



Anxiety in Individual Game Sports and Team Game Sports

Finaldhi Palgunadhi^{1*}, Tian Kurniawan², Jajat³, Kuston Sultoni⁴, Widy Dewi Nuryanti⁵

1,2,3,4,5 Department of Sport Science, Universitas Pendidikan Indonesia, Indonesia

Article Info

Article History

Didaftarkan: August 21, 2024
Diterima: October 15, 2024
Dipublikasikan: October 30, 2024

Article Access



Correspondence

Finaldhi Palgunadhi
E-mail:
finaldhipalgunadhi@upi.edu

Abstract

This study aims to examine the differences in anxiety levels between athletes participating in individual game sports and those involved in team game sports. Employing a quantitative research approach with a causal-comparative design, the study focuses on identifying emotional variations based on the type of sport. The population comprises athletes who competed in the 2018 West Java Provincial Sports Week (Porda). Using a purposive sampling technique, a total of 60 athletes were selected, consisting of 30 athletes from individual game sports (27 squash players and 3 badminton players) and 30 athletes from team game sports (18 volleyball players and 12 basketball players). Data were collected using the Sport Emotion Questionnaire (SEQ), which is widely used to assess emotional responses in competitive sports environments. The results indicate a significant difference in anxiety levels between the two groups. Athletes in individual game sports exhibit higher levels of anxiety compared to those in team game sports. This finding suggests that the solitary nature of individual competition, where the full responsibility for performance rests on one player, may contribute to elevated anxiety. In contrast, team sports may offer shared responsibility and greater emotional support, leading to lower anxiety levels. These insights underscore the importance of sport-specific psychological training to manage performance-related anxiety effectively.

Keywords: anxiety, emotional response, individual game sports, team game sports



Introduction

Emotion is a reaction of a person's feelings which is shown when feeling happy, afraid, even angry about something. We define emotions as episodic, relatively short-term, biologically based patterns of perception, experience, physiology, action, and communication that occur in response to specific physical and social challenges and opportunities (Ketlner & Gross, 1999). There are eight basic emotional dimensions, arranged in four pairs: joy versus sorrow, anger versus fear, acceptance versus disgust, and surprise versus expectancy (Mason & Capitanio, 2012). Emotion has many benefits in helping human life. Our emotions are often our best allies, helping us to respond energetically and effectively to the opportunities and difficulties we encounter (Lazarus, 1991). In the world of sports emotions are one of the factors that determine one's achievement. Emotion will always be involved in any type of sport. However, each branch of sport has different characteristics, which means that the emotions involved will be little or much different. Emotions can effect performance, depending on the athlete and the type of sport (Jones, 2003).

Emotions in sports play a crucial role in influencing an athlete's performance, interpersonal interactions, and overall experience in a competition. Not only are they related to physical reactions, but emotions also involve mental processes that can affect decisions, strategies, and an athlete's drive. In the context of sports, emotions such as anxiety, excitement, anger, and dejection can arise in various situations, both during training and competition. Therefore, understanding the relationship between emotions and performance in sports is key to optimizing achievement and the mental well-being of athletes.

There are several emotions related to sports and achievement. Anger is a frequent emotion in sport (Steffgen, 2017). Emotion that has received enough attention in performance situations is anxiety (McCarthy, Allen, & Jones, 2013). There is sufficient empirical evidence to suggest that at least five emotions are particularly relevant to sport settings ... the emotions are anger, anxiety, dejection, excitement, and happiness (Jones, et al., 2005).

Previous research has revealed that physical contact sports such as martial arts always involve anger emotions. Athletes involved in physical contact sports often interpret their competitive anger as beneficial to sports performance (Steffgen, 2017). Table tennis players are confronted with multiple critical situations that instigate annoyance, frustration and anger (Steffgen, 2017). Based on research conducted that sports emotions are always involved in various

types of sports, it becomes something that needs to be studied in a study.

An athlete competing in individual game sports, such as tennis or badminton, often experiences high levels of anxiety before and during the competition. This anxiety arises due to the pressure to perform individually, which can affect the athlete's performance and emotions. In contrast, in team game sports such as football or basketball, although athletes also experience anxiety, they feel more supported by their teammates, which can help reduce the impact of that anxiety. However, there are also feelings of anxiety related to the responsibility towards the team and the possibility of disappointing teammates

Therefore, it is necessary to provide evidence regarding whether there is a difference in the level of sport emotions, particularly anxiety, that athletes often experience when facing competition in different types of sports. And does team game sports have the same impact on anxiety, considering that this type of sport involves more than one individual? For this reason, this study aims to determine the level of difference in sport emotion (anxiety) in individual game sports and team game sports. The hypothesis in this study is that there are differences in sport emotion (anxiety) between individual game sports and team game sports.

This study can reveal how the characteristics of both types of sports (individual vs. team) affect athletes' anxiety levels and provide insights into ways to manage anxiety so that it does not interfere with athletes' performance in competition.

Methods

The research method used is causal-comparative with a quantitative approach. In causal-comparative research, investigators attempt to determine the cause or consequences of differences that already exist between or among groups of individuals (Fraenkel, J. R. & Wallen, N. E., 2007). The research was conducted at the location where each sample was situated, or at the venue before the competition. This research was conducted from October 6 to October 14, 2018.

Research Design

The research design used in this study is the basic causal-comparative design. The basic causal-comparative design involves selecting two or more groups that differ on a particular variable of interest and comparing them on another variable or variables (Fraenkel, J. R., Wallen, N. E., & Hyun H. H.,

Figure 1

The Basic Causal-Comparative Design



2012). No manipulation is involved. The research process is carried out in one stage, which involves administering the test to the two specified groups. The result of the test is to assess the differences between the two groups. The research design of the basic causal-comparative design can be seen in [Figure 1](#).

In this research design, there are two independent variables and one dependent variable. The independent variables in this study are individual game sports and team game sports, and the dependent variable is anxiety.

Participants

The population in this study were athletes registered as players at the Regional Sports Week of West Java in 2018. The sampling technique used in this research is purposive sampling, which is a method of selecting samples based on specific criteria or considerations. For experimental and causal-comparative studies, we recommend a minimum of 30 individuals per group (Fraenkel, J. R. & Wallen, N. E., 2007).

Sample was 60 West Java athletes divided into 2 groups, each of 30 athletes for individual game sports (27 squash athletes, 3 badminton athletes), and 30 team game sports athletes (18 volley athletes, 12 basketball athletes).

Instrument

The research instrument used in this study is the Sport Emotion Questionnaire (SEQ). The instruments used was Sport Emotion Questionnaire (SEQ) developed by Jones, et al. (2005) is a validated instrument for measuring emotions that occur in sports (before the competition).

Procedure

The research procedure begins with testing the validity and reliability of the instrument. Out of the 22 statements, 20 items were found to be valid, and 2 items were invalid, with a reliability level of 0.864. Therefore, 20 valid items were selected to be used in the research.

After the instrument has been validated and shown to be reliable, the next step is to test it to the sample. The sample is given the test shortly before the competition begins.

Data Analysis

The data obtained from the sample were analyzed using SPSS version 20 software, specifically employing one-way ANOVA (Tukey HSD). This test is to determine the difference in anxiety between the two variables (individual game sports, team game sports).

Result

In [Table 1](#), the descriptive statistics of anxiety are presented, with a mean value of 1.3211 and a standard deviation of 0.80326.

Besides, [Table 1](#) shows that anxiety in individual game sports and team game sports has a sig. value of 0.003 < 0.05 at a 95% confidence level, indicating that there is a significant difference in the mean scores.

After testing the mean differences of each variable, the next step is the follow-up test. With the same sample size for each variable to be tested, the test used is the follow-up Tukey HSD (Honest

Significant Difference) test. This test is used to determine which group's anxiety is the highest between the two groups using the Tukey HSD test in multiple comparisons with a confidence level.

Based on [Table 1](#), the results show that individual sports have a value of 1.6067 with a subset for alpha = 0.05, and team game sports have a value of 0.9317 with a subset for alpha = 0.05. Therefore, individual game sports have a higher level of anxiety compared to team game sports.

Discussion

This study examined anxiety levels in individual and team sports, particularly in the pre-

Table 1

Independent Samples t-test Comparing Anxiety Between Sports Types

Variable	Team Game Sport		Individual Game Sport		t (58)	p	Cohen's d
	M	SD	M	SD			
Anger	0.93	0.63	1.61	0.87	3.14	0.003	0.85

competition phase. The findings indicate that athletes in individual sports experience significantly higher anxiety compared to those in team sports. This difference can be attributed to the unique psychological demands of each sport type. In individual sports, athletes bear full responsibility for their performance and outcomes, creating greater pressure and self-imposed expectations. In contrast, team sports provide a collective environment where teammates share responsibilities, which may alleviate some of the stress associated with competition.

The results align with previous research highlighting the psychological distinctions between individual and team sport athletes. Palgunadhi and Kardjono (2020) emphasize that in individual sports, success and failure rest solely on the athlete, with coaches serving only as external facilitators rather than direct contributors to performance. Furthermore, Nia and Besharat (2010) found that individual sport athletes exhibit higher levels of conscientiousness and autonomy compared to team sport athletes, suggesting a greater predisposition to self-regulation and responsibility—factors that may contribute to elevated anxiety levels.

Social support also plays a crucial role in modulating pre-competition anxiety. Unlike individual sports, where athletes must rely solely on personal coping mechanisms, team sports allow for direct interaction among teammates, fostering motivation and encouragement. This dynamic can help mitigate anxiety by providing a sense of shared experience and emotional support before and during competitions.

Additionally, gender differences appear to influence anxiety levels in sports. Abrahamsen, Roberts, and Pensgaard (2008) reported that female athletes tend to experience higher levels of performance worry, concentration disruption, and somatic anxiety compared to male athletes. These findings suggest that beyond sport type, biological and psychological factors may contribute to variations in anxiety responses. Future research should explore how gender interacts with sport type to shape athletes' anxiety experiences.

Overall, this study underscores the importance of understanding anxiety dynamics in sports, particularly in relation to competition settings. Coaches, sport psychologists, and athletes can use these insights to develop targeted strategies for anxiety management, ensuring optimal mental preparation before competitions. Future studies should further investigate how factors such as experience level, coping mechanisms, and social support structures influence anxiety levels across different sports disciplines.

Conclusions

It can be concluded that anxiety levels differ between individual and team game sports, with individual athletes experiencing higher anxiety. This may be due to the greater personal responsibility and pressure in individual sports. Future research should explore gender differences and competitive situations to better understand anxiety in various sporting contexts.

Acknowledgment

This research was supported by the Sports Science Study Program of Faculty of Sport Education and Health of the Universitas Pendidikan Indonesia. The author thanks to athletes from West Java in the sports of squash, badminton, volleyball, and basketball, which has simplified the research process, and some parties that were not mentioned.

References

- Abrahamsen, F. E., Roberts, G. C., & Pensgaard, A. M. (2008). Achievement goals and gender effects on multidimensional anxiety in national elite sport. *Psychology of Sport and Exercise*, 9, 449–464. <https://doi.org/10.1016/j.psychsport.2007.06.005>.
- Fraenkel, J. R., Wallen, N. E. (2007) *How to Design and Evaluate Research in Education*. 7th ed. McGraw-Hill Higher Education; 2007.
- Fraenkel, J. R., Wallen, N. E., & Hyun H. H. (2012). *How to Design and Evaluate Research in Education*. 8th ed. McGraw-Hill; 2012.
- Jones, M. V. (2003). Controlling Emotions in Sport. *The sport psychologist*, 17(4), 471-486.
- Jones, M., V., et al. (2005). Development and Validation of The Sport Emotion Questionnaire. *Journal of Sport and Exercise Psychology*, 27(4), 407–431.
- Keltner, D., & Gross, J. J. (1999). Functional Accounts of Emotions. *Cognition and Emotion*, 13(5), 467-480.
- Lazarus, R. S. (1991). *Emotion and Adaptation*. Oxford, United Kingdom: Oxford University Press.
- Mason, W. A. & Capitanio, J. P. (2012). Basic Emotions: A Reconstruction. *Emot Rev*, 4(3), 238–244. <https://doi.org/10.1177/1754073912439763>
- McCarthy, P. J., Allen, M. S., & Jones, M. V. (2013). Emotions, Cognitive Interference, and Concentration Disruption in Youth Sport. *Journal of Sports Sciences*, 31(5), 505–515. <https://doi.org/10.1080/02640414.2012.738303>.

- Nia, M. E., & Besharat, M. A. (2010). Comparison of Athletes' Personality Characteristics in Individual and Team Sports. *Procedia-Social and Behavioral Sciences*, 5, 808-812.
- Steffgen, G. (2017). Anger Management - Evaluation of A Cognitive-Behavioral Training Program for Table Tennis Players. *Journal of Human Kinetics*, 55, 65-73. <https://doi.org/10.1515/hukin-2017-0006>.
- Palgunadhi, F., & Kardjono, K. (2020, February). Emotion Levels in Individual Game Sports and Martial Arts. In 4th International Conference on Sport Science, Health, and Physical Education (ICSSHPE 2019) (pp. 406-409). Atlantis Press.