



## Analysis of Self Efficacy on Psychological Stress of Handball Athletes

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### Abstract

This study aims to determine how the psychological levels of stress and self-efficacy of handball athletes relate to each other. In addition, this study also seeks components that can increase self-efficacy to reduce stress experienced by athletes. This research method uses a quantitative descriptive correlational research design. Data were collected through a questionnaire consisting of a self-efficacy scale and a psychological stress scale that has been tested for validity and reliability. Respondents in this study were 20 handball athletes who actively competed in West Java Province. The results showed a significant negative relationship between self-efficacy and psychological stress in handball athletes ( $p < 0.05$ ). Athletes with high self-efficacy tended to have lower levels of psychological stress, while athletes with low self-efficacy experienced higher stress levels. Factors such as competitive experience, social support, and coping strategies also contribute to athletes' self-efficacy levels. Self-efficacy plays an important role in reducing psychological stress in handball athletes. Athletes who are more confident in their abilities tend to be better able to manage stress in sports. Therefore, increasing self-efficacy can be an effective strategy for maintaining mental health and athlete performance.

### How to Cite

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## INTRODUCTION

A person's belief in their ability to achieve a goal, also known as self-efficacy, is very important in sports, including handball (Oktadinata et al., 2024). Athletes who have high levels of self-efficacy are more confident in facing challenges and pressure during a match, which in turn can improve their performance (Lochbaum et al., 2023). Conversely, athletes who have low levels of self-efficacy tend to be more susceptible to psychological stress, which can interfere with the consistency and quality of their game (Komarudin, 2019). Therefore, it is important to understand how self-efficacy can affect psychological stress in handball athletes (Reigal et al., 2020).

Psychological stress is a physiological and emotional reaction to external pressures that exceed one's ability to cope (Lumban Gaol, 2016). Athletes in sports, especially in handball, often face a lot of pressure. This includes intense competition, the expectation to win, and a busy training schedule (Nur'aini, 2025). If this stress is not managed well, impacts such as physical and mental fatigue, decreased desire, and even risk of injury can occur (Nurani et al., 2019). Finding out what influences athletes' psychological stress levels can help them cope with stress (Agustina et al., 2022).

Previous studies have shown that Athletes' psychological stress levels and self-efficacy are negatively correlated (Hong, 2019). Athletes who believe in their abilities tend to have lower anxiety and are better able to cope with pressure in competition (Novian, 2024). On the other hand, athletes who do not believe in their abilities tend to be more susceptible to stress, which can impact their performance on the field (Lochbaum et al., 2022). In addition, handball athletes' stress and self-efficacy are influenced by additional variables, such as competition experience, motivation to achieve, and social support from coaches and teammates (Weinberg, R. S., & Gould, 2015).

It is essential to develop mental training programs by understanding the relationship between psychological stress and self-efficacy in handball athletes (Saputra, 2022). Athletes are expected to be better able to manage stress and improve their psychological well-being by increasing self-efficacy through methods such as visualization, mental training, and emotional support from the surrounding environment. Further research is needed to identify factors that can increase self-efficacy and the effectiveness of intervention strategies aimed at reducing stress in handball athletes (Zhang et al., 2024).

Based on previous studies revealed that psychological skills training can improve self-efficacy and performance in handball athletes. A ten-week psychological skills training program with positive feedback was shown to improve self-efficacy and shot accuracy in young handball players. These results suggest that structured psychological training can have a positive impact on athletes' confidence and performance on the court (Metan & Küçük, 2022).

In addition, another research study revealed that self-efficacy and mental toughness were intervening factors in the sport performance of Brazilian futsal athletes. This study highlights the importance of developing mental toughness and self-confidence to achieve optimal performance in competitive sports. Thus, an in-depth understanding of the relationship between self-efficacy and psychological stress, as well as the implementation of effective mental training programs, can help handball athletes manage competition pressure and improve their overall performance.

## METHODS

The subjects in this study were 20 handball athletes aged 18-21 years, who were active athletes in the West Java Provincial Sports Week (Porprov).

This study uses a quantitative approach with a descriptive correlational research design. The quantitative approach was chosen because this study focuses on measuring the relationship between self-efficacy variables and psychological stress in handball athletes objectively using numerical data (John W. Creswell, 2018). Correlational design is used to analyze the relationship between two variables without conducting experimental manipulation, so that it can be known to what extent self-efficacy plays a role in influencing the level of psychological stress in athletes (Babbie, 2020).

The research instrument used was a Self Efficacy and Psychological Stress questionnaire compiled by the author using the CSALSS - Psychological Stress and ASES Self-Efficacy instruments (Harris et al., 2023). This Self Efficacy questionnaire aims to measure a person's belief in their ability to deal with various stressful situations effectively (Oula et al., 2024). This instrument usually uses a Likert scale with a range of answers from "strongly disagree" to "strongly agree" and has been adjusted to the cultural and language context of the study (Abdulai M. Kaba, 2024). The questionnaire was filled out using a Likert scale according to references from (Hap-

sari, 2024). The questionnaire was given once to the research subjects via Google Form in March 2025. This filling process was carried out independently by the subjects with clear instructions to ensure a good understanding of each question. The research subjects answered the questions.

## RESULTS AND DISCUSSION

The research results were obtained through statistical data calculations using SPSS (Statistical). After that, the results of the quantitative data analysis were presented in the form of **Table** and figures.

**Table 1.** Statistical Description

Variable	N	Min.	Max.	Sum	Mean	Std. Dev.
Self-Efficacy	20	41	80	1293	64.65	20.879
Psychological Stress	20	32	100	1267	63.35	15.281

**Table 1** shows the statistical description of the 20 research subjects involved. Based on Table 1, it can be seen that the Self Efficacy score obtained a minimum score of 41, a maximum of 80, with a total of 1293, an average of 64.65, and a standard deviation of 10,879. For the Psychological Stress, the variable obtained a minimum score of 32, and a maximum of 100, with a total of 1267, an average of 63.35, and a standard deviation of 15,281. Furthermore, the author presents the results of the normality test, which can be seen in **Table 2**.

**Table 2.** Normality Test

Variable	Statistic	df	Sig.
Self-Efficacy	.956	20	.469
Psychological Stress	.966	20	.671

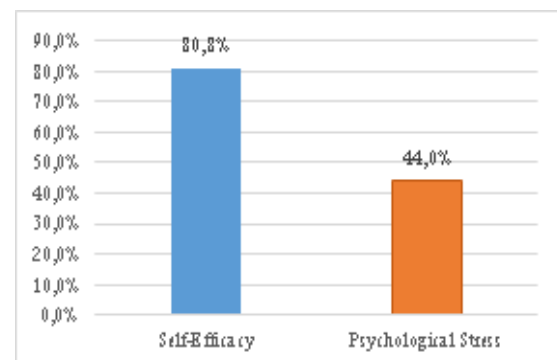
Based on **Table 2** shows the results of the data normality test using the Shipiro-Wilk technique, it can be seen that the Self Efficacy score obtained a statistical score of .956, df of 20, and a significance value of .469. While the Psychological Stress score obtained a statistical score of .966, df of 20, a significance value of .671. Data is normally distributed if it is more than .05, then the data is declared normally distributed. Furthermore, the author presents the results of the correlation test, which can be seen in **Table 3**.

**Table 3** shows the results of the correlation test to compare the values of self-efficacy and psychological stress. In this table, there is

information about person correlation, N, and significance (Sig. 2-tailed). The Pearson correlation value obtained was .484 indicating a significant difference between the two measurements, N of 20, a significance value (sig. 2-tailed) of .030, which is smaller than .05 so the author concludes that there is a significant difference between the results of Self-Efficacy and psychological stress.

**Table 3.** Correlation Test between Self-Efficacy and Psychological Stress

Variable	Pearson Correlation	N	Sig. (2-tailed)
Self-Efficacy-Psychological Stress	.484	20	.030



**Figure 1.** Percentage of Self-Efficacy and Psychological Stress

**Figure 1.** This shows the overall percentage of results that the Self-Efficacy Stress result is 44.0%, while the percentage of psychological stress is 44.0%, this indicates a significant percentage difference between self-efficacy and psychological stress of handball athletes.

The results of this study indicate a significant negative relationship between self-efficacy and psychological stress in handball athletes, which means that the higher the level of self-efficacy of an athlete, the lower the level of psychological stress they experience (Subarjah & Williyanto, 2025). This finding is in line with previous theories and studies which state that self-confidence in the ability to complete tasks (self-efficacy) plays an important role in managing psychological pressure and stress in the context of sports (Kim & Cruz, 2021). Therefore, developing self-efficacy should be the main focus of mental training programs for athletes (Setiawan et al., 2020). This approach can help face competitive challenges with more confidence and resilience.

High self-efficacy allows athletes to be

more confident in facing challenges during training and matches so that they can use effective coping strategies to reduce the impact of stress (Novian, 2022). Factors such as competitive experience, social support from coaches and teammates, and achievement motivation also contribute to increasing athletes' self-efficacy, which in turn helps them manage competitive pressure better (Fajrika & Aulia, 2020). Therefore, coaches need to create a supportive environment and provide positive feedback consistently (Sandi et al., 2021). This can strengthen athletes' self-confidence and maximize their potential in competition.

In contrast, athletes with low self-efficacy tend to be more susceptible to excessive psychological stress, which can interfere with the consistency and quality of their performance on the field. This condition can cause mental and physical fatigue, even increasing the risk of injury due to a lack of good stress management (Rodríguez, Velasquí, 2019). Excessive stress can also reduce an athlete's ability to make the right decisions in high-pressure situations (Nurmalasari et al., 2024). In addition, low self-efficacy can affect an athlete's motivation, making it more difficult for them to recover from failures or mistakes that occur during the match (Dai & Cahyaningrum, 2023).

The percentage of self-efficacy of 80.8% compared to psychological stress of 44.0% shows that most athletes have quite high confidence in their abilities, but there is still a proportion of psychological stress that needs attention (Hong, 2019). This indicates the need for a mental training program that focuses on increasing self-efficacy through techniques such as visualization, goal-setting, and consistent social support from the athlete's environment (Aulia et al., 2024). In addition, periodic evaluation of the athlete's psychological condition is very important to identify changes and adjust the interventions given (Setiawan et al., 2020). With the right approach, it is hoped that a balance between self-efficacy and stress management can be achieved, so that athlete performance can increase optimally (Sholicha & W, 2020).

Thus, increasing self-efficacy is not only beneficial for reducing psychological stress levels but can also improve the mental well-being and sports performance of handball athletes (Komarudin et al., 2024). This study strengthens the importance of psychological interventions in sports training to support athletes in dealing with competitive pressure more effectively (Puriana et al., 2024). Therefore, coaches and sports psycholo-

gists need to work together in designing comprehensive and sustainable programs (Jawara & Romas, 2019). The implementation of this strategy is expected to have a long-term positive impact on athlete development (Fajar et al., 2025).

## CONCLUSION

The conclusion of this study shows that there is a significant negative relationship between self-efficacy and psychological stress in handball athletes, which means that the higher the level of self-efficacy of an athlete, the lower the level of psychological stress they experience. Self-efficacy plays an important role in helping athletes manage the pressure and stress that arise during training and matches so that it can improve their mental health and sports performance. Factors such as competitive experience, social support from coaches and teammates, and achievement motivation also support the increase in athlete self-efficacy. Therefore, the development of a mental training program that focuses on increasing self-efficacy through techniques such as visualization, goal setting, and social support is highly recommended to reduce psychological stress and support optimal handball athlete performance. This study also emphasizes the importance of continuous psychological evaluation and intervention to maintain the psychological balance of athletes in facing competition pressure.

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