

The Effect of Achievement Motivation and Self Confidence on Freestyle Swimming Performance; A Correlation Study on Senior High School Students in Yogyakarta



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ABSTRACT: This study is to analyze: (1) The effect of achievement motivation on freestyle swimming achievement. (2) The effect of self-confidence on freestyle swimming achievement. (3) The influence between achievement motivation and self-confidence on freestyle swimming achievement. This type of research is quantitative with an ex post facto approach. The population in this study were high school students in Yogyakarta. Researchers did not examine the entire population, the sampling technique used random sampling totaling 150 students. The instrument used was a questionnaire. Data analysis techniques using ANOVA analysis. The results showed that (1) There is a significant influence between achievement motivation on freestyle swimming achievement, with a p-value of $0.000 < 0.05$. (2) There is a significant influence between self-confidence on freestyle swimming performance, with a p-value of $0.000 < 0.05$. (3) There is a significant influence between achievement motivation and self-confidence on freestyle swimming performance, with a p-value of $0.000 < 0.05$.

KEYWORDS: achievement motivation, self-confidence, freestyle swimming performance

INTRODUCTION

These days, swimming is in great demand by the public, from children to adults, whether they are in the village or in the city. The definition of swimming in general is one of the sports carried out in water that is fun, healthy for the body, and can be done by any group (Lloret et al., 2021); (Britton & Foley, 2021). There are four styles of swimming that are contested, namely: (1) freestyle; (2) backstroke; (3) breaststroke; (4) butterfly (Akmaludin et al., 2021). Of the four styles contested, freestyle is the fastest and easiest style. The swimmer's freestyle swimming generally uses the crawl style, because the crawl style is the fastest and most efficient style of all swimming styles. Therefore, someone who masters the crawl style will gain an advantage because of the many numbers that are contested. Freestyle swimming or called the crawl style is the basic swimming that a swimming student must be good at. While the 50 meter and 100 meter freestyle swimming race numbers are swimming race numbers that are mostly followed by swimming students (Supriyanto, 2019).

The rapid development in swimming has motivated many students to compete in achievement. The factors that can support the maximum achievement are physical condition, tactics, technique, and mentality. The mental element that needs the attention of the coach as the basic capital to reach maximum performance is achievement motivation and self-confidence. Achievement motivation is the main determinant of achieving success in sports. Motivation in the context of sport is one of the most studied cognitive variables (Monteiro et al., 2018: 2). Achievement motivation is very important for students to have, because students who have high achievement motivation will always try hard to reach maximum achievement. Students who have achievement motivation will always improve their abilities to be better than before (Gardner et al., 2017); (Brunstein & Heckhausen, 2018).

Besides achievement motivation, another psychological factor that coaches need attention to achieve maximum achievement is self-confidence. Self-confidence is an aspect of personality that must be possessed by students in any sport, because it is related to confidence (Sanader et al., 2021). Self-confidence as the belief that you can successfully perform the desired behavior. Self-confidence means thinking, active, aggressive in approaching problem solving and not separated from the environmental situation that supports it. Responsible for the decisions that have been taken, be able to look at facts and reality objectively based on abilities and skills (Sihotang et al., 2017).

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Researchers depart from the assumptions of previous research conducted (Supriyanto, 2019) that there is a correlation between self-confidence and swimming student achievement. (Yani, 2017) in his study proved that there is a significant relationship between achievement motivation and swimming achievement 50 meters freestyle. (Maulidin, 2018) proves that achievement motivation on swimming skills 50 meters of breaststroke. Based on this, the researcher is interested in conducting a study entitled "The Relationship between Achievement Motivation and Self-Confidence to Freestyle Swimming Achievement."

METHOD

This type of research is descriptive quantitative with a correlational approach. Correlation research is a study that aims to find whether or not there is a relationship and if the correlation is there, how close the relationship is, and whether or not the relationship is meaningful. The population in this study were high school students in Yogyakarta, totaling 458 students. Samples were taken based on random sampling techniques totaling 150 students. The 50 meter freestyle swimming achievement instrument was measured using a test. The freestyle swimming test was measured by swimming 50 meters of freestyle swimming in a 50 meter long swimming pool. Swimming time is measured using a stopwatch with units of seconds. Achievement motivation and self-confidence instruments using questionnaires. The lattice of research instruments in table 1.

Table 1. Grid of Instruments

Variable	Indicators	Item Numbers	
		Favorable	Unfavorable
Achievement Motivation	Task Selection Risk	1, 2, 5, 6	3, 4
	Feedback	7, 8, 10	9, 11, 12
	Responsibility	13, 14, 15	16, 17, 18
	Creative-Innovative	19, 20, 22	21, 23
	Time for Task Completion	24, 27	25, 26, 28
	Have a Realistic Goal	29, 30, 31, 33	32, 34
Self-Confidence	Physical skill and training	1, 2, 4, 9, 10	3, 6, 7, 8, 11, 12, 13
	Cognitive efficiency	14, 17, 18, 22	15, 16, 19, 21, 23, 24
	Resilient	25, 27	26, 28

The technique of data analysis used is a prerequisite test consisting of normality test, linearity test, while the hypothesis test uses partial and simultaneous tests. The analysis was carried out using SPSS 23.

RESULT

The results of the descriptive analysis are intended to determine the respondents' responses to the variables of achievement motivation, self-confidence, and freestyle swimming achievement based on the results of filling out the questionnaire. Descriptive statistics based on mean and standard deviation are in Table 2.

Table 2. Descriptive Statistics

No	Variable	Statistics
1	Achievement Motivation	78.98 ±7.09
2	Self-Confidence	60,15±5.63
3	Freestyle Swimming Achievement	50.12±7.10

The data normality test in this study used the Kolmogorov-Smirnov method. The results of the data normality test conducted on each group were analyzed with the SPSS version 20.0 for windows software program with a significance level of 5% or 0.05. The data summary is presented in Table 3.

Table 3. Normality Test Results

No	Variable	p	Sig	Description
1	Achievement Motivation	0.758	0.05	Normal
2	Self-Confidence	0.368	0.05	Normal
3	Freestyle Swimming Achievement	0.550	0.05	Normal

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Based on the statistical analysis of the normality test that has been carried out using the Kolmogorov-Smirnov test in Table 6, the achievement motivation and self-confidence variables on students' freestyle swimming achievement obtained normality test results with a p -value > 0.05 , which means that the data is normally distributed.

The linearity test of the relationship is tested using the F test. The relationship between the independent variable (X) and the dependent variable (Y) is declared linear if the p -value > 0.05 . The results of the linearity test can be seen in Table 4.

Table 4. Linearity Test Results

No	Functional correlation	p	Sig.	Description
1	Achievement motivation * Freestyle swimming achievement	0.504	0.05	Linier
2	Self-confidence * Freestyle swimming achievement	0.659	0.05	Linier

Based on the analysis results in Table 4 above, it can be seen that the correlation between achievement motivation and freestyle swimming performance p -value $0.504 > 0.05$ and the correlation between self-confidence and freestyle swimming performance p -value $0.659 > 0.05$ is considered linear.

The multicollinearity test uses the Variance Inflation Factor (VIF) value in the regression model, if $(VIF) > 10$, then the variable has a problem with other independent variables. The multicollinearity test results can be seen in Table 5.

Table 5. Multicollinearity Test Results

No	Variable	Tolerance	VIF
1	Achievement motivation	0.784	1.092
2	Self-confidence	0.784	1.092

Based on Table 5 above, the variance inflation factor (VIF) value is obtained, the achievement motivation variable (X_1) = 1.092 and self-confidence (X_2) = 1.092. Both independent variables have VIF values smaller than 10, so it can be concluded that there is no multicollinearity between the independent variables.

Then hypothesis analysis is analyzed, which are partial tests and simultaneous tests. The t test (partial) was conducted to determine the effect of each independent variable, namely achievement motivation and self-confidence on freestyle swimming achievement. The results of the t test (partial) analysis are presented in Table 6 as below.

Table 6. Partial Test Analysis Results (t test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.406	7.044		2.471	0.017
	Achievement motivation	0.458	0.086	0.494	5.315	0.000
	Self-confidence	0.566	0.107	0.493	5.303	0.000

a. Dependent Variable: Freestyle swimming achievement

Achievement motivation variable obtained p -value 0.000. Because the p -value of $0.000 < 0.05$, then H_0 is rejected, meaning that H_1 which says "There is a significant effect between achievement motivation on freestyle swimming achievement" is accepted. Positive value, meaning that if achievement motivation is getting better, then freestyle swimming achievement will also be better.

The self-confidence variable obtained a p -value of 0.000. Because the p -value of $0.000 < 0.05$, then H_0 is rejected, meaning that H_2 which reads "There is a significant effect between self-confidence on freestyle swimming achievement" is accepted. Positive value, meaning that if self-confidence is getting better, then freestyle swimming achievement will also be better.

The F test is used to test the hypothesis whether the independent variables together (simultaneously) affect the dependent variable. H_3 says "There is a significant effect between achievement motivation and self-confidence on freestyle swimming achievement". The results of the analysis in Table 7.

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Table 7. F Test Analysis Results (Simultaneous)

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1564.813	2	782.407	46.764	0.000 ^a
	Residual	736.166	296	16.731		
	Total	2300.979	298			
a. Predictors: (Constant). Self-confidence. Achievement motivation						
b. Dependent Variable: Freestyle swimming achievement						

Based on Table 7 above, the calculated F coefficient is 46,764 and the p-value is 0.000 < 0.05, then Ho is rejected, meaning. The alternative hypothesis which says "There is a significant effect between achievement motivation and self-confidence on freestyle swimming achievement", is accepted.

The Coefficient of Determination is essentially used to measure how far the ability of the regression model to explain the variation in the dependent variable. The analysis results in Table 8 are as below.

Table 8. Coefficient of Determination Analysis Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.568	0.323	0.320	4.0914
Predictors: (Constant), Self-confidence, Achievement motivation				

The coefficient of determination R Square or achievement motivation and self-confidence in explaining or predicting freestyle swimming achievement variables is 0.323 or 32.3%. This means that the variables of achievement motivation and self-confidence have an effect on freestyle swimming achievement of 32.3%, while the rest is affected by other factors of 67.7% outside this study.

DISCUSSION

Based on the results of the study, it shows that there is a significant effect between achievement motivation on freestyle swimming achievement. (Yani, 2017) in his study proves that there is a significant correlation between achievement motivation and 50 meter freestyle swimming achievement. (Maulidin, 2018) proves that achievement motivation affects swimming skills 50 meters breaststroke. Students who have high achievement motivation have more encouragement to be able to achieve maximum achievement. Achievement motivation is a person's drive to succeed or succeed in competition, with a measure of excellence in the form of other people's achievements and previous achievements. Achievement motivation is a push that happens in individuals to always improve certain qualities as well as possible or more than what is normally done (Nicholls, 2017). This finding means that if you want to increase swimming speed in sprint numbers, it can be made by paying attention to the level of athlete motivation both intrinsic and extrinsic that student seeds have, in addition to physical, technical, tactical, mental also greatly affects the maximum achievement of students. Students with high achievement motivation will tend to choose challenging activities or tasks and also tend to avoid tasks that are too easy because they do not get satisfaction from the results of achieving the tasks. Students will carry out the training program provided seriously and with high discipline.

Based on the results of the study, it shows that there is a significant effect between self-confidence and freestyle swimming achievement. Previous research conducted (Supriyanto, 2019) shows that there is a relationship between self-confidence and swimming student achievement. Students who have confidence in their abilities and are able to make appropriate use of them can achieve the expected achievements (Kovach, 2018). In addition, self-confidence needs to be managed during the competition so that students are able to focus on achieving targeted achievements. The reality in the field shows that confidence in one's ability is the main capital, because in training and in competitions the first thing a swimming student has is confidence in one's ability to achieve or improve his achievement time in the form of record time both with opponents and without opponents (against himself). Students who have self-confidence will be able to perform by applying all the potential they have which is helpful for the benefit of themselves and even others in the context of social interaction. Self-confidence has positive impacts on emotions, this can be seen if individuals who have high self-confidence, it will be easier to control themselves in a stressful situation.

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Based on the results of the study, it shows that there is a significant effect between achievement motivation and self-confidence on freestyle swimming achievement. The fast development in swimming has motivated many students to compete in achievement. An achievement can be reached if a student has mastered several factors that support the achievement of that performance. The factors that can support the achievement of a maximum achievement are physical condition, tactics, technique and mentality. The mental element that needs the attention of the coach as a basic capital to achieve maximum achievement is achievement motivation and self-confidence.

Motivation is defined as a push that comes from outside or inside an individual to carry out an activity that guarantees the activity and can determine the direction and the amount of effort exerted for the activity, so as to achieve the set goals (Rocchi & Pelletier, 2017). Motivation results in the growth of strength in a person to move, try, for certain goals to be achieved. The encouragement that exists within to make changes in behavior that are better in achieving a goal. Achievement motivation contains operational task values such as attainment value, intrinsic motivation, and utility value or extrinsic value. This means that when individuals, in this case Judo students, have a value placed on a task, this value will increase students' confidence to achieve goals that are higher than the expectations they want to achieve. Achievement motivation has been viewed as a traditional psychological construct that has been developed long ago in psychological research (Larson et al., 2014).

Self-confidence is a sense of confidence in which he will be able to complete his task well in a performance. Self-confidence is one of the main capital and absolute requirements for achieving sports achievements. Self-confidence is influenced by objective aspects related to aspects of achievement motivation, which is feed back / evaluating an individual's self-assessment is very important. Judging from individuals who have high self-confidence and achievement motivation really like feed back on the work they have done. He considers feed back very useful as an improvement in future work results (evaluation). Self-confidence is often used to refer to a positive and healthy attitude in students to perform optimally. Self-confidence is one of the determinants of a student's success. Self-confidence increases motivation to achieve achievements in sports, because the higher the confidence in one's abilities, the stronger the enthusiasm to strive for achievement (Pelana et al., 2021).

CONCLUSION

The results showed that (1) There is a significant effect between achievement motivation on freestyle swimming achievement, with a p-value of $0.000 < 0.05$. (2) There is a significant effect between self-confidence on freestyle swimming performance, with a p-value of $0.000 < 0.05$. (3) There is a significant effect between achievement motivation and self-confidence on freestyle swimming performance, with a p-value of $0.000 < 0.05$.

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