ETDC Indonesian Journal of Research and Educational Review
Volume 3, No. 4, 2024, pp 28 - 36
e–ISSN 2809-3682
p–ISSN 2809-7505
https://doi.org/10.51574/ijrer.v3i4.2187

THE EFFECTIVENESS OF GUIDED IMAGERY TRAINING ON ANXIETY OF COMPETING BASKETBALL STUDENTS AT UNIVERSITY

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Article Info

Article history:

Received July 15, 2024
Revised September 01, 2024
Accepted September 10, 2024

Keywords:

Anxiety;
Basketball;
Guided Imagery Training;
Students University.

ABSTRACT

Competition anxiety is a psychological phenomenon that is often experienced by athletes/students, including basketball athletes/students, at the State University of Makassar and can have a negative impact on their performance on the field. This research is motivated by the need to find effective methods for overcoming such anxiety. The purpose of this study is to explore the effectiveness of guided imagery training in reducing competition anxiety in basketball athletes/students. The method used in this study is a quasi-experimental design with a pre-test and post-test approach. A total of 22 basketball students were selected by purposive sampling as research samples. Assessment of anxiety levels was carried out using the Scale of Anxiety (SA), which consists of 20 items, before and after the training intervention. The results of the data analysis showed that there was a significant decrease in athletes/students' level of anxiety after participating in guided imagery training; the t value obtained was 25.27, and the p value was 0.00 <0.05. This data indicates that this intervention not only aids in reducing anxiety but also has the potential to boost athletes/students' confidence. The conclusion of this study states that guided imagery training is proven to be effective in reducing competition anxiety in State University of Makassar basketball athletes/students. This study suggests that this method should be integrated into training programs to help athletes/students deal with the pressure of competition and increase their confidence.

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1. INTRODUCTION

In the world of sports, especially competitive sports such as basketball, competition anxiety is a problem that is often faced by athletes. Competition anxiety is a common phenomenon experienced by athletes before and during competition (Mehrsafar et al., 2021; Casali et al., 2022). This anxiety can be mental and physical tension that arises from the pressure to perform well, expectations from coaches, teams, and fans, as well as a personal desire to achieve (Baldock et al., 2021). While a little anxiety can improve performance by motivating athletes to be more focused and alert, excessive anxiety can

actually hinder efficiency and make athletes lose concentration. Factors contributing to competition anxiety range from negative past experiences, high expectations from oneself or others, to a lack of thorough preparation (Hardy et al., 2018). For example, an athlete who has experienced failure in previous competitions may be more prone to anxiety when facing similar competitions in the future. In addition, environmental factors such as media pressure and crowd cheering can also contribute to increased anxiety by athlete (Gabrys & Wontorczyk, 2023).

Anxiety can be defined as a psychological and physiological reaction experienced by athletes leading up to and during competition, characterized by feelings of anxiety, tension, and worry about performance (Ford et al., 2017; Maulana & Khairani, 2017). Anxiety can be divided into two main components: cognitive anxiety and physical anxiety. Cognitive anxiety involves worrying about performance, while physical anxiety relates to physiological symptoms, such as increased heart rate and muscle tension (Eysenck, 2013; Maloney et al., 2014). If not managed properly, this anxiety can interfere with an athlete's concentration, reduce the effectiveness of playing techniques, and even lead to decreased performance in matches.

On the other hand, guided imagery training is a technique that utilizes the ability of imagination to create positive mental images that can improve athletes' focus and confidence (Ekeocha, 2015; Lin et al., 2021). This process involves directing athletes through detailed verbal descriptions, helping them to imagine competitive situations in a positive and encouraging context. Research by Omar-Fauzee et al. (2009) showed that this technique is not only effective for reducing anxiety but can also improve athletes' performance by helping them develop planned mental scenarios. In the context of basketball athletes, visualization can include images of successful shooting techniques, ball control, and positive interactions with teammates. In this way, athletes not only train physically but also train their minds to adapt to stressful situations.

The link between anxiety and performance is another key element that will be explored in this study. Anxiety can serve as a performance booster or inhibitor, depending on its level and how individuals manage it (Patel et al., 2010; Zhang et al., 2018; Rowland et al., 2021). Yerkes and Dodson proposed a theory known as the "Yerkes-Dodson curve," which explains that moderate amounts of anxiety can improve performance, but when anxiety increases to excessive levels, efficiency decreases (Buchwald, 2010). This suggests that anxiety management through techniques such as guided imagery can help athletes achieve the right balance for performance optimization. This method involves using positive imagery and visualization to create mental experiences that can support athlete performance. Research suggests that this technique can help athletes reduce stress, improve focus, and build confidence (Strachan & Munroe-Chandler, 2006; Dormoy, 2016; Williams & Cumming, 2016). Although there has been much research on the effectiveness of guided imagery in sport contexts, studies focusing on basketball athletes/students in Indonesia are limited.

The main issue to be discussed in this study is the effectiveness of guided imagery training in reducing competition anxiety among State University of Makassar basketball athletes/students. This study will explore how this visualization exercise can help

athletes/students in dealing with anxiety, as well as compare their anxiety levels before and after the intervention. There is debate among academics and practitioners regarding how effective this technique is compared to other anxiety management methods, such as relaxation techniques or other psychological training. Some recent studies have shown that guided imagery not only helps reduce anxiety but can also improve athletes/students overall performance. For example, research by Predoiu et al. (2020) found that athletes who trained with visualization methods reported improvements in confidence and self-control while competing. There are also doubts about its efficacy in the absence of other mental training methods. Therefore, this study aims to provide deeper insight into how guided imagery can be effectively applied in the context of basketball athletes/students at the State University of Makassar.

This study aims to determine the level of athletes/students anxiety before and after participating in the training program. By comparing the pre-test and post-test data, it is expected to find evidence that shows a significant reduction in anxiety levels, reflecting the effectiveness of the method. Additionally, this study aims to investigate how visualization techniques can assist students in managing their anxiety while also enhancing their confidence and focus during competitions. By examining the experiences of athletes/students who have undergone guided imagery training, we aim to provide insight into concrete ways that can be used to improve their mental well-being. At the end of the study, it is expected to provide practical recommendations for coaches and athletes/students in implementing this method in their training programs so as to not only improve performance but also provide the mental support needed to overcome challenges in the competitive arena. Thus, this study is expected to contribute to the development of psychological strategies in the world of sports, especially in the context of basketball athletes/students in Indonesia.

2. METHOD

This study used a quasi-experimental design with a pre-test and post-test approach. This design was chosen to evaluate the effect of guided imagery training interventions on athletes' competition anxiety. In this design, data on athletes' anxiety will be collected before and after the implementation of the intervention, so comparisons can be made to measure the effectiveness of the training. The study's population consisted of all basketball athletes/students registered at the State University of Makassar. In this context, the population includes all students who participate in competitions, both at the local and national levels. From this population, the researcher chose a sample of 22 athletes/students who were taken by the purposive sampling method. This selection is based on certain criteria, specifically athletes who are active, willing to participate in training programs, and have a measurable level of anxiety when competing.

The instrument used in this study to measure the level of anxiety is the Scale of Anxiety (SA). This measuring instrument is designed to assess the anxiety level of athletes before and after training (Smith et al., 2006). Instrument Description: The scale consists of 20 items that cover various aspects of match anxiety, such as fear, worry,

and distress. 2) Score Range: Respondents are asked to score from 1 (not anxious) to 5 (very anxious). 3) Validity and reliability: This instrument has been tested for validity and reliability in previous studies.

The implementation of the research was carried out in several steps:

1. Pre-test: Prior to the implementation of the intervention, all participants will undergo a pre-test using the Scale of Anxiety to measure their level of match anxiety.
2. Intervention: Selected participants will then participate in guided imagery training sessions for 8 sessions, which last for 4 weeks (2 sessions per week). Each session lasts for 60 minutes and includes the following activities:
   a. This is an introduction to the concept of guided imagery.
   b. Positive visualization exercises.
   c. Discussion of participants' experiences and feelings after the session.
3. Post test: After completing the training program, participants will undergo a post-test using the same instrument to measure their anxiety level after the intervention.

3. RESULTS AND DISCUSSION

Results

Data Description

Table 1 below provides descriptive statistics for the pre-test and post-test data groups, which reflect the anxiety levels of athletes before and after the guided imagery training intervention.

Table 1. Descriptive Statistics for the Pre-test and Post-test

Group	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Pre-Test	22	74	89	80.68	4.45	19.84
Post-Test	22	44	64	54.05	5.80	33.66

Based on the summary of descriptive data in Table 1, the pre-test group consisted of 22 respondents; anxiety scores ranged from 74 to 89, with a mean of 80.68, and the standard deviation in this group was 4.45, with a variance value of 19.84. In the post-test group, anxiety scores decreased with a range of 44 to 64 and an average (mean) of 54.05. The variance in the post-test reached 33.66.

Hypothesis Test

Data interpretation analysis and the difference between pre-test and post-test in research on the effectiveness of guided imagery training are presented in Table 2 below.

Table 2. Hypothesis Test

Data group	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pretest - Posttest	26.63	4.94	1.05	24.44	28.82	25.27	21	0.00

Table 2 showed that there was a significant difference between athletes/students competition anxiety scores before the pre-test and after the post-test following the guided imagery training intervention. The average decrease in anxiety scores was 26.63 points, with a standard deviation of 4.94, indicating that the difference was fairly consistent among participants. The obtained t value of 25.27 indicates that the observed difference is real, with a degree of freedom (df) of 21, which corresponds to the number of participants who participated in this study. The results of the significance analysis showed a p value of 0.00, which means that these results are highly statistically significant ($p < 0.05$). Thus, it can be concluded that guided imagery training effectively reduces the anxiety of competing basketball athletes/students of the state university of Makassar, which is reflected in a significant decrease in anxiety scores after the intervention.

Discussion

The results of this study indicate that guided imagery training has a significant impact in reducing competition anxiety in state University of Makassar basketball athletes/students. Before the intervention, the average level of anxiety was relatively high. However, after the intervention, there was a significant decrease in anxiety scores. This shows that the guided imagery method is effective in helping athletes/students manage feelings of anxiety that often arise before and during matches. Guided Imagery Training works by harnessing the power of visualization and imagination to create a more stable and calm mental state. Athletes/students involved in this training are trained to envision positive match scenarios, plan successful moves, and feel the sensation of success ultimately improving their mental readiness.

This decrease in anxiety can be explained through a psychological approach where visualization techniques help reduce the stress response by replacing negative scenarios in the athlete's mind with more constructive and optimistic scenarios (Soundara Pandian et al., 2023). This supports the Cognitive Behavioral Therapy (CBT) theory, which states that the way a person thinks about a situation can affect their emotional response (Beck, 2020; Gautam et al., 2020; Matthys & Schutter, 2023). By replacing negative thoughts (such as fear of failure) with positive images (such as success in the match), anxiety levels can be suppressed (Darisman et al., 2021).

The results of this study are consistent with previous studies that have found that visualization and imagery techniques have a positive impact on reducing anxiety and improving athlete performance. These findings are supported by several relevant studies:

Gregg et al. (2005) conducted a study, this study showed that imagery training can help athletes develop mental toughness, including the ability to cope with pressure and anxiety in competitive situations. The study found that athletes who practiced imagery regularly showed significant improvements in the ability to cope with competitive anxiety. This study supports our findings that guided imagery training can lower anxiety levels by mentally preparing athletes through visualization.

Research by Cumming & Williams (2012). This study developed a conceptual model that explains that imagery can be used not only to improve physical performance but also to maintain mental health, including reducing anxiety. They emphasized that imagery has an important role in helping athletes reduce pre-competition anxiety. The results of this study reinforce our findings that guided imagery training can be an effective intervention to address match anxiety in basketball athletes.

A study showed that regular use of imagery can help reduce competitive anxiety, especially when combined with relaxation techniques (Kudlackova et al., 2013; Pelka et al., 2016). Athletes who engage in imagery practice tend to feel more mentally prepared to deal with competitive pressure. These results support the findings of our study, where guided imagery training was shown to reduce basketball athletes' competitive anxiety by providing them with the ability to visualize positive scenarios during the game.

In addition to the visualization mechanism itself, there are several factors that play a role in reducing match anxiety. Social support from coaches and teammates, for example, can also play a role in amplifying the positive effects of guided imagery training. Research by Sarkar & Fletcher (2013) emphasizes that resilience and the ability to bounce back from competitive pressure can be enhanced by the use of imagery, especially when athletes get positive social support. This is in line with the findings that athletes with strong social support will be more effective in using guided imagery training to reduce anxiety.

Another factor is the athlete's level of experience. More experienced athletes may find it easier to understand and apply visualization techniques (Bell et al., 2022), which may affect the effectiveness of guided imagery training. This is consistent with research by Strachan & Munroe-Chandler (2006), who examined self-confidence and imagery in sports performance. It found that athletes with more experience have a tendency to utilize imagery more effectively, as they are more familiar with competitive situations.

Although these results suggest that guided imagery training is effective in reducing anxiety, it is important to acknowledge that the results of the study may be influenced by individual factors such as athletes'/students level of experience, physical state, and their natural ability to visualize situations. More experienced athletes/students may have had better stress management skills compared to novice athletes (Burlot et al., 2018), so the effect of the intervention could have varied among participants. Overall, this study makes an important contribution to the understanding of how guided imagery training can be an effective psychological method in improving athletes' mental well-being, particularly in managing match anxiety. In the long run, the application of this method

may strengthen athletes' performance by reducing the negative influence of anxiety, which is often a major barrier to achieving optimal performance.

4. CONCLUSION

The conclusion of this study shows that guided imagery training is proven to be effective in reducing competition anxiety in the state University of Makassar basketball students. The results of statistical analysis showed a significant decrease in anxiety levels after the intervention compared to before the training was given. This indicates that the positive visualization method through guided imagery can help students manage the mental and emotional stress they feel when competing. Exercise not only promotes mental calmness but also builds confidence and focuses on on-field performance.

Therefore, as a suggestion, guided imagery training can be integrated as part of a psychological training program to improve the quality of play and mental well-being of students.

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