

The Relationship Between Emotional Regulation and Optimism in Student Athletes

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ABSTRACT

Background: Emotion regulation and optimism are two psychological factors that play an important role in supporting athletes performance. However, the relationship between these two variables is still rarely studied, especially in the population of student athletes at universities. **Objective:** This study aims to determine the extent of the relationship between emotional regulation and optimism among student athletes at University X. **Method:** The research uses a correlational quantitative approach with 120 student athletes as subjects, obtained through accidental sampling. The instruments used include the IERQ4S to measure emotion regulation and an optimism scale developed based on hope theory. Data collection was conducted online through Google Form. Data analysis was performed using Pearson correlation test after ensuring the fulfillment of normality and linearity assumptions. **Results:** The Pearson correlation test results showed a very significant positive relationship between emotion regulation and optimism ($r = 0.899$; $p < 0.001$). **Conclusion:** These findings indicate that student-athletes with good emotional regulation skills tend to have a high level of optimism, which enables them to maintain motivation and formulate positive strategies in achieving performance goals. The practical implication is the need for emotion regulation training as part of the psychological development program for student-athletes.

Keywords: Emotion regulation, optimism, student athlete

ABSTRAK

Latar Belakang: Regulasi emosi dan optimisme merupakan dua faktor psikologis yang berperan penting dalam menunjang performa atlet. Namun, hubungan antara kedua variabel ini masih jarang diteliti, terutama pada populasi atlet mahasiswa di perguruan tinggi. **Tujuan:** Penelitian ini bertujuan untuk mengetahui sejauh mana hubungan antara regulasi emosi dan optimisme pada atlet mahasiswa di Universitas X. **Metode:** Penelitian ini menggunakan pendekatan kuantitatif korelasional dengan subjek penelitian sebanyak 120 atlet mahasiswa, diperoleh melalui accidental sampling. Instrumen yang digunakan meliputi IERQ4S untuk mengukur regulasi emosi dan skala optimisme yang dikembangkan berdasarkan teori harapan. Pengumpulan data dilakukan secara daring melalui Google Form. Analisis data dilakukan dengan menggunakan uji korelasi Pearson setelah memastikan terpenuhinya asumsi normalitas dan linearitas. **Hasil:** Hasil uji korelasi Pearson menunjukkan adanya hubungan positif yang sangat signifikan antara regulasi emosi dan optimisme ($r = 0,899$; $p < 0,001$). **Kesimpulan:** Temuan ini menunjukkan bahwa atlet mahasiswa dengan keterampilan regulasi emosi yang baik cenderung memiliki tingkat optimisme yang tinggi, yang memungkinkan mereka untuk mempertahankan motivasi dan merumuskan strategi positif dalam mencapai tujuan performa. Implikasi praktisnya adalah perlunya pelatihan pengaturan emosi sebagai bagian dari program pengembangan psikologis bagi atlet pelajar.

Kata Kunci: Atlet pelajar, optimis, regulasi emosi,

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Introduction

The development in the world of sports is currently experiencing an increase, which is not surprising as sports are now favored by various age groups and social strata. In 2024, the Sports Development Index (IPO) in Indonesia recorded an increase from 0.327 to 0.334, indicating that the efforts for sustainable and more planned sports development have yielded positive results (Deputy 3 for Sports Cultivation, 2024).

Student-athletes are individuals who hold the status of both an athlete and a student, thus facing the demands of participating in teaching and learning activities as well as striving for achievements in championship competitions (Wisudawati et al., 2017). Therefore, student-athletes often face pressures such as championships from their role as athletes, as well as academic achievements from their role as students. In that situation, psychological characteristics are factors that contribute to the performance and psychological well-being of athletes. Two of them include the ability to manage emotions well and maintain optimism (Gould et al., 2002). However, the reality found in the field shows that many coaches tend to focus more on increasing the portion of physical training rather than on training or monitoring related to the psychological conditions of their athletes (Maharani & Nurcahyo, 2024).

Emotion regulation refers to a process undertaken by individuals, either consciously or unconsciously, to feel, manage, and express the emotions within themselves (Gross et al., 1998). According to Angreini et al. (2021), emotion regulation can be used as a coping strategy to deal with the pressures that arise within individuals. When related to athletes, good emotion regulation can help athletes cope with anxiety when facing a competition. This is also supported by several studies, such as the one conducted by Safitri and Jannah (2020), which showed that good emotion regulation can reduce anxiety levels in athletes. Not only that, the results of the research conducted by Oktavia and Jannah (2023) also show that there is a positive relationship between emotion regulation and self-confidence in student athletes. This can happen because student-athletes with good emotion regulation can demonstrate effective emotion management, thereby building self-confidence in their own abilities to achieve targets, whether as athletes (sports) or as students (academics). From both studies, it can be concluded that the ability to regulate emotions is very much needed by student-athletes, regardless of their role as an athlete or as a student.

In addition to the ability to manage emotions, an athlete also needs to cultivate optimism within themselves. According to Seligman (2006), optimism is an individual's perspective on negative events as something temporary and caused by factors outside of the individual. According to him, an optimistic person believes that failure is not an end, but rather a temporary obstacle and an opportunity to learn and grow. According to Scheier and Carver (1985), optimism refers to an individual's tendency to believe that positive things will happen more often in the future compared to negative ones.

In a student athlete, optimism has a positive impact on achieving achievements. This is supported by similar research conducted by Marpaung and Sahrani (2025), where the results of the study show that there is a close relationship between optimism and achievement in individuals with disabilities who have accomplishments. According to the individuals with disabilities, optimism is a factor that can encourage them to be brave in facing various obstacles they often encounter, such as physical and social challenges. For them, optimism not only helps in maintaining their emotional balance but also provides motivation to keep persevering and achieving their goals. Furthermore, based on research conducted by Evalista and Yunus (2024), there is a negative relationship between optimism and burnout. Athletes who exhibit high levels of optimism tend to experience lower levels of burnout.

From here, the researchers feel that the relationship between emotional regulation and optimism is an important topic to study, considering that both variables play a significant role in various aspects of life, from academics to sports. Supported by various studies mentioned earlier, it can be understood that emotion regulation and optimism themselves have a relationship with the achievements and performance displayed by individuals. An athlete with good emotion regulation is able to show an optimistic attitude during the training process. In contrast, athletes with poor regulation tend to think negatively, believing that there is no way out or solution to the obstacles they are facing (Manah & Jannah, 2020).

The previous research conducted by Fitri and Indriana (2018) examined whether there is a relationship between optimism and emotion regulation among eleventh-grade students from SMK Cut Nya' Dien located in the city of Semarang. The research was conducted using a sample of 110 eleventh-grade students from SMK Cut Nya' Dien, who came from various majors. The results of the study indicate that there is a significant positive correlation between optimism and emotional regulation among the 11th-grade students of SMK Cut Nya' Dien Semarang. In addition, the study found that the optimism variable has a

role of 26.2% on the emotion regulation variable. Meanwhile, the remaining 73.8% indicates that emotion regulation is still influenced by other factors. However, research studies examining the relationship between emotion regulation and optimism are still relatively rare. Therefore, based on the benefits that can be obtained and the lack of research on this theme, the researcher is interested in studying the relationship between emotion regulation and optimism, using student-athletes as subjects to differentiate from previous studies.

Material and Method

Participants

The subjects used in this study are student-athletes from the Student Activity Unit engaged in sports at University X. The participants in this study consist of male and female student-athletes who have participated in at least one competition, are active athletes, and are members of sports clubs outside the University Student Activity Unit. The sample used in this study consists of 120 student athletes selected using the accidental sampling technique, where the researcher directly went to the training locations of the athletes to collect research data. The athletes have an age range of 18-21 years and come from 19 student sports activity units.

Procedure

This study employed a correlational quantitative design, enabling researchers to observe the relation between emotion regulation (independent variable) and optimism (dependent variable). Data were collected through Google Forms, chosen for its flexibility and accessibility for participants. The survey included sections to gather demographic information and responses regarding participants' emotion regulation and optimism.

Data Collection

Data were collected through a questionnaire structured in the form of a Google Form to be filled out by respondents. The instrument used in this study is the IRQ4S (Indonesian Emotional Regulation Questionnaire for Sport) developed by Jannah et al. (2022) to measure emotional regulation with a total of 10 items, as well as an optimism scale developed based on aspects of Snyder's hope theory (2002), namely goal, pathways thinking, and agency thinking, which consists of a total of 22 items. This study uses a 1-7 Likert scale.

Data Analysis

The data that has been obtained will first be tested using assumption tests to determine whether the data is normally and linearly distributed or not. From the results of these assumption tests, the inferential tests that will be used can then be determined. The statistical tests conducted in this research are all assisted using the JASP for Windows software.

This research was conducted after obtaining a research permit from the faculty addressed to all student activity units in the field of sports at University X. Additionally, the researcher guarantees the confidentiality of all personal data of the participants.

Result

Based on the results of the data analysis, it was found that respondents showed an average emotional regulation score of 40.02 (SD=14.65), which can be categorized as moderate emotional regulation, with a minimum score of 12 and a maximum score of 68. Similarly, with optimism, the respondents showed an average score of 111.15 (SD=18.62) which is categorized as moderate, with a minimum score of 66 and a maximum score of 149. The categorization results were obtained using the empirical categorization formula presented by Azwar (2022). These findings provide an initial overview of the characteristics of the sample being studied, which is important for further understanding the correlation between the two variables. Descriptive data is presented in Table 1.

Table 1 Descriptive Statistics

	ER	Optimism
Mean	40,02	111,15
Std. deviation	14,65	18,62
Min. Score	12	66
Max. Score	68	149
Skewness	-0.045	-0,242
Kurtosis	-0.874	-0.574

Based on the assumption test, it was found that the data was normally distributed, as indicated by the skewness value being within the range $(-2 < x \leq 2)$ and the kurtosis value being within $(-7 < x \leq 7)$. This was also supported by the Q-Q plots, where the distribution of the points mostly followed a straight line. Additionally, the residual-vs-predicted plot, with points scattered randomly without forming any specific pattern, indicated that the data was linear (Hair et al., 2010).

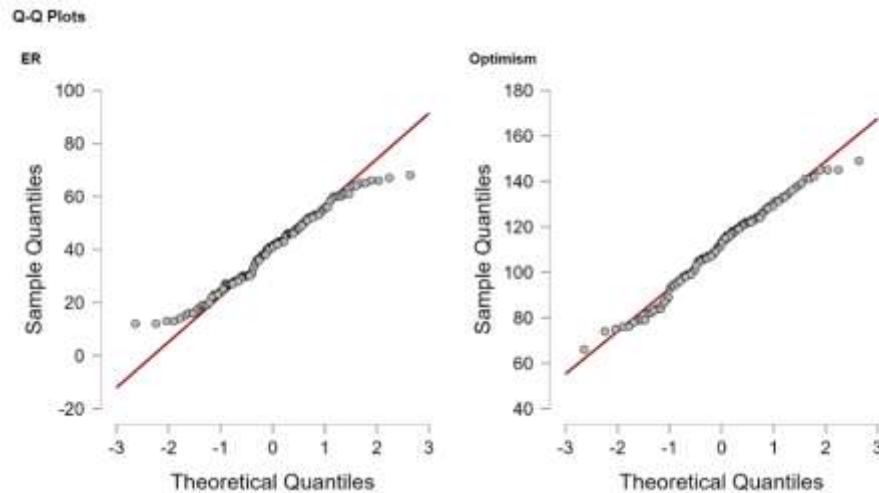


Figure 1. Q-Q Plots Emotional Regulation and Optimism

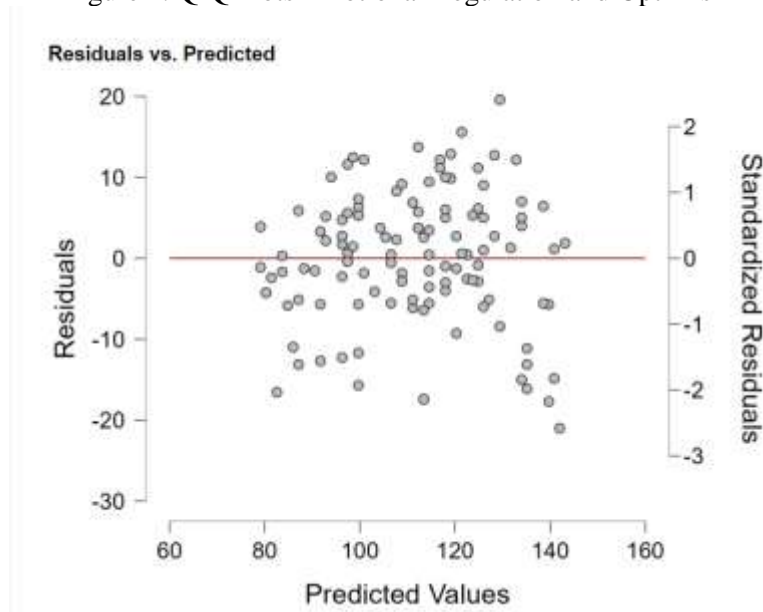


Figure 2. Residuals vs Predicted Plots

Based on the results of the assumption test that had been conducted, it was found that the data were parametric, so the Pearson product-moment test could be used for hypothesis testing. The results of the hypothesis test showed a Pearson's r value of 0.899 with a p -value < 0.001 . These findings indicated that there was a very high level of correlation between the variables of emotion regulation and optimism among student-athletes (Sugiyono, 2025). The Pearson product-moment test results were presented in Table 2.

Table 2. Pearson Product-Moment Test Result

		Emotional Regulation	Optimism
Emotional Regulation	Pearson's r	-	-
	p -value	-	-
Optimism	Pearson's r	0,899	-
	p -value	$<0,001$	-

Additionally, the researchers also found supplementary results that showed the average values of the emotional regulation level categories differentiated between males and females based on the category guidelines according to Azwar (2022). The results indicated that the average score of emotional regulation among male student-athletes was 38.9, and among female athletes was 41.8, both of which fell into the moderate category. The average value of the emotion regulation variable was obtained from descriptive data divided by gender and was presented in Table 3.

Table 3. Descriptive Data Divided by Gender

	Male	Female
Valid	74	46
Mean	38.892	41.826
Std. Deviation	15.011	14.027
Min. Score	12	13
Max. Score	67	68

The results of the mean difference, where the scores of female student-athletes were slightly higher, were in line with the findings of the study conducted by Hasmarlin & Hirmaningsih (2019). Meanwhile, the results reported by García-Fernández et al. (2025) indicated that the mean score of the emotion regulation variable in male subjects was slightly higher compared to that of females. Additionally, the study also found that, in emotion regulation strategies, males had scored higher in suppression, self-blame, and blaming others, whereas females had excelled in the maladaptive rumination strategy. Additionally, research conducted by Goubet & Chrysikou (2019) showed that, in the use of emotion regulation strategies, women tended to be more frequent and more flexible compared to men.

Discussion

Based on the research findings, there is a relationship between emotion regulation and optimism among student athlete subjects of the Student Activity Unit at University X. This relationship can be explained by the fact that emotion regulation plays a crucial role in helping individuals manage emotional experiences that arise when facing pressure or competitive situations. These results are also supported by previous findings which indicate that for athletes, good emotion regulation serves as a coping strategy when facing competitions (Angreini et al., 2021; Manah & Jannah, 2020; Oktavia & Jannah, 2023). Student athletes with good emotional regulation skills tend to manage stress, anxiety, and other negative emotions adaptively, thereby not disrupting their focus and performance in training or competition.

When negative emotions are well-controlled, individuals become more capable of maintaining a positive outlook on the situations they face, including dealing with failures or obstacles that are common in the world of sports. This is in line with Snyder's hope theory (2002), which states that individuals must have the capacity to generate strategies (pathways thinking) and maintain motivation or drive (agency thinking) to achieve goals, making it reasonable for individuals to rely on their ability to maintain or strengthen positive emotions and effectively manage negative emotions.

Athletes with good emotion regulation tend to view the pressure of a match as a challenge they must overcome. This is still in line with the opinion of Gross et al. (2014), who state that there are two strategies in regulating emotions: interpreting the situation positively (*reappraisal*) and suppressing the emotional expressions that arise in individuals (*suppression*). Therefore, with good emotion regulation abilities, individuals tend to display an optimistic attitude when facing a match.

For athletes involved in competitive sports, achieving performance is the main target that logically attaches to their activities. This reflects their orientation towards results, where success is measured through objective achievements such as victories or rankings in a competition. This is also supported by the opinion of Kliwon et al. (2022), who state that an athlete's performance is measured by how often they compete and how many matches they win. Additionally, according to him, sports achievements are a form of actualization of the training results displayed by athletes based on their abilities.

According to Rozali and Sakti (2015), in a competition, an athlete is required to maximize their potential in the form of performance in order to achieve success in the form of victory. The success of athletes in achieving accomplishments is closely related to emotional regulation and optimism. This is supported by the findings of Sehrawat et al. (2024), where optimism in athletes is positively correlated with sports performance. Meanwhile, in terms of emotional regulation, athletes with good emotional regulation, who are able to cope with various disturbances such as pressure and anxiety, certainly have a better chance of achieving accomplishments compared to athletes who cannot manage them (Kliwon et al., 2022). This shows how important psychological aspects, especially emotion regulation and optimism, are for athletes in their efforts to achieve success.

This research still has limitations in that the number of subjects used is considered insufficient when compared to the target population. In addition, the overall subjects used are still dominated by the male gender group. Furthermore, this research focuses only on the correlation between the two variables without including environmental factors such as the involvement of coaches.

Conclusion

This study aims to determine whether there is a relationship between emotional regulation and optimism in student athletes. The results of this study indicate that student-athletes with good emotion regulation skills tend to have a more optimistic outlook on their future achievements. The ability to perform reappraisal (interpreting situations positively) and suppression (controlling emotional expressions) contributes to building realistic hope and motivation in facing competitive challenges. The implications of these findings emphasize the importance of psychological training focused on strengthening emotional regulation skills as part of athlete development programs. Providing appropriate interventions has the potential to enhance athletes' mental resilience and support the achievement of performance. Practically, these results can be utilized by coaches to develop training strategies that also encompass psychological aspects. In addition, athletes are also expected to recognize the importance of managing emotions in order to maintain an optimistic attitude and consistent performance.

Author contribution statement

Difa Aditya Nugraha creating the research design, gathering information from student athletes, and using JASP software to perform statistical analysis. Miftakhul Jannah directed the creation of manuscripts, including article preparation and formatting, helped with statistical analysis, and took part in data collection. Emmanuel E. Uye providing input during the study design phase and conducting critical reviews during the drafting and editing of the manuscript to ensure scientific accuracy and clarity.

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