

**The Effect of Progressive Relaxation Techniques on Anxiety of Bua Raga Fc Sepak Takraw Athletes: Before and During the Match****Irham^{1✉}, Rachmat Hidayat², Arman Bin Anuar³, A. Heri Riswanto⁴, Andi Alif Tunru⁵**

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Abstract

The aim of this research is to determine the effect of progressive relaxation techniques on the anxiety of Bua Raga Fc sepak takraw athletes. This research used Pretest-Posttest Design; giving a pretest before treatment, and a posttest afterward in the experimental group. The population in this study is all 15 Bua Raga Fc sepak takraw athletes. The sample is 15 Bua Raga Fc sepak takraw athletes. The sampling technique used is saturated sampling where all members of the population are sampled in this research. The data collection technique uses a questionnaire or questionnaire which uses an anxiety test instrument by (Tangkudung, 2018). Research data was analyzed descriptively, testing requirements; data normality and homogeneity tests, paired sample t-test. according to the significant level $\alpha = 0.05$. The results of the study show that there is a significant influence of progressive relaxation techniques on the anxiety of Bua Raga Fc sepak takraw athletes, with a $t = \text{table } 2.131$ or $t = \text{count of } 17.905 > t = \text{table } 2.131$ and the result is sig. (2-tailed) which is $0.000 < 0.05$. The average pretest anxiety score is 51.27 and the average posttest anxiety score is 40.67, there is a difference between groups of 10.6. The conclusion is that there is a decrease in athlete anxiety after being given progressive relaxation techniques. Thus, the progressive muscle relaxation technique is effective in reducing anxiety in Bua Raga Fc sepak takraw athletes.

How to Cite

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INTRODUCTION

Exercise is necessary in everyday life, because by exercising people will become healthy and have a fit body throughout their life (Salfina & Aulia, 2021). Sport is a lifestyle or trend for someone to become a basic need in their life (Uyun, 2020). Sport is a physical activity carried out by a person or group of people with the aim of creating physical fitness (Robinanto et al., 2022). Sport is a physical activity carried out to protect a person's physical condition and improve the functional abilities of sports practitioners (Pratama et al., 2022). Sport is a physical and psychological activity that is structured and aims to maintain and improve the quality of a person's health (Agustina, 2018).

Sport is a series of regular and planned physical movements that people do consciously to improve their functional abilities (Riyanto & Riyoko, 2020). Sport is all systematic activities to encourage, foster, and develop physical, spiritual, and social potential (Jefri et al., 2023). Sports are a good means to improve physical and mental quality, especially for the younger generation (Azim et al., 2023). Sport is an organized and competitive form of play (Abadi et al., 2023). Sport is one form of effort to improve human quality directed at the formation of character and personality (Arsin et al., 2020).

Sepak takraw is a sport that contributes in improving performance at local, national and international levels, both in special sepak takraw events and multi-events (Sudarso, 2022). Sepak takraw is a combination of football and volleyball played on a field the same size as a doubles badminton court, where during the match the ball must not touch the hands (Akbar et al., 2021). Sepak takraw is a type of sport that originates from traditional games (Awaluddin & Janwar, 2019). Sepak takraw is a foot-dominated game played on a field the size of a badminton court and competed between two teams facing each other with 3 (three) players each (Suprayitno, 2018). Sepak takraw is also a sport full of challenges where players have to be able to do splits, somersaults and even roll their bodies which can cause injury but that is what the game sepak takraw is like (Aryanti et al., 2022). The basis of the sepak takraw game is a traditional Indonesian sports game played by 6-7 people in a circle (Irawan et al., 2021). Sepak takraw is a game played on a rectangular, flat field, either in an open or closed area (Musa et al., 2020).

Sepak takraw is a game played on a rectangular field (Sucipto et al., 2017). Sepak takraw

is a game played on a rectangular field (Mamu et al., 2022). Sepak Takraw is a quite popular sport, and the feet are the most dominant part of the body when playing (Murti et al., 2020). This game originally came from the Malays, developed to Indonesia and several other countries (Kurniawan & Firdaus, 2020), the ball is made of rattan (Ramadhan & Bulqini, 2018), it can be played by any part of the body except the hands (Iyakrus & Ramadhan, 2021). Sepak takraw is a team sport. Psychologically, team sports are different from individual sports, where the difference lies in the responsibility of each individual, but the process and results depend on the entire team (Sultan et al., 2020). As the sport of Takraw is currently developing, only 3v3 matches are held but are divided into four competitions, namely two against two, three against three, four against four and also hoop Takraw (Hidayat et al., 2020).

Anxiety is a mental disorder that can suddenly come to every athlete. Anxiety can come from within or from outside an athlete (Siregar et al., 2022). Anxiety is a normal reaction or something that normally happens, for example when facing a match (Hardiyono, 2020). Anxiety is the ego's function to warn individuals about the possibility of impending danger so that appropriate adaptive reactions can be prepared (Novianti et al., 2019). Anxiety is a mood state characterized by negative affect and symptoms of physical tension in which a person anticipates the possibility of danger or misfortune in the future with feelings of worry (Kumbara et al., 2018). Anxiety is a mixed feeling of fear and concern about the future without a specific cause for the fear (Widhiyanti et al., 2020). Sports anxiety is negative thoughts related to the perception of danger that will befall oneself, with feelings of worry, anxiety, and unease by considering the match as something dangerous. This occurs when the match is considered a tough challenge to succeed (Jannah., 2017).

Anxiety is a psychological condition or form of individual emotion in the form of tension, restlessness, worry related to feelings of threat and fear due to uncertainty in the future that something bad will happen (Sari & Irawan, 2021). Competition anxiety is a common occurrence in competitive situations resulting in weakened sporting performance (Salfina & Aulia, 2021). Anxiety is an emotional reaction to a threatening condition (Afrizal & Mistar, 2015). Anxiety is an unpleasant response characterized by a person's worry and fear when faced with difficult circumstances (Hindiari & Wismanadi, 2022). The source of anxiety experienced by athletes can come from within the athlete and can also come from outside

the athlete or the environment (Robinanto et al., 2022). Anxiety is a problem of emotional turmoil that often faces athletes, especially in individual sports with quite high difficulty (Setiabudi & Santoso, 2020). Competitive anxiety felt by athletes is a feeling of worry, anxiety and unease and considers competition as something dangerous which is accompanied by physiological changes such as increased heart rate and blood pressure, a feeling of cramps in the stomach, breathing becomes rapid and the face becomes red (Irawan, 2021). Each person has different levels of anxiety depending on each athlete (Hendra et al., 2013).

Anxiety can arise before competing, but any anxiety that arises can also be worked on so that athletes are able to control the anxiety they experience (Rizal & Kasrman, 2022). Anxiety before a match (state anxiety) is an emotional state that occurs suddenly or at a certain time (Hendra et al., 2018). State anxiety is an emotional state that occurs suddenly or at a certain time which is characterized by anxiety, fear, tension and usually this anxiety occurs before the match (Myalsidayu, 2014). Anxiety also arises from thinking about undesirable things that will happen before a match (Anira et al., 2017).

Anxiety (competition anxiety) and sepak takraw are basically two interrelated types. In every sepak takraw match that athletes play, anxiety will arise as a negative emotional reaction (Kamarudin, 2020). The anxiety felt by athletes usually often appears when they are about to compete, even when they are on the field, this anxiety appears so that the athlete lacks concentration when facing an opponent (Uyun, 2020). Feelings of anxiety are feelings of worry that arise in a player when facing a match, the feelings in question can arise from within oneself or from other people (Akhbar & Mahendra, 2021). There are many factors that can cause an athlete to experience anxiety during a match, namely dysfunctional thoughts and stress, academic problems, anxiety about injury, and poor relationships with the team (Pristiwa & Nuqul, 2018).

Yacobson's progressive muscle relaxation technique is that the underlying assumption is that there is a strong relationship between the muscular system and emotions, if someone controls their muscular system and the tension is reduced, they can control their emotions (Setiawan et al., 2018). Physiologically, when a muscle contracts, it means the muscle shortens, while in a relaxed state it means the muscle lengthens. After contraction and relaxation, the muscle will lengthen again and be more relaxed than before the contraction (Maksum, 2011). Relaxation must

be learned in a calm atmosphere and regularly practiced before athletes are able to apply it in stressful situations (Jannah, 2017). The progressive relaxation technique is an exercise method that is carried out by tensing the muscles throughout the body before relaxing them, so that they get used to and are able to differentiate between muscles that are in a tense state, and muscles that are in a relaxed state, before facing a situation full of tension (Komaruddin, 2017).

The beginning of the formation of Bua Raga Fc, which was previously the Karucu Club which consisted of 10 players, was formed by coach Taslim in 2007. Over time, the Karucu club changed its name to Bua Raga Fc on March 14 2017, which was initiated by coach Taslim together with Mirwan and Iskal Jabbar. Bua Raga Fc is one of the sepak takraw clubs in Luwu Regency. Bua Raga Fc has participated in various tournaments which were held in Luwu Raya, especially in Luwu Regency.

Based on observations with the Bua Raga Fc coach on behalf of coach Taslim, he said that when he was about to compete, athletes felt anxious, such as nervousness, irregular breathing, sleeping difficulty, frequently going back and forth to the bathroom, anxious, afraid of losing, lacking self-confidence. What athletes usually do is that when they are at the competition venue, athletes stay quiet and pay attention to the other athletes during the competition. During the match, Bua Raga Fc sepak takraw athletes often made mistakes that they shouldn't have made which resulted in sub-optimal performances such as aimless passing, smashes not crossing the net and crossing the court line.

The formulation of the problem is the extent of the anxiety before and during the Bua Raga Fc sepak takraw athlete's match. The aim of the research was to determine the extent of anxiety before and during Bua Raga Fc sepak takraw athletes' matches. Supported by previous research (Kamarudin, 2020) shows that the level of competition anxiety of sepak takraw athlete Smanor Tadulako is in the "very low" category. Novelty research is to add an anxiety indicator before competing. Previous research added (Salfina & Aulia, 2021) shows that mental training can have an effect on reducing athletes' competitive anxiety. In line with previous research (Setiawan et al., 2018) that progressive relaxation training has a significant influence on reducing anxiety in coaching men's sepak takraw performance at Sriwijaya University. Further to previous research (Rafli et al., 2023) that mental stress has a significant relationship to the role of religiosity in sepak

takraw athletes before competing.

METHODS

The experimental design in this research is a Pretest-Posttest Design which are providing a pretest before treatment, and a posttest afterward in the experimental group(Sugiyono, 2018). The research took place in October 2023. The research lasted for one day. Location of research carried out at Rajawali sepak takraw field, Pammesakang Village, Bua District, Luwu Regency. The population in this study was all 15 Bua Raga Fc sepak takraw athletes. The sample was 15 Bua Raga Fc sepak takraw athletes. The sampling technique used is saturated sampling where all members of the population are sampled in this research. The data collection technique used a questionnaire which used an anxiety test instrument by (Tangkudung, 2018). Dimensions of anxiety statements, with indicators before the match and during the match with the following grid **Table 1**.

Table 1. Anxiety Instrument Grid

Dimensions	Indicator	No. Question Items
(Anxiety)	Before Match	1,2,3,4,5
		6,7,8,9,10,11,12,13
	During Match	14,15,16,17,18
		19,20
		21,22,23,24,25,26,27
		28,29,30,31,32,33,34,35

The aim of the research was to measure the anxiety of sepak takraw athletes Bua Raga Fc. Before the treatment is carried out, the athlete's anxiety pretest is first given to obtain initial data. Then treatment is given for progressive muscle relaxation techniques by providing material with a duration of 60 minutes. Final test (posttest) to reveal the effect after being given treatment. pretest and posttest were carried out Rajawali sepak takraw field, Pammesakang Village, Bua District, Luwu Regency. Research data was analyzed descriptively, testing requirements, namely data normality and homogeneity tests, paired sample t-test. according to the significant level $\alpha = 0.05$.

RESULTS AND DISCUSSION

Initial data collection/pretest Bua Raga Fc sepak takraw athlete about anxiety before the match and during the match before being given treatment. Then they are given treatment on

progressive relaxation techniques, then the final data or post test will be taken Bua Raga Fc sepak takraw athlete. This is done to determine anxiety Bua Raga Fc sepak takraw athlete after being given treatment. To provide a clearer picture of the data from this research.

Descriptive data analysis is intended to obtain a general overview of the research data. Descriptive analysis was carried out on pretest and posttest anxiety data from Bua Raga Fc sepak takraw athletes. Descriptive analysis includes mean, standard deviation, range, minimum and maximum values.

Table 2. Descriptive Analysis

Variable	Pretest Worry	Posttest Worry
N	15	15
Mean	51.27	40.67
Median	50.00	40.00
Std. Deviation	6,519	6,651
Min	41	31
Max	65	54

The results **Table 2** of the descriptive analysis show that pretest anxiety has an N (sample) of 15, a mean (average) of 51.27, a median (middle value) of 50.00, Std.deviation (standard deviation) of 6.519, Min (lowest value).) of 41, Max (highest value) of 65. The results of the descriptive analysis can be seen that posttest anxiety has an N (sample) of 15, a mean (average) of 40.67, a Median (middle value) of 40.00, Std. deviation (standard deviation) is 6.651, Min (lowest value) is 31, Max (highest value) is 54.

The Normality Test was carried out to test whether the variables are normally distributed or not. This normality test uses SPSS 23. To discover whether the data is normal or not, if sig > 0.05 then it is normal and if < 0.05 then it can be said to be abnormal. The calculation results obtained are in the following **Table 3**.

Table 3. Normality Test Results

Variable	Shapiro-Wilk	Sig.	α	Note
PretestWorry	0.962	0.725	0.05	Normal
PosttesWorry	0.966	0.789	0.05	Normal

Based on the results **Table 3** of the data normality test, it is known that the significant value of pretest anxiety is with a Shapiro-Wilk value of 0.962 and a significance level of 0.725 which is greater than $\alpha 0.05$, then it can be said that the distribution of pretest anxiety follows a

normal distribution or is normally distributed. Meanwhile, posttest anxiety with a Shapiro-Wilk value of 0.966 and a significant level of 0.789 is greater than α 0.05, then it can be said that the distribution of posttest anxiety follows a normal distribution or is normally distributed.

The homogeneity test is carried out to determine the similarity of variances or to test that the data obtained comes from a homogeneous population. Decision making criteria are accepted if the significant value is greater than 0.05.

Table 4. Homogeneity Test Results

Lavene Statistics	df1	df2	Sig.	Note
0.084	1	28	0.774	Homogeneous

Based on the results **Table 4** of the pretest and posttest homogeneity test with a levane test of 0.084 with a significant value of 0.774, it is known that the significant value is 0.05, so the hypothesis which states that the data was obtained from a homogeneous sample is accepted. The conclusion that can be drawn is that the pretest and posttest data have a homogeneous population.

The T test in this study uses a parallel sample T test to determine the effect progressive relaxation techniques for anxiety in Bua Raga Fc sepak takraw athletes. The results of the T test sample test can be seen as follows **Table 5**.

Table 5. Paired T Test Results

Variable	N	T-Count	T-Table	Sig.(2-tailed)
PretestWorry PosttestWorry	25	17,905	2,131	0,000

Judging from the table above, it can be concluded that the $t =$ calculated value is 17.905, this value is greater than $t =$ table 2.131 or $t =$ count of 17.905 $>$ $t =$ table 2.131 and the result is sig. (2-tailed) namely 0.000 $<$ 0.05. The average pretest anxiety score is 51.27 and the average posttest anxiety score is 40.67, there is a difference between groups of 10.6. This means there is a significant influence progressive relaxation techniques for anxiety in Bua Raga Fc sepak takraw athletes.

Based on the results of research conducted on Bua Raga Fc sepak takraw athletes, with a research focus related to athlete anxiety before and during the match by providing treatment in the form of relaxation techniques to sepak takraw athletes which were carried out audio-visually by presenting speakers from psychology who deal

with athlete anxiety. Then show athletes about relaxation techniques as an alternative for dealing with anxiety. It is proven from the results of the treatment that the average athlete experiences a decrease in anxiety by looking at the final results or posttest scores.

Anxiety arises due to feelings of fear, nervousness and worry, causing increased activity of the autonomic nervous system to become a physiological hyperactive response and muscle tension. The hyperactive response comes from unconscious muscle movements associated with organs, causing cold sweat and increased pulse rate. Providing progressive muscle relaxation exercises can reduce the tension felt by the athlete. Progressive relaxation training is an exercise method that involves tensing the muscles throughout the body before relaxing the muscles again(Sholikhin et al., 2019).

Research result(Mutmmainnah & Kasmad, 2022)explained that there was a decrease in the athlete's anxiety level between before and after being given progressive muscle relaxation. The more frequently they carried out progressive muscle relaxation exercises systematically and made their muscles contract systematically so that they could reduce anxiety in competition situations. Relaxation is not only a technique to make athletes relax and stabilize their emotions, but also as a strategy so that athletes recover quickly during competition so that their performance is optimal.(Komaruddin, 2015). This shows that there is a difference between anxiety before and after treatment in the form of training in deep breathing relaxation techniques, deep breathing relaxation is effective in overcoming the anxiety felt by individuals.(Ardini & Jannah, 2017).

Supported by research(Sopian, 2019)explains that elite athletes successfully use relaxation techniques regularly to regulate their physical energy. Physical relaxation strategies specifically targeted to athletes with somatic anxiety were more effective than cognitive relaxation strategies. Relaxation recovery has a role in calming oneself psychologically and eliminating lactic acid in the body's blood and muscles, because lactic acid is a temporary waste product that inhibits movement and coordination of muscle work so that a person becomes tired quickly.

Relaxation can help eliminate the symptoms of stress even though the cause of the anxiety will not disappear, so you will feel able to deal with it again after releasing tension in the body and clearing the mind. Research result(Hikmah et al., 2021)shows that there is a significant effect on reducing stress levels in people after being given

progressive muscle relaxation techniques. Progressive muscle relaxation exercises can stop the increase in sympathetic nerves and have the effect of a sensation of calming the limbs, lightness and feeling of warmth that can spread throughout the body.

CONCLUSION

Based on the research, it can be concluded that the data above shows the results of the research: This means there is a significant influence progressive relaxation techniques for anxiety in Bua Raga Fc sepak takraw athletes, with a $t = \text{count}$ value of 17.905, this value is greater than $t = \text{table}$ 2.131 or $t = \text{count}$ of 17.905 > $t = \text{table}$ 2.131 and the result is sig. (2-tailed) which is $0.000 < 0.05$. The average pretest anxiety score was 51.27 and the average posttest anxiety score was 40.67, there was a difference between groups of 10.6. This shows that there is a decrease in athletes' anxiety after being given progressive relaxation techniques. Thus, progressive muscle relaxation techniques are effective in reducing anxiety in athletes sepak takraw Bua Raga Fc.

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