

Human Problems: Competitive Anxiety in Sport Performer and Various Treatments to Reduce It

Umilatul Hasanah University of Muhammadiyah Malang umilatulhasanahila@gmail.com Niken Refanthira University of Muhammadiyah Malang rfnthr04@gmail.com

Abstract: In the field of sports, one of the psychological factors that hinder the athlete's optimal performance is excessive anxiety. Anxiety associated with a competitive or competition situation is called competitive anxiety. Treatment is important so that athletes can reduce competition anxiety and optimize their performance in competition. This article discusses the interventions that have been carried out by previous studies to reduce competition anxiety in athletes. The method used is systematic review. Literature criteria used interventions to reduce competition anxiety in athletes. There are 23 works of literature in the form of articles and journals that meet the selection criteria, which were analyzed and translated descriptively. The results of the literature review showed that Self-talk, Guide Imagery, Yoga, Relaxation and Mindfulness proved effective in reducing competitive anxiety in athletes with some similarities in the subject's age criteria, the subject's sports type, and other factors. The treatments were even more effective when combined, such as a combination of relaxation and imagery, or a combination of self-talk, imagery, and relaxation.

Keywords: treatment, competitive anxiety, athletes

Introduction

Everyone has the risk of experiencing psychological disorders at each stage of his life, such as stress, depression and anxiety (Ifdil, B Khairul, 2015). Anxiety is often experienced by athletes, both amateur and elite sports athletes, either young or mature athletes. In this case, even though an athlete has worked hard, trained and prepared a mature strategy, the athlete may not be able to show optimal performance. In this case, the focus on physical training and the right strategy alone cannot encourage an athlete to show optimal performance. Coaches and athletes must be aware that psychological aspects can also play an important role in athlete performance. Psychology is considered as one of the key factors to achieve optimal performance and well being in sports (Dosil, 2006).

In line with the description above, 80% of professional athlete victories are determined by psychological factors, which have a very important role in helping the athletes pursue high achievements (Adisasmito, 2007). Jimmy Connors, a former world number one also stated that 95% of professional tennis games are mental factors (Maksum, 2012).

Anxiety is one of the psychological factors that determine the athlete's motivation in the psychological aspects of the athlete. Competitive anxiety in athletes occurs before athletes compete in a game and during matches, which affect an athlete's peak performance. Mahoney and Avener suggested that if an athlete wants to achieve optimal performance, he must have the ability to overcome his anxiety (Satiadarma, 2000). The Anxiety that occurs in athletes usually interferes

with his appearance. For example, the athlete has a fear of failing in the match or has the moral burden if he does not win the match (Husdarta, 2010).

Anxiety is an emotion that arises because of the interpretation and assessment of the situation at hand (Cox, 2007). In the context of sports, anxiety or negative emotions usually arise in response to competitive pressures. The game can indeed cause excessive emotional pressure so that the concentration of athletes to face the opponent will be reduced. This means that the performance of the athlete decreases, accuracy will also decrease, thus affect the performance of the athlete. Anxiety associated with a competition or competitive situation is commonly referred to as competitive anxiety (Mellalieu, Hanton, & Fletcher, 2006).

Competitive anxiety consists of cognitive and somatic subcomponents. The cognitive component of anxiety arises due to fear of negative evaluations of the social environment, fear of failure, and lack of self-esteem (Martens, Vealey, & Burton, 1990). The somatic component of anxiety is a physiological response from these perceptions such as increased heart rate, respiration, and muscle tension. Physical symptoms arise due to the influence of psychological symptoms, which then cause anxiety in the athletes before competing in a game and thus prevent him to show his best performance (Lavallee, Kremer, Moran, & Williams, 2004).

Swain & Jones (Cox, 2007) states that before the game starts, the level of somatic and cognitive anxiety will increase. With the start of the match, somatic anxiety will decrease, but cognitive anxiety tends to



vary depending on the conditions of the ongoing game. High anxiety will interfere with athlete's performance because it makes the athlete difficult to control the rhythm of the game, unable to regulate the timeliness of reacting, difficult to regulate muscle contraction, and feel tired too quickly. It also reduces ability and accuracy of reading the opponent's game, and encourages the athlete to make decisions hastily and make movements without conscious mind control (Satiadarma, 2000).

Based on the explanation above, one of the psychological factors that hinder the athlete's optimal performance is competitive anxiety. For this reason, psychological treatments are important to optimize the performance of the athletes in the competition so that the athletes can release their optimal performance in the competition. Because excessive anxiety has become a major barrier to athlete performance (Cox et al. 1993; Ortiz 2006), so the purpose of this study is to conduct a review of previous studies related to interventions that has proven effective in reducing the competitive anxiety in athletes.

Competitive Anxiety

Competitive anxiety is an athlete's negative emotional reaction when his self-esteem is felt threatened because he considers the match to be a formidable challenge, and will always remember his performance abilities, which have an impact on competitive behavior (Smith, Smoll, & Schutz, 1990). Anxiety is interpreted in two ways, namely anxiety felt by athletes at a certain time, for example before the match (state anxiety), or anxiety felt because athletes are classified as anxious (trait anxiety) (Husdarta, 2010).

Based on the description above, it can be concluded that competitive anxiety is an athlete's behavior towards negative emotional reactions, such as anxiety, worry, uneasiness, tension, and fear when his pride is threatened and considers the match as something dangerous that results in defeat. Psychologically, anxiety is an unpleasant feeling and is the personality of the athlete (trait anxiety) and subjective feelings from outside the athlete (state anxiety).

Competitive anxiety has four measurable aspects (Smith et al., 1990), namely **cognitive**, **affective**, **somatic**, **and motoric**.

Cognitive is an event in the mind of an individual that reflects symptoms and anxiety disorders in exercising so that it affects actions in competition, such as being unable to concentrate, thinking about unrelated things, and negative thoughts that disturb concentration.

The second aspect is affective, that is, an event in an individual's feelings that reflects symptoms and

anxiety disorders in sports that affect action in competition, such as feeling hopeless, reckless, and having self-doubt.

The third aspect is somatic. It is a perceptual event of physiological excitement in an individual reflecting symptoms and anxiety disorders in exercising so that it affects actions in competition, such as heart palpitations, urination, cold sweating, and difficulty sleeping.

The last aspect is motoric, that is, a physical occurrence (muscles) in individuals that improperly reflect symptoms and anxiety disorders in sports so that it affects actions in competition, such as face and forehead wrinkle, trembling, feeling heavy in the feet, scratching head repeatedly, and aching muscles. The factors that influence competitive anxiety in athletes include fear of failure in a match, fear of social consequences for the quality of performance, fear of injury or injury of an opponent, physical fear of not being able to complete their duties to compete properly, and demands to change something without training (Cox, 2003).

Discussions

Based on the literature review, below are several treatments undertaken to reduce competitive anxiety felt by athletes that proved effective. Not all of the following treatments are psychological treatments.

- 1. Imagery. It is a cognitive intervention technique where an individual uses all of his senses to create or re-create experiences in his mind (Vealey & Greenleaf, 2001). In the field of sports, there have been many studies on the effectiveness of imagery in reducing competitive anxiety. Imagery was found to be effective in reducing competitive anxiety, especially in young athletes aged 12 to 19 years (Bagherpour, Hashim, Saha, & Ghosh, 2012; Nguyen & Brymer, 2018; VA Parnabas & Mahamood, 2011; V. Parnabas, Mahamood, Parnabas, 2012 & Meera Abdullah, 2014; Quinton, Cumming, Allsop, Gray, & Williams, 2018).
- **2. Self Talk.** It is one's talk with himself by speaking loudly and from within (Morris, & Andersen, 2007). Several studies have shown that self-talk can overcome competitive anxiety in athletes in the field Georgakaki of sports (Kanniyan, 2015; Karakasidou, 2017; Hatzigeorgiadis, Galanis, & Theodorakis, 2014; Khabiri, Ali Moghadam Zadeh, Kalash, Asadi, & Mehrsafar, 2018; Lotfi, Tahmasebi, & Rabavi, 2016; Walter, Nikoleizig, & Alfermann, 2019). Self-talk consists of three types, namely positive, negative and neutral (Hatzigeorgiadis et al., 2014). Among these self-talk, positive self-talk is used to reduce anxiety in athletes. In contrast, negative selftalk must be avoided to improve the performance of athletes (Lotfi et al., 2016). Not only in elite athletes,



self-talk is also effective in reducing anxiety in junior athletes and young athletes (Abdussalam Kanniyan, 2015).

- 3. Relaxation is one of the methods used to overcome competitive anxiety in athletes. This type of progressive muscle relaxation was found effective to reduce anxiety in athletes (Ali, 2015; Bagherpour et al., 2012; Kaur & Singh, 2016; Navaneethan, Ph, & Soundara, 2010). Although muscle relaxation can reduce competitive anxiety in athletes, progressive muscle relaxation can be even more effective if used in conjunction with guide imagery (Bagherpour et al., 2012). Whereas, in other studies, it was found that relaxation by listening to relaxing music was able to control and reduce the anxiety in athletes (Elliot, Polman, & Taylor, 2012). In addition to relaxation, Yoga has also proven effective in reducing competitive anxiety in athletes (Kusuma & Bin, 2017; C. Smith, Hancock, Blake mortimer, & Eckert, 2007). However, the application of yoga in the field of sports psychology is very limited. Only a few researchers have examined the effectiveness of yoga to overcome competitive anxiety in athletes.
- 4. Mindfulness. Research results show that effective mindfulness can reduce competitive anxiety in athletes (Baltzell, Caraballo, Chipman, & Hayden 2014; Gardner & Moore, 2004; Noetel, Zanden, & Lonsdale, 2017; Rivera, Quintana, & Rincón, 2014; Zadkhosh & Hemayattalab, 2019; Permadi & Nurwianti, 2018 (Noetel et al., 2017). Although mindfulness therapy is not intended to reduce anxiety, it can actually reduce the level of anxiety (Gardner & Moore, 2004). The mindfulness skills of athletes are related to their abilities to resolve negative emotions and increase focus when facing competition, thereby reducing their level of competitive anxiety (Baltzell, Caraballo, Chipman, & Hayden, 2014). In addition to neurofeedback, mindfulness proved even more effective in reducing anxiety in soccer players (Zadkhosh & Hemayattalab, 2018).

A study found that mindfulness did not show a significant change in depression and anxiety reduction, but could still cause an increase in depression mean scores and anxiety scales at the post workshop and follow-up time points. It is assumed that mindfulness can help symptoms of depression and anxiety, but further studies with a greater number of cases and control groups are needed to provide more evidence (Chen, Tsai, Lin, Chen, & Chen, 2019).

Intervention Integration

Some of the literature reviewed above related to reducing competitive anxiety in athletes showed that treatments would be even more effective if they are integrated. This has indeed received the attention of researchers and practitioners for a long time with evidence of the discovery of research from several years ago. A study found that athletes of all ages and skill levels feel greater benefits by integrating several criteria in overcoming their psychological problems, including anxiety of competition.

A recent study shows that mental imagery with documentary analysis method greatly reduces athlete's anxiety and improves athlete performance, especially if other psychological strategies such as self-talk, relaxation, and goal setting are included in this technique (Mousavi & Meshkini, 2011). The integration of the use of progressive muscle relaxation and imagery can also reduce cognitive and somatic anxiety while increasing confidence in athletes (Bagherpour, Hashim, Saha, & Ghosh, 2012).

Conclusion

It can be concluded that Self-talk, Guide Imagery, Yoga, Relaxation and Mindfulness prove effective in reducing competitive anxiety in athletes, especially when combined and used together, such as a combination of relaxation and imagery, or a combination of self-talk, imagery and relaxation.

References

- Kanniyan, A. (2015). Competitive state anxiety: Impact of positive self talk training on junior level football players. *Sport Mont, XIII*(43-44–45), 42–49
- Adisasmito, L. (2007). *Mental juara modal atlet berprestasi*. Jakarta: Raja Grafindo Persada.
- Ali, K. (2015). The effectiveness of progressive muscle relaxation to reduce the intensity of competitive sport anxiety among the elite layers football. *Research Journal of Physical Education Sciences*, 3(2), 4–8.
- Bagherpour, T., Hashim, H. A., Saha, S., & Ghosh, A. K. (2012). Effects of progressive muscle relaxation and internal imagery on competitive state anxiety inventory–2R among taekwondo athletes. *International Conference on Education and Management Innovation*, 30, 218–224. https://doi.org/10.13140/2.1.2184.4161.
- Baltzell, A, Caraballo, N., Chipman, K., & Hayden, L. (2014). A qualitative study of mindfulness meditation training for sport: Division I female soccer players' experiences. *Journal of Clinical Sport Psychology*, 8, 221-244. https://doi.org/10.1123/jcsp.2014-0030.
- Chen, J.H., Tsai, P., Lin, Y., Chen, C., & Chen, C.



- (2019). Mindfulness training enhances flow state and mental health among baseball players in Taiwan. *Psychology Research and Behavior Management*, 12, 15–21.
- Cox, R. H. (2003). Sport psychology: Concepts and applications (sixth edit). Australia: Mc-Graw-Hill International edition.
- Elliott, Dave., Polman, Remco, & Taylor, Julie. (2012). The effects of relaxing music for anxiety control on competitive sport anxiety. *European Journal of Sport Science*, 14. doi.org/10.1080/17461391.2012.693952.
- Gardner, F. L., & Moore. Z. E. (2004). A mindfulness acceptance-commitment-based approach to athletic performance enhancement: Theoretical considerations. *Behavior Therapy*, 35, 707-723.
- Georgakaki, S. K., & Karakasidou, E. (2017). The effects of motivational self-talk on competitive anxiety and self-compassion: A brief training program among competitive swimmers. *Psychology*, 8(5), 677–699. https://doi.org/10.4236/psych.2017.85044.
- Hatzigeorgiadis, A., Galanis, E., & Theodorakis, Y. (2014). Self-talk and Competitive Sport Performance. *Journal of Applied Sport Psychology*, 26(January), 82–95. https://doi.org/10.1080/10413200.2013.790095
- Kaur, S., & Singh, A. (2016). Comparative analysis of progressive muscle relaxation training and Yog Nidra training effect on anxiety of athletes. *International Journal of Applied Research 2016*; 2(8): 377-379 ISSN, 2(8), 377-379.
- Khabiri, M., Ali Moghadam Zadeh, Kalash, R. M., Asadi, A., & Mehrsafar, A. H. (2018). The effect of positive self-talk intervention on psychophysiological responses of competitive anxiety and self-confidence in elite athletes. *Neuropsychology*, *3 No 4*(August), 93–102.
- Kusuma, D. W. Y., & Bin, W. (2017). Effect of yoga program on mental health: competitive anxiety in semarang badminton athletes. *Jurnal Kesehatan Masyarakat*, *13*(1), 121–130. https://doi.org/http://dx.doi.org/10.15294/kemas.v13i1.9862.
- Lavallee, D., Kremer, J., Moran, A. P., & Williams, M. (2004). *Sport psychology: Contemporary themes*. New York: palgrave macmillan.
- Lotfi, G., Tahmasebi, F., & Rabavi, A. (2016). The impact of instructional and motivational self-talk on cognitive anxiety, somatic anxiety, and learning of soccershoot skill in beginner players. *International Journal of Advanced Biotechnology and Research (IJBR*, 7(4–07), 543–549.
- Mousavi, S. H., & Meshkini, A. (2011). The effect of mental imagery upon the reduction of athletes anxiety during sport performance. *International*

- Journal of Academic Research in Business and Social Sciences, 1(3), 2222–6990.
- Navaneethan, B., Ph, D., & Soundara, R. (2010). Effect of progressive muscle relaxation training on competitive anxiety of male inter-collegiate volleyball players. *International Journal of Sports Science and Engineering*, *4*(3), 161–164. https://doi.org/10.26524/13417.
- Nguyen, J., & Brymer, E. (2018). Nature based guided imagery as an intervention for state anxiety. *Frontiers in Psychology*, 9(OCT), 1–10. https://doi.org/10.3389/fpsyg.2018.01858.
- Noetel, M., Zanden, B. Van, & Lonsdale, C. (2017). Mindfulness and acceptance approaches to sporting performance enhancement: a systematic review International Review of Sport and Exercise Psychology A systematic review. *International Review of Sport and Exercise Psychology*, 11. https://doi.org/10.1080/1750984X.2017.1387803.
- Parnabas, V. A., & Mahamood, Y. (2011). Anxiety and imagery of green space among athletes. 3rd ISESEE 2011 International Symposium and Exhibition in Sustainable Energy and Environment, 9, 165–167. https://doi.org/10.1109/ISESEE.2011.5977126.
- Permadi, D., & Nurwianti, F. (2018). Mindfulness and coping skills as predictors of competitive anxiety amongst athletes in Indonesia. *Anima Indonesian Psychological Journal*, 33(4), 231–240. https://doi.org/https://doi.org/10.24123/aipj.v33i4.1796.
- Quinton, M. L., Cumming, J., Allsop, J., Gray, R., & Williams, S. E. (2018). Imagery meaning and content in golf: Effects on performance, anxiety, and confidence. *International Journal of Sport and Exercise Psychology*, 16(4), 382–397. https://doi.org/10.1080/1612197X.2016.1242150.
- Rivera, O., Quintana, M., & Rincón, M. E. (2014). Effects of mindfulness on sport, exercise and physical activity: A systematic review. *Online Open Science in Mindfulness.*, 77(June 2011), 1–7.
- Smith, C., Hancock, H., Blake mortimer, J., & Eckert, K. (2007). A randomised comparative trial of yoga and relaxation to reduce stress and anxiety. *Complementary Therapies in Medicine Journal*, 15(June), 77–83. https://doi.org/10.1016/j.ctim.2006.05.001.
- Smith, R. E., Smoll, F. L., & Schutz, R. W. (1990). Measurement and correlates of sport-specific cognitive and somatic trait anxiety: The sport anxiety scale. *Anxiety Research*, 2(4), 263–280. https://doi.org/10.1080/08917779008248733.
- Walter, N., Nikoleizig, L., & Alfermann, D. (2019). Effects of self-talk training on competitive anxiety, self-efficacy, volitional skills, and performance: An intervention study with junior sub-elite athletes



NadjaWalter. *Sport Journal*, *1*(june), 1–20. https://doi.org/10.3390/sports7060148. Zadkhosh, S. M., & Hemayattalab, R. (2019). The effects of mindfulness on anxiety decrease and

athletic performance enhancement of young football players. 8(11) . https://doi.org/10.22089/spsyj.2019.3167.1325