 2018).

### ***Gender Differences in the Experience of Anxiety***

Gender differences in athletes' experience of anxiety encompass a range of interacting biological, psychological and social dimensions that may affect their performance and mental wellbeing (Walton et al., 2021). Biologically, hormonal differences play an important role in how anxiety is perceived and dealt with (NZF Medina et al., 2022). Female athletes often experience emotional fluctuations associated with the menstrual cycle, which can increase susceptibility to anxiety, while men can be affected by testosterone levels and masculinity norms that emphasise resilience and strength (C. Emma et al., 2020). Neurological aspects also play a role, where differences in brain structure and neurochemical function may influence how anxiety is regulated and responded to by male and female athletes (Sterratt et al., 2023).

Psychologically, female athletes often face pressure from multiple sources, including social expectations to appear physically strong while fulfilling beauty standards and traditional gender roles (Haalboom ETH, 2020). This pressure may increase the risk of anxiety, especially in terms of appearance and performance. On the other hand, male athletes may experience anxiety related to competitive norms that require them to constantly prove themselves, both on the field and in everyday life. Different mindsets and coping mechanisms between men and women may influence how they cope with stress and anxiety, where women may be more likely to seek social support while men may prefer a more individualistic approach or suppress their feelings (Walton et al., 2021).

Prevailing gender norms in sport often require men to show strength and avoid weakness, which can inhibit them from seeking help or expressing their anxiety (Walton et al., 2021). Meanwhile, female athletes may face stereotypes that associate them with weakness or lack of toughness, which adds to their psychological burden. These experiences are often compounded by unrealistic expectations and societal standards from coaches, the media and the general public.

## METHODOLOGY

**Table 1. Qualitative Research Methods for Understanding Athlete Anxiety**

| No. | Research Design and Methods | Description  |
|-----|-----------------------------|--|
| 1.  | Research Design             | This research used a qualitative case study design. This design was chosen to explore in depth the individual experiences of pencak silat athletes in dealing with pre-competition anxiety. With this approach, researchers can understand athletes' subjective experiences in detail and contextually, as well as the coping strategies they use (Pramesty, 2021).  |
| 2.  | Data Collection Methods     | <p><b>In-depth Interviews</b><br/>Interviews were conducted with 15 pencak silat athletes who compete at the national level. Interviews were conducted individually using a semi-structured interview guide, which involved open-ended questions to explore the athletes' experiences of anxiety and coping strategies.</p> <p><b>Visual Approach</b><br/>In addition, the athletes were asked to use visual techniques such as drawing and diagramming to express their anxiety experiences (Assidiqqi et al., 2022). These techniques provide an additional dimension to the data and enrich the understanding of how athletes visualise and manage their anxiety.</p> |
| 3.  | Data Analysis               | Data from interviews and visual techniques were analysed using thematic analysis. This analytical process involved identifying key themes, categorising patterns, and interpreting the meaning of the collected data. This analysis aimed to uncover patterns and themes relevant to anxiety and the coping strategies adopted by the athletes (Amellina et al., 2023; Rahayuni, 2023).  |
| 5.  | Ethical Approval            | This study received ethical approval from the university's research ethics committee. All participants provided written informed consent before participating in the interviews and visual techniques. The research protocol adhered to ethical standards, including the protection of privacy and confidentiality of participant information (Collins, 2018).   |

## RESULT AND DISCUSSION

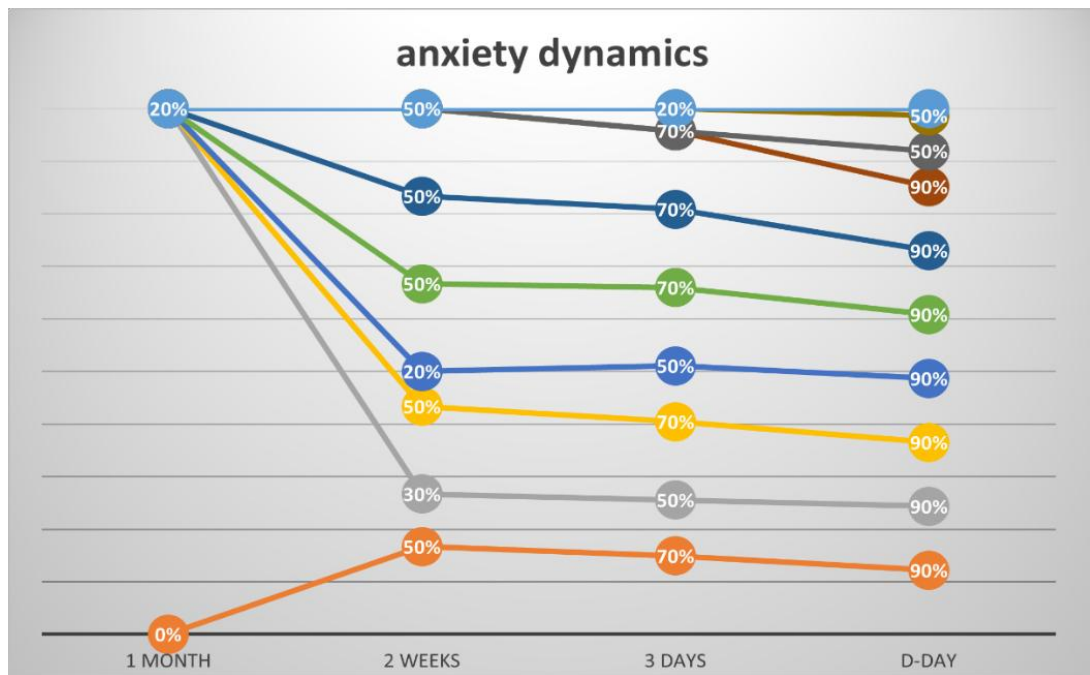


Figure 1: Visual Data Analysis

## RESULT

Table 2: These findings were obtained from in-depth interviews and visual data analysis

| No. | Findings                                  | Description   |
|-----|---|---|
| 1   | Anxiety Levels by Gender                  | Female athletes experience higher levels of anxiety than male athletes. Biological factors such as hormonal fluctuations contribute to this difference. Social expectations and pressure to prove oneself also significantly affect female athletes' anxiety.   |
| 2   | Sources of Anxiety                        | The pressure to fulfil expectations at national and regional levels is a major source of anxiety. Athletes feel burdened to perform well in front of coaches, family and the community. Uncertainty about physical and mental readiness before the competition as well as judgement from judges and spectators also adds to anxiety.  |
| 3   | Coping Strategies                         | Athletes use deep breathing techniques, positive visualisation, and visual approaches such as pictures and diagrams to overcome anxiety. These strategies help them reduce stress and increase self-confidence. Other psychological approaches include in-depth counselling to change negative thought patterns and strong social support from coaches and fellow athletes. |
| 4   | The Role of Social Support                | Social support from coaches and fellow athletes is crucial to reducing anxiety. The presence of this support gives a sense of confidence, reduces loneliness, and provides a platform to share experiences and strategies.  |
| 5   | Gender Differences in Anxiety Experience: | Research has found that female athletes tend to experience higher levels of anxiety than men, which is influenced by social pressures and higher performance expectations as well as hormonal fluctuations.   |

|   |   |  |
|---|---|--|
| 6 | Qualitative data analysis identified five main themes | <p>1. Anxiety Levels by Gender:<br/>This theme covers the differences in anxiety between men and women, focusing on the biological and social factors that influence anxiety levels.</p> <p>2. Sources of Anxiety:<br/>This theme describes the different sources of pressure athletes feel, including high expectations and the uncertainty of competition.</p> <p>3. Coping Strategies Used:<br/>This theme covers the psychological techniques athletes use to cope with anxiety, such as deep breathing, visualisation, and visual approach.</p> <p>4. Role of Social Support:<br/>This theme outlines how support from coaches and fellow athletes contributes to athletes' anxiety management and motivation.</p> <p>5. Gender Differences in Anxiety Responses:<br/>This theme identifies differences in anxiety based on gender, with a focus on social and biological influences.</p> |
|---|---|--|

## DISCUSSION

**Table 3: Anxiety Findings and Coping Strategies of Pencak Silat Athletes**

| No. | Findings                                | Description   |
|-----|---|---|
| 1   | Differences by Gender                   | Higher anxiety in female athletes requires a training approach that is sensitive to biological and social factors. Coaches should consider the specific needs of female athletes in their training programmes.  |
| 2   | Pressure and Expectations               | Competitive pressure at national and regional levels is a major factor in athlete anxiety. Therefore, it is important to create a supportive competitive environment with realistic goals and effective stress management strategies.   |
| 3   | Effective Coping Strategies             | Breathing techniques, visualisation, and visual approaches used by athletes suggest that psychological methods can be helpful in managing anxiety. Therefore, coaches and athletes should work together to develop and implement the most appropriate strategies.   |
| 4   | The Role of Social Support              | Social support plays an important role in reducing anxiety and increasing athletes' motivation. Strong relationships with coaches and fellow athletes help create a supportive and motivating environment.  |
| 5   | Gender Differences in Anxiety Responses | Differences in anxiety by gender suggest the need for different approaches in training and support. Training programmes should consider the influence of biological and social factors on female athletes. Thus, an in-depth understanding of the factors that influence martial arts athletes' anxiety will provide a solid basis for designing effective training programmes that focus on psychological well-being. A holistic approach to anxiety management will assist coaches and researchers in providing athletes with the support they need to cope with competitive pressures at national and regional levels and reach their full potential both physically and mentally. |

The results of this study provide a deep insight into the anxiety experienced by Indonesian pencak silat athletes and the factors that influence it. The main findings of this study can be explained in several interrelated aspects, each of which has significant implications for athlete training and support.

Gender-based differences in pencak silat athletes' anxiety suggest that female athletes tend to experience higher levels of anxiety than male athletes (Walton et al., 2021). The research identified that this difference is mainly due to two main factors, namely biological factors and social expectations (C. Emma et al., 2020). Biologically, the hormonal fluctuations that women experience can affect their emotional balance and anxiety levels. In addition, women often face heavier social expectations in sports, such as pressure to meet certain standards and traditional gender roles that can add to their mental burden (Walton et al., 2021).

These factors require a training approach that is more sensitive to the specific needs of female athletes. Training approaches should consider these differences to design effective programmes to manage anxiety (Haalboom ETH, 2020). Trainers are expected to develop strategies specifically designed to address women's anxiety, such as customised coping techniques and additional support that may be needed (Velasco et al., 2021) By adopting these strategies, coaches can help female athletes to better cope with their anxiety, create a more inclusive and supportive training environment, and enable them to reach their full potential in competition (Mark, 2019).

The pressures and expectations athletes experience at national and regional levels are a major source of significant anxiety. Athletes often face intense pressure from multiple sources, including high expectations from coaches, fans and judges. This pressure can be a huge mental burden, affecting their psychological well-being and potentially impairing their performance in competition (Sulistiani, 2022).

The role of social support in sport, especially for athletes, is crucial in reducing anxiety and increasing motivation. Social support includes positive relationships and interactions between athletes and coaches, fellow athletes, family and significant others (Avcioglu et al., 2019). These strong and positive relationships contribute greatly to creating an environment that is supportive and conducive to athlete performance.

Social support, both from coaches and fellow athletes, plays an important role in building confidence and reducing athletes' anxiety. Coaches who provide encouragement and constructive feedback help athletes feel valued and better prepared for competitive pressure. In addition, positive relationships with fellow athletes create a sense of community and solidarity, which strengthens motivation and reduces stress. Strong social support not only reduces anxiety, but also improves athletes' psychological well-being and performance, helping them focus on preparation and strategy without being overwhelmed by worry. Overall, adequate social support is essential for creating a supportive and motivating environment for athletes (Avcioglu et al., 2019).

Differences in anxiety responses by gender underscore the importance of customising training and support approaches for female athletes. Female athletes often experience higher levels of anxiety due to biological and social factors such as hormonal fluctuations and high social expectations (Haalboom ETH, 2020). Therefore, training programmes need to take these differences into account by developing effective methods of managing anxiety, including holistic approaches that focus not only on physical aspects, but also psychological well-being. Thus, an approach that is sensitive to the individual needs of female athletes will support better anxiety management and enable them to optimally reach their full potential (Walton et al., 2021).

Overall, this study emphasises the need for a holistic approach to training that is sensitive to gender differences and the social and biological factors that affect athletes. By integrating physical and psychological aspects in training programmes, and creating a supportive and motivating environment, coaches and researchers can help athletes to reach their full potential and better manage competition anxiety.

## CONCLUSION

This study identified various anxiety-related aspects as well as coping strategies applied by TGR pencak silat athletes, using a qualitative approach supported by creative visual data. The main findings of this study indicate that pencak silat athletes face significant levels of anxiety, which is mainly triggered by high expectations from self, coach, family, and society. Pressure to perform well at national and regional levels



and uncertainty regarding physical and mental readiness are the main sources of anxiety. The study also revealed that female athletes tend to experience higher anxiety than male athletes, due to greater social pressure, higher performance expectations and hormonal fluctuations. Symptoms of anxiety include physical manifestations such as increased heart rate and excessive sweating, as well as emotional and cognitive impacts such as inability to relax, fear of failure, and difficulty concentrating. Treatment strategies used by athletes include relaxation techniques such as deep breathing, positive visualisation, and psychological counselling, which have been shown to be effective in reducing stress and increasing self-confidence. Social support from coaches, peers and family was also critical in managing anxiety, providing confidence, reducing loneliness and assisting athletes in sharing experiences and coping strategies. The findings emphasise the importance of a holistic training approach that focuses on athletes' psychological well-being, with recommendations for coaches to integrate anxiety management techniques in their training programmes and provide ongoing support. With this holistic approach, athletes are expected to better cope with competitive pressure and reach their full potential both physically and mentally.

### CONFLICT OF INTEREST

The authors declare no conflicts of interest related to the writing of this article

### AUTHOR CONTRIBUTIONS

YSP: Drafting, organising, writing, translating, national seminar at Universiti Malaya

KR: Studying, organising, proofreading

MNMS: Studying, organising, proofreading

### REFERENCES

- Afifah, M., Manihuruk, F., Suhartini, B., Sabillah, M. I., & Zarya, F. (2023). Analysis of athletes' anxiety levels before special matches in martial arts. *International Journal of Multidisciplinary Research and Analysis*, 06(01), 379–386. <https://doi.org/10.47191/ijmra/v6-i1-43>
- Amellina, M. T., Fardani, M. A., & Ristiyani. (2023). Penerapan model pembelajaran VAK berbantuan media audio visual untuk meningkatkan kemampuan berpikir kreatif siswa. *Journal on Education*, 5(3), 9545–9551. <https://doi.org/10.31004/joe.v5i3.1284>
- Assidiqqi, M. G., Rahayuni, K., Widiawati, P., & Roesdiyanto, R. (2022). A descriptive study of the achievement timeline of volleyball athletes at state university of malang. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, 8(3), 37–60. [https://doi.org/10.29407/js\\_unpgr.v8i3.18813](https://doi.org/10.29407/js_unpgr.v8i3.18813)
- Avcioglu, M. M., Karanci, A. N., & Soygur, H. (2019). What is related to the well-being of the siblings of patients with schizophrenia: An evaluation within the Lazarus and Folkman's Transactional Stress and Coping Model. *International Journal of Social Psychiatry*, 65(3), 252–261. <https://doi.org/10.1177/0020764019840061>
- Bourne, E. J., & Garano, L. (2016). *Coping with anxiety ten simple ways to relieve anxiety, fear, and worry*. New Harbinger Publications.
- Bowen, J. (2019). *Anxiety coping tools discover how understanding, managing and to cope with anxiety* (Kindle). Amazon Digital Services LLC - KDP Print US.
- Collins, H. (2018). Visual research. *Creative Research*, 141–142. <https://doi.org/10.5040/9781474247115.0041>
- Cox, R. H. (2012). *Sport psychology: Concepts and Applications*.
- Curran, E., Rosato, M., Ferry, F., & Leavey, G. (2020). Prevalence and factors associated with anxiety and depression in older adults: Gender differences in psychosocial indicators. *Journal of Affective Disorders*, 267, 114–122.

- Daumiller, M., Rinas, R., & Breithecker, J. (2024). Elite athletes' achievement goals, burnout levels, psychosomatic stress symptoms, and coping strategies. *Mental Health in Sport and Physical Activity: Selected Writings from the ISSP Academy of Science*, 93–113. <https://doi.org/10.4324/9781003459750-6>
- Farhane, M., N. Z., Luque, B., Tabernero, C., & Castillo-Mayén, R. (2022). Factors associated with gender and sex differences in anxiety prevalence and comorbidity: A systematic review. In *Science Progress* (Vol. 105, Issue 4). SAGE Publications Ltd. <https://doi.org/10.1177/00368504221135469>
- Haalboom ETH. (2020). The role of sex and gender in anxiety disorders: Being scared “like a girl”? In M. K. L. B. M. Haalboom ETH (Ed.), *Handbook of Clinical Neurology* (Vol. 175, pp. 359–368). Elsevier.
- Mark, A. (2019). *Good to great: Coaching athletes through sport psychology*. Cognella, Incorporated.
- Maryam, S. (2017). Strategi coping: Teori dan sumberdayanya. *JURKAM: Jurnal Konseling Andi Matappa*, 1(2), 101. <https://doi.org/10.31100/jurkam.v1i2.12>
- Moore, A. K. (2017). *Stress and anxiety coping and resilience*. Logos Vertag Berlin GmbH.
- Muhammad, N., Khan, M., & Khan, W. (2020). *Effect of different types of Anxiety on Athletes Performance; Planning and Managing Strategy to cope with Athletes' Anxiety* (Issue 10). <http://cusitjournals.com/index.php/CURJ>
- Papaioannou, A. G., & Hackfort, D. (Eds.). (2014). Routledge companion to sport and exercise psychology: Global perspectives and fundamental concepts. In *Choice Reviews Online* (Issue 02).
- Pramesty, A. A. (2021). Pembuatan konten visual kreatif di instagram (studi deskriptif kualitatif pada akun instagram @biskuitjoid) arsytha. *Angewandte Chemie International Edition*, 6(11), 951–952., 2013–2015.
- Rahayuni, K. (2021). 243 JPJO 6 (2) (2021) 243-254 Reflections on conducting photographic elicitation interview in sport psychology research in indonesia article info. 6(6), 243–254. <https://ejournal.upi.edu/index.php/penjas/article/view/32342><https://ejournal.upi.edu/index.php/penjas/index>
- Rahayuni, K. (2023). Sosialisasi dan edukasi transisi karir atlet pelajar menuju atlet mahasiswa melalui pendekatan visualisasi kreatif. *Dharmas Journal of Sport*, 3(1), 11–19. <https://doi.org/10.56667/djs.v3i1.802>
- Reay, W. R., Kiltschewskij, D. J., Geaghan, M. P., Atkins, J. R., Carr, V. J., Green, M. J., & Cairns, M. J. (2022). Genetic estimates of correlation and causality between blood-based biomarkers and psychiatric disorders. In *Sci. Adv* (Vol. 8). <https://www.science.org>
- Rindi, I. L., Taibe, P., Gunawan, A., & Zubair, H. (2022). Coping strategies sebagai prediktor terhadap mental toughness pada mahasiswa. *Jurnal Psikologi Karakter*, 2(2), 160–167–160–167. <https://doi.org/10.56326/jpk.v2i2.1767>
- Robert N. Singer, H. A. H. and C. M. J. (2001). *Handbook of sport psychology* (Second Edi). <https://lontar.ui.ac.id/detail?id=20371549&lokasi=lokal>
- Russell Robert. (2020). *Coping with anxiety 12 best ways to deal with anxiety*. Positively.
- R, Yaro, J. a, Yamauchi, F., Larson, D. F., Work, S. F. O. R., Work, D., Wolseth, J., Wiuf, C., Donnelly, P., Wilson, J., Wilson, J., Wilson-Parr, R., Westminster, N., Plc, B., No, W., Office, R., Authority, P. R., Authority, F. C., Authority, P. R., ... Marchetti, A. (2018). Perbandingan tingkat kecemasan antara atlet olahraga body contact dan non body contact sebelum bertanding pada atlet BKMF BEM FIK UNM cabang bulutangkis dan pencakilat. *World Development*, 1(1), 1–15. <http://www.fao.org/3/I8739EN/i8739en.pdf%0Ahttp://dx.doi.org/10.1016/j.adolescence.2017.01.003%0Ahttp://dx.doi.org/10.1016/j.childyouth.2011.10.007%0Ahttps://www.tandfonline.com/doi/full/10.1080/23288604.2016.1224023%0Ahttp://pdx.sagepub.com/lookup/doi/10>
- Sholakhudin, M. S., Roesdiyanto, & Rahayuni, K. (2021). Survei aspek psikologis atlet pencak silat kota dan kabupaten malang menggunakan athletic coping stress inventory-28 Survey of psychological aspects of pencak silat athletes in malang city and district using athletic coping stress inventory-28. *Prosiding Seminar Nasional Pendidikan Keplatihan Olahraga*, 1(2), 86–97.

- Sterratt, D., Graham Bruce, Gillies Andrew, Einevoll Gaute, & Willshaw David. (2023). *Principles of computational modelling in neuroscience*. Cambridge University Press.
- Sulistiani, D. (2022). The Effect of Guided imagery relaxation training on anxiety levels of pencak silat athletes. *Ipec*, 106–111. <https://ipec.stkipkasundan.ac.id/index.php/ipec/article/view/29>
- Velasco, M. A., & Alforja, N. S. (2021). *Sports coaching competencies , motivation and performance of the athletes : An input to sports development program for coaches*. 56–77.
- Walton, C. C., Rice, S., Gao, C. X., Butterworth, M., Clements, M., & Purcell, R. (2021). Gender differences in mental health symptoms and risk factors in australian elite athletes. *BMJ Open Sport and Exercise Medicine*, 7(1). <https://doi.org/10.1136/bmjsem-2020-000984>
- Yadi, H. (2022). *Gambaran strategi coping akademik mahasiswa fakultas psikologi UIR*. <https://repository.uir.ac.id/15166/>