

Self-Confidence and Achievement Motivation on Anxiety Among Swimming Athletes

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ABSTRACT

This study aimed to analyze the relationship between self-confidence and achievement motivation toward anxiety among swimming athletes at Sulani Swimming Club Pekalongan. The study employed a quantitative approach with a correlational research design. The sample consisted of 25 athletes selected using purposive sampling techniques. Self-confidence was measured using a self-confidence questionnaire, achievement motivation was assessed using the Sport Motivation Scale-II, and anxiety was measured using the Competitive State Anxiety Inventory-2 Revised (CSAI-2R). Data analysis included descriptive statistics, the Shapiro-Wilk normality test, Pearson correlation analysis, and linear regression analysis. The results indicated that all variables were normally distributed, with significance values greater than 0.05. Pearson correlation analysis revealed that the relationship between self-confidence and achievement motivation was $r = 0.305$ ($p = 0.138$), the relationship between self-confidence and anxiety was $r = 0.024$ ($p = 0.909$), and the relationship between achievement motivation and anxiety was $r = -0.036$ ($p = 0.865$). Furthermore, the linear regression analysis showed an F value of 0.029 with a significance level of 0.972 (> 0.05) and a coefficient of determination of 0.003, indicating that self-confidence and achievement motivation contributed only 0.3% to athletes' anxiety levels. Therefore, self-confidence and achievement motivation were not identified as the primary factors influencing anxiety among athletes at Sulani Swimming Club Pekalongan. These findings suggest that athlete development programs should focus on other more dominant factors contributing to competitive anxiety.

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INTRODUCTION

Achievement sports not only require physical and technical abilities but also demand athletes' psychological readiness in facing competition (Ilham, 2021). One sport that requires optimal mental and physical preparedness is swimming. Swimming is a water sport performed using specific techniques, including freestyle, breaststroke, backstroke, and butterfly stroke, and it provides benefits for both health and athletic achievement (Narlan et al., 2020). In swimming, athletes' psychological condition is

considered an important factor influencing performance during competition. One of the key psychological aspects is self-confidence. Self-confidence refers to an individual's belief in their ability to face challenges and achieve goals (Ulfah et al., 2021). Athletes with high self-confidence tend to be more optimistic, better able to control pressure, and capable of demonstrating superior performance during competitions (Rais, 2022). In contrast, low self-confidence may lead to self-doubt, fear of failure, and excessive anxiety, which can negatively affect athletic performance (Nisa & Jannah, 2021). Self-confidence also plays a significant role in supporting athletes' self-development and mental resilience (Naliza et al., 2024).

In addition to self-confidence, achievement motivation is another important factor contributing to athletic success. Achievement motivation refers to an individual's internal drive to attain success and achieve the best possible outcomes (Jebaru et al., 2025). Athletes with high achievement motivation are generally more persistent, disciplined, and goal-oriented (Putri et al., 2024). Achievement motivation is also associated with an athlete's ability to cope with pressure and enhance performance quality (Haru, 2023). On the other hand, athletes frequently experience anxiety when facing competitions. Competitive anxiety is an emotional response characterized by fear, worry, and tension in competitive situations (Wulandari et al., 2021). Anxiety may appear in both cognitive and somatic forms, such as negative thoughts, rapid heartbeat, and muscle tension, all of which can disrupt concentration and athletic performance (Pratama et al., 2024). High levels of anxiety often prevent athletes from performing at their best during competition (Syuhada et al., 2025).

Previous studies have shown that self-confidence and achievement motivation are associated with athletes' anxiety. High self-confidence has been proven to reduce competitive anxiety and improve athletic performance (Widodo et al., 2022). Furthermore, athletes with strong achievement motivation tend to be more capable of managing pressure and fear during competition (Zhu & Festijo, 2025). Other studies have also indicated that low self-confidence is associated with increased anxiety and decreased concentration among athletes (Trpkovici et al., 2023). Swimming performance is strongly influenced by both physical and psychological preparedness, as athletes must sustain optimal levels of strength, speed, flexibility, concentration, and emotional regulation during competitive performance (Rahayu & Widjanarko, 2025). Based on these findings, self-confidence and achievement motivation are assumed to be related to anxiety levels among swimming athletes. Therefore, this study was conducted to analyze the relationship between self-confidence and achievement motivation toward anxiety among athletes at Sulani Swimming Club Pekalongan.

METHODS

This study employed a quantitative approach with a correlational method to examine the relationship between self-confidence and achievement motivation toward anxiety among swimming athletes. The correlational method was used to identify the

relationships among variables without providing any specific treatment to the research subjects (Iting et al., 2024). The study was conducted at Sulani Swimming Club, Pekalongan Regency, Central Java, from May to June 2026. The population consisted of 40 swimming athletes from Sulani Swimming Club. The sample was selected using a purposive sampling technique with the following criteria: (1) athletes aged 7–12 years, (2) actively participating in training sessions, and (3) capable of performing at least one swimming stroke. Based on these criteria, 25 athletes were selected as the research sample.

The study variables consisted of self-confidence (X1) and achievement motivation (X2) as independent variables, and anxiety (Y) as the dependent variable. Data were collected using Likert-scale questionnaires. The anxiety instrument was adapted from the Indonesian version of the Competitive State Anxiety Inventory-2 Revised (CSAI-2R) developed by (Putra & Guntoro, 2022) with a reliability coefficient of 0.74. The achievement motivation instrument was adapted from the Sport Motivation Scale-II developed by (Islami & Tomoliyus, 2020) with a reliability coefficient of 0.946. Meanwhile, the self-confidence instrument was adapted from (Sungkowo, 2019) with a reliability coefficient of 0.921. Instrument validity was tested using the Pearson Product-Moment correlation, while reliability testing employed Cronbach's Alpha to determine the consistency of the research instruments (Subhaktiyasa, 2024).

Data analysis was conducted using descriptive statistics, the Shapiro-Wilk normality test, linearity testing, and Pearson correlation analysis. Descriptive statistics were used to describe the research data, while Pearson correlation analysis was employed to determine the relationships among the study variables. Decision-making was based on the significance value, where a significance level of $p < 0.05$ indicated a significant relationship, whereas $p > 0.05$ indicated no significant relationship among variables (Ghozali, 2018).

RESULTS AND DISCUSSION

Result

Table 1.
Descriptive Statistics

	Self-Confidence	Achievement Motivation	Anxiety
Mode	97.90	52.58	35.16
Median	93.00	53.00	35.00
Mean (arithmetic)	92.24	54.00	34.12
Std. Deviation	10.49	3.317	3.516
Shapiro-Wilk	0.964	0.937	0.961
P-value of Shapiro-Wilk	.497	.127	.438
Minimum	66.00	48.00	27.00
Maximum	111.0	61.00	41.00

Based on the descriptive statistical analysis, the self-confidence variable obtained a mean score of 92.24 with a standard deviation of 10.49 and a score range of 66–111, indicating variations in the athletes' levels of self-confidence. The achievement

motivation variable showed a mean score of 54.00 with a standard deviation of 3.317 and a score range of 48–61, suggesting that the athletes generally demonstrated relatively good achievement motivation with a fairly homogeneous data distribution. Meanwhile, the anxiety variable obtained a mean score of 34.12 with a standard deviation of 3.516 and a score range of 27–41, indicating that the athletes' anxiety levels were in the moderate category with relatively small variation.

In general, the mean, median, and mode values across all variables were relatively similar, suggesting that the data distribution tended to be normal and free from extreme deviations. Furthermore, the results of the Shapiro–Wilk normality test indicated that all variables had significance values greater than 0.05, namely self-confidence (0.497), achievement motivation (0.127), and anxiety (0.438). Therefore, the research data were considered to be normally distributed and met the assumptions required for parametric statistical analysis, such as Pearson correlation analysis.

Table 2.
 Pearson Correlation

Variable		Self-Confidence	Achievement Motivation	Anxiety
Self-Confidence	Pearson's r	–		
	p-value	–		
Achievement Motivation	Pearson's r	0.305	–	
	p-value	.138	–	
Anxiety	Pearson's r	0.024	-0.036	–
	p-value	.909	.865	–

Based on the Pearson correlation analysis, the relationship between self-confidence and achievement motivation obtained a correlation coefficient of $r = 0.305$ with a significance value of $p = 0.138 (> 0.05)$, indicating a positive but non-significant relationship. The relationship between self-confidence and anxiety showed a correlation coefficient of $r = 0.024$ with $p = 0.909 (> 0.05)$, while the relationship between achievement motivation and anxiety obtained a correlation coefficient of $r = -0.036$ with $p = 0.865 (> 0.05)$. These findings indicate that the relationships among the variables were very weak and statistically non-significant. Therefore, self-confidence and achievement motivation were not found to have a meaningful relationship with athletes' anxiety.

Table 3.
 Simple Linear Regression

Model	R	R ²	Adjusted R ²	RMSE	R ² Change	df1	df2	p
M ₀	0.000	0.000	0.000	3.516	0.000	0	24	
M ₁	0.051	0.003	-0.088	3.667	0.003	2	22	.972

Based on the results of the simple linear regression and linearity tests, the correlation coefficient (R) was found to be 0.051, with a coefficient of determination (R²) of 0.003. This indicates that self-confidence and achievement motivation contributed only 0.3% to the anxiety variable, while the remaining variance was influenced by other factors outside the scope of this study. Furthermore, the Adjusted R² value of -0.088 suggests that the regression model demonstrated a very weak relationship in explaining the anxiety variable.

Table 4.
ANOVA Simple Linear Regression

Model		Sum of Squares	df	Mean Square	F	p
M ₁	Regression	0.779	2	0.389	0.029	.972
	Residual	295.9	22	13.45		
	Total	296.6	24			

The results of the ANOVA test in the linear regression analysis showed an F value of 0.029 with a significance level of 0.972 (> 0.05). Therefore, the regression model was not statistically significant, indicating that there was no significant linear relationship between self-confidence and achievement motivation toward anxiety among the athletes.

Table 5.
Coefficients Simple Linear Regression

Model		Unstandardized	Standard Error	Standardized	t	p
M ₀	(Intercept)	34.12	0.703		48.53	< .001
M ₁	(Intercept)	35.65	12.57		2.835	.010
	Self-Confidence	0.013	0.075	0.039	0.172	.865
	Achievement Motivation	-0.050	0.237	-0.048	-0.212	.834

Based on the regression coefficient analysis, the self-confidence variable obtained a regression coefficient value of 0.013 with a significance value of 0.865 (> 0.05). This finding indicates that self-confidence did not have a significant effect on anxiety. Meanwhile, the achievement motivation variable obtained a regression coefficient value of -0.050 with a significance value of 0.834 (> 0.05), indicating that achievement motivation also did not have a significant effect on athletes' anxiety.

Discussion

This study aimed to analyze the relationship between self-confidence and achievement motivation toward anxiety among swimming athletes at Sulani Swimming Club Pekalongan. The findings revealed that both variables did not have a significant relationship with athletes' anxiety. These results indicate that anxiety among young swimming athletes is not solely influenced by internal factors such as self-belief and achievement drive, but also by other factors, including competitive experience, environmental pressure, social support, and athletes' mental readiness.

The absence of a significant relationship between self-confidence and anxiety suggests that athletes' self-belief does not necessarily reduce competitive anxiety. This condition may be influenced by the athletes' developmental stage, as children generally have not yet achieved stable emotional control or the ability to cope effectively with competitive pressure. Young athletes tend to experience tension more easily due to fear of failure and situational demands during competition (Pratama et al., 2024). These findings differ from those reported by (Widodo et al., 2022) who stated that self-confidence plays an important role in reducing competitive anxiety. The discrepancy may be attributed to differences in athletes' competitive experience and psychological maturity.

The findings also demonstrated that achievement motivation was not significantly associated with anxiety. High motivation to achieve success does not necessarily correspond with an athlete's ability to manage competitive pressure. Among young athletes, participation in sports is often still driven more by enjoyment and training experiences rather than performance-oriented goals. This result contrasts with the findings of (Zhu & Festijo, 2025) who suggested that achievement motivation helps athletes cope with competition-related pressure. Differences in findings may be influenced by the characteristics of the sport, coaching systems, and the age categories of the athletes involved.

From a theoretical perspective, sports anxiety is considered a multidimensional response involving both cognitive and somatic aspects (Wulandari et al., 2021). In this study, athletes' anxiety was likely influenced more by situational factors, such as competition pressure and the performance demands of swimming, which require high levels of concentration. This finding is consistent with (Syuhada et al., 2025) who explained that athletes' anxiety is frequently affected by competitive pressure and environmental expectations. The limited contribution of self-confidence and achievement motivation suggests that other factors, such as mental toughness, stress coping strategies, emotional regulation, and social support, may have a stronger influence on athletes' anxiety.

The novelty of this study lies in its finding that, among swimming athletes aged 7-12 years, self-confidence and achievement motivation were not the primary factors influencing anxiety. Most previous studies have reported strong relationships between these variables and athletes' psychological conditions (Trpkovici et al., 2023). However, this study presents different findings within the context of young swimming athletes in a regional development club.

This study has several strengths, including the use of valid and reliable instruments and the simultaneous examination of multiple psychological variables. Nevertheless, the study also has limitations, particularly the relatively small sample size and the fact that participants were drawn from only one swimming club. Therefore, future studies are recommended to involve larger and more diverse samples and to include additional psychological variables in order to provide a more comprehensive understanding of the factors influencing anxiety among swimming athletes.

CONCLUSION

This study concludes that self-confidence and achievement motivation were not significantly associated with anxiety among swimming athletes at Sulani Swimming Club Pekalongan. The findings indicate that anxiety experienced by young swimming athletes is influenced not only by internal psychological factors, but also by other aspects such as competitive experience, environmental pressure, social support, and mental readiness.

The study further demonstrates that self-confidence and achievement motivation contributed only a very small proportion to athletes' anxiety levels, suggesting that both

variables cannot be considered the primary determinants of competitive anxiety in this context. These findings provide new insight that, among swimming athletes aged 7–12 years, anxiety tends to be more strongly influenced by situational and developmental factors rather than by self-confidence and achievement motivation alone.

Overall, this study contributes to the understanding of sports psychology, particularly in youth swimming athletes, by highlighting the importance of considering broader psychological and environmental factors in athlete development programs. Therefore, coaches and sports practitioners are encouraged to focus not only on enhancing self-confidence and achievement motivation, but also on strengthening emotional regulation, coping strategies, mental toughness, and social support to better manage athletes' competitive anxiety.

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