



# Anxiety Level of DKI Jakarta Women's Rugby Athletes Towards the National Sports Week 2024

## Original Article

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### Abstract

To achieve maximum performance, an athlete requires preparation such as physical, technical, tactical, and mental. One of the mental aspects of sports psychology is anxiety. Anxiety is a mental symptom that is identical to negative feelings which are characterized by feelings of worry, tension, and unease when facing a situation, causing a decrease in concentration and self-confidence. This study aims to determine the anxiety level of DKI Jakarta female rugby athletes before the match. This research is quantitative descriptive research using a percentage formula. Data collection used a questionnaire with research instruments using the Sport Competition Anxiety Test (SCAT). The population in this study were all female rugby athletes from DKI Jakarta, totalling 15 athletes who were designated as the research sample. The research results showed that the anxiety level of DKI Jakarta female rugby athletes before the match was 27% (4) athletes who had low anxiety levels, 60% (9) athletes had moderate anxiety levels, and 13% (2) athletes had high anxiety levels. From the data results, it can be explained that the anxiety level of DKI Jakarta female rugby athletes before the match is in the medium category.

**Keywords:** *anxiety, achievement, rugby athlete*

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## INTRODUCTION

Rugby is one of the most popular sports games in mainland Europe. This rugby game is a universal sport that can be played by men and women. In Indonesia itself, the sport of rugby has experienced development and progress since it was introduced in 2004. Apart from being popular with various groups, rugby also has many benefits. The benefits of rugby include it can provide health, fun and physical fitness (12). The development of rugby in Indonesia can also be seen from the many championships held in cities and districts. Apart from that, the sport of rugby in Indonesia is currently competed in three numbers, namely rugby 7s, rugby 15s and X rugby. The sport of rugby is unique because it can be played by all types of human body postures; fat, thin, tall, short, big, or small, each of which has an important position in this sport. Rugby is a sport that has tough characteristics where each player makes direct body contact. The duration of the game is around 14 minutes for 7s rugby, 80 minutes for 15s, and 14 minutes for X rugby with a square field shape having a maximum field length of 144 m and a width of 70 m. The number of players according to the type of game is 7, 15, and 5 people in one team.

The physical aspect of playing rugby is very important. Players are required to have excellent physical condition to complete the game with physical activity involving hard impacts and sprinting for 144 meters. The athlete's overall physical condition is referred to as a bio-motor component which consists of several components. The basic bio-motor component which mainly consists of endurance, strength, and speed, while the main bio-motor component of the supplement consists of flexibility and coordination (1).

Because rugby is a sport with high intensity and high levels of physical contact between players, it is not only the physical component that is relied upon but also psychological factors and the mental health of players that is needed to maximize training and matches. Apart from training technique, physicality and tactics in sports, mental training is also paid attention to (4). Athletes need to have a tough mentality to be able to train and compete with high enthusiasm, total dedication, never giving up, and not easily distracted by technical and personal problems. The role of the coach is important in paying attention to mental health because athlete's mental health is not actually a psychological problem but technical or physiological factors that cause mental disorders. One of the mental states that often arises before a match is anxiety, motivation, and self-confidence (5,6).

Anxiety is a negative emotional state characterized by nervousness, worry, and fear and is related to activation or excitement in the body. The result of anxiety can result in an athlete's performance being hampered and not being good. Meanwhile, motivation is an impulse within an athlete that causes agitation or desire to achieve something desired (2,3).

The DKI Jakarta Indonesian Rugby Union Association (PRUI) is one of the platforms owned by DKI Jakarta to develop the achievements of athletes in the sport of rugby and also as a form of its contribution in developing rugby in Indonesia. However, there are still many athletes who train at Rugby DKI Jakarta who are not yet fully aware of the importance of overcoming anxiety and increasing the motivation that arises within them, for example mental problems that often occur, such as some athletes not coming to training on time, training not being optimal when trainers are unable to attend, always complain if they are given heavy training material, use the excuse of illness to not take part in the training program, some even give permission not to go to training. This incident was not carried out by all athletes, but only some did.

One of the women's rugby athletes from DKI Jakarta is a player who has won several championships, but before the match the athlete experienced a mental decline marked by visible fear and anxiety, so this situation resulted in the athlete experiencing mental decline. This generally happens because coaches do not pay enough attention to mental aspects which are very important because they usually always emphasize physical mastery, technique, and tactics.

Based on the explanation above, mental health is proven to have an influence on athlete performance. This is based on research by Adisasmito (2007) explaining that 80% of professional athletes' winning factors are determined by mental factors. Another opinion says that 50% of match results are determined by psychological factors such as mentality. Therefore, achieving optimal appearance as well as high physical abilities and achievements requires mental readiness.

## **MATERIAL AND METHODS**

This research is quantitative descriptive research. The method used in collecting data in this research was a survey using a questionnaire. The characteristic of the survey method is that data is collected from respondents using a questionnaire with a formal approach. A questionnaire is one of the characteristics of a descriptive study that collects and records data obtained from questionnaires filled out by DKI Jakarta female rugby athletes. This research will prove how high the level of anxiety and motivation is in female rugby athletes in DKI Jakarta. The population in this study were all female rugby athletes from DKI Jakarta, totalling 15 athletes who were designated as the research sample.

The data collection technique uses an anxiety research instrument, namely SCAT (Sport Competition Anxiety Test). The questionnaire for this variable was taken from an available questionnaire, namely the SCAT (Sport Competition Anxiety Test) questionnaire. Which was developed by Rainners Martens, Robin S. and Damon Barton in 1990 (6). This SCAT questionnaire has been tested in several studies by Rainer Martens, in his book *Competitive Anxiety in Sport* (1997) which explains the field studies and trials made by creating valid research on the SCAT (Sport Competition Anxiety Test). This SCAT has 15 questions, all of which relate to statements about anxiety. The SCAT statements consist of 5 statements with a blank score (statements that have nothing to do with anxiety), 2 positive or unfavourable statements (questions that are not

related to anxiety), and 8 negative favourable statements (questions related to anxiety). The method used in this research is the experimental method (Sugiyono, 2014).

Table 1. SCAT Anxiety Instrument Grid

Variable	Indicator	Item	
		favorable	unfavorable
Anxiety	• Cognitive Anxiety	2,3,5,8,9,12, 14,15	6,11
	• Somatic Anxiety		

Table 2. Assessment of Anxiety Instruments

Question Number	Rarely	Some-times	Often
1	0	0	0
2	1	2	3
3	1	2	3
4	0	0	0
5	1	2	3
6	3	2	1
7	0	0	0
8	1	2	3
9	1	2	3
10	0	0	0
11	3	2	1
12	1	2	3
13	0	0	0
14	1	2	2
15	1	2	3

Table 3. Score of Sport Competition Anxiety Test also known as SCAT, Brian Mackenzie (1)

SCAT Score	Analysis
<b>Less than 17</b>	<b>You have a low level of anxiety</b>
<b>17 to 24</b>	<b>You have a middle level of anxiety</b>
<b>More than 24</b>	<b>You have a high level of anxiety</b>

Information:

1. In questions number 1, 4, 7, 10, and 13 the score is 0 because these questions are not about measuring anxiety levels. With the aim, so that the subject does not feel that his level of anxiety is being measured so that he feels safer and fills in the questionnaire as is.
2. In questions number 2, 3, 5, 8, 9, 12, 14, and 15 favorable statements (statements related to anxiety) with a score of rarely = 1, sometimes = 2, and often = 3.
3. In questions number 6 and 11 unfavorable statements (statements that correspond to anxiety) with a score of rarely = 3, sometimes = 2, and often = 1.

**RESULTS**

The results of data collection using a questionnaire given to 15 athletes (respondents) were then analyzed which included descriptive statistical analysis. Descriptive analysis includes calculating minimum, maximum, mean (average) score values, standard deviation, and categorization of athletes into low, medium, and high levels. The data is then expressed in percentages which are presented in the form of a pie chart.

Anxiety level data was collected using a questionnaire that had been previously validated in the book entitled 101 Performance Evaluation Tests by Brian Mackenzie in 2005, pages 213-215 (1). This SCAT has 15 questions, all of which relate to statements about anxiety. The SCAT statements consist of 5 statements with a blank score (statements that have nothing to do with anxiety), 2 positive or unfavourable statements (questions that are not related to anxiety), and 8 negative favourable statements (questions related to anxiety).

Table 4. Anxiety Level Statistical Results

No	Name	Age	SCAT Score
1	Pipit Ayu Lestari	26	21
2	Indira Kusuma Wardani	19	13
3	Wardhana Nurul Fajrin	22	13
4	Oktavia Nurul Aini	21	19
5	Andi Riya Palesangi	23	19
6	Nadya Khoir	26	16
7	Shakira	21	16
8	Nurul Sifa Kusumawarsari	23	20
9	Fitri Arumdani	27	25
10	Sheila Nur Vierdhana	23	20
11	Judith Anastasya	21	18
12	Agilia Mahardika	21	26
13	Livi Oktaviani	22	23
14	Monike Ardilla	23	18
15	Rahma Andira Putri	24	21
<b>Total</b>			288

Table 5. Statistical Description of Anxiety Levels

<b>Statistic</b>	
<i>N</i>	15
<i>Mean</i>	19,2
<i>Median</i>	19
<i>SD</i>	3,80
<i>Minimum</i>	13
<i>Maksimum</i>	26

In all the statement items used, there are three answer choices with a score of 1-3. A detailed description of each research data is as follows (Table 4), and according to the table 5, it is known that the anxiety level of DKI Jakarta female rugby athletes got an average score (mean) of 19.2, a middle score (median) of 19, a standard deviation of 3.80, the lowest score (minimum) of 13, the highest score (maximum) of 26.

Anxiety data analysis results. The aim of carrying out this research is to determine the anxiety level of DKI Jakarta female rugby athletes towards PON 2024. The data analysis technique used in this research is percentage descriptive. Data is created in three categories, namely low, medium, and high. The results of data categorization can be seen in the table 6. It is known that there are 27% (4) athletes who have low anxiety levels, 60% (9) athletes have moderate anxiety, and 13% (2) athletes have high anxiety. The majority of DKI Jakarta female rugby athletes heading to PON 2024 have a moderate level of anxiety.

Table 6. Frequency Distribution of Anxiety Levels for Female Rugby Athletes in DKI Jakarta

No	Intervals	Category	Frequency	Percentage %
1	Less than 17	Low	4	27%
2	17 to 24	Middle	9	60%
3	More than 24	High	2	13%
<b>Total</b>			<b>15</b>	<b>100%</b>

This means that 60% or 9 athletes who have a moderate level of anxiety can feel the symptoms when their anxiety comes. Even though the symptoms of anxiety are disturbing, athletes who have moderate anxiety can control their anxiety.

**DISCUSSION**

Anxiety is basically an emotional reaction to a threatening condition (7,8). The aim of research on this variable is to determine the anxiety level of DKI Jakarta female rugby athletes towards PON 2024. The size of an athlete's anxiety level can influence several things, including themselves and the environment where they carry out activities, which will result in an athlete's poor performance on the competition field.

Based on the research results above, it shows that the anxiety level of DKI Jakarta female rugby athletes before the match has an average score of 19.2. Is in the moderate anxiety category. The details are as follows: 1) A total of 4 respondents (27%) were in the low anxiety level category, 2) A total of 9 respondents (60%) were in the moderate anxiety level category, 3) A total of 2 respondents (13%) were in the high anxiety level category.

This shows that some DKI Jakarta female rugby athletes need to increase their mental training portion and try to control their own anxiety in order to achieve a better mental condition before the match so that their performance during the match will be optimal. High levels of anxiety usually make athletes less confident in facing competitions and anxiety arises from them, so their actual performance in each competition will not be as optimal as their performance during training (9,10).

Pay attention to several factors that can cause excessive anxiety. Factors that can reduce anxiety levels can be used as input for other parties to reduce the high levels of anxiety experienced by athletes before a match, so that they can form athletes who are mentally strong and have high self-confidence.

As a coach or official who accompanies athletes in competitions, you must understand and acknowledge the importance of mental factors in competition apart from physical, technical, and good tactics. Many athletes have potential, but due to anxiety when competing, athletes cannot compete optimally. This really hinders the athlete's achievement. Therefore, the role of the coach in dealing with this problem is very influential, the coach must understand the characteristics of the athlete's behaviours and attitudes. Each athlete also has a different character, so how to deal with anxiety is different. Coaches must also know whether their athletes are in a calm condition or when their anxiety is high, for example looking pale, becoming quiet, frequently going to the restroom, or even breaking out in cold sweat (11).

In this way, the role of the coach here is to control the athlete's anxiety, such as shifting focus by inviting him to tell stories and providing motivation to the athlete, but not so that the athlete

must win the championship, and of course, one's own role in dealing with anxiety is also very important, athletes must be able to control their anxiety in their own way, for example by using breathing techniques, self-talk, turning negative thoughts into positive ones, and focusing on the competition. In this way, at least it can reduce the athlete's anxiety and the athlete can manage their anxiety well so they can play a good game. By knowing an athlete's anxiety, it is hoped that he can overcome the symptoms that can cause anxiety in an athlete so that the desired performance and achievements will be achieved optimally.

## CONCLUSION

Based on the results of the research and discussion, it can be concluded that what was taken was the total score of the anxiety variable, namely the Anxiety Level of DKI Jakarta Women's Rugby Athletes Towards PON 2024 with the greatest frequency being moderate anxiety amounting to 9 athletes with a percentage of 60% followed by low anxiety totalling 4 athletes with a percentage 27%, and high anxiety amounted to 2 athletes with a percentage of 13%.

With the existence of anxiety in some athletes, it is hoped that athletes will be able to know themselves better and overcome this anxiety by increasing training or increasing competition flying hours. So that when playing the match, we can show the best and maximum game in accordance with the targets that the DKI Jakarta Women's Rugby Team wants to achieve at various events.

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## CONFLICTS OF INTEREST

**Conflict of interest** : Authors state no conflict of interest.

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## REFERENCES

1. Brian Mackenzie. (2015). 101 performance evaluation tests. *London: Electric Word plc.*
2. Febiaji, Pendidikan, S., & Olahraga, K. (2015). Tingkat kecemasan atlet pomnas xiii cabang olahraga sepakbola sebelum menghadapi pertandingan. *SKRIPSI. Diajukan Kepada Fakultas Ilmu Keolahragaan, Universitas Negeri Yogyakarta.*
3. Guntur, O., Prestifa Herdinata, R., Saparwati, M., & Aprianti, I. (2022). Sport hypnosis: ego state dalam mereduksi anxiety atlet tae kwon do (studi kasus pada atlet ppopd tae kwon do kota salatiga). *Jurnal Inovasi Penelitian, 2:12*. DOI: <https://doi.org/10.47492/jip.v2i12.1503>
4. Hackfort, D., & Spielberger, C. D. (1990). Anxiety in sports: an international perspective (series in health psychology and behavioral medicine). *Taylor & Francis; 1st edition.*
5. Leitenberg, H. (1990). Handbook of social and evaluation anxiety. *Springer; Softcover reprint of the original 1st ed.*
6. Martens, R. (1997). Sport competition anxiety test. *Human Kinetics Publishers.*
7. Ojio, Y., Matsunaga, A., Hatakeyama, K., Kawamura, S., Horiguchi, M., Yoshitani, G., Kanie, A., Horikoshi, M., & Fujii, C. (2021). Anxiety and depression symptoms and suicidal ideation in japan rugby top league players. *International Journal of Environmental Research and Public Health, 18(3)*, 1–11. <https://doi.org/10.3390/ijerph18031205>

8. Satiadarma, M. P. (2000). Dasar-dasar psikologi olahraga. *Jakarta Pustaka Sinar Harapan*.
9. Sukiri, S., Wenly, A. P., Pelana, R., & Setiakarnawijaya, Y. (2023). Bibliometric analysis of anxiety and athlete in the last decade. *International Journal of Human Movement and Sports Sciences*. <https://api.semanticscholar.org/CorpusID:258561561>
10. Supriyadi. (2015). Psikologi olahraga.
11. Tangkudung, J., & Mylsidayu, A. (2017). Mental training: Aspek-aspek psikologis dalam olahraga. *Cakrawala Cendekia*.
12. World Rugby. (2023). The laws of the game. <https://www.world.rugby/the-game/laws/home>