

The Effect of Visualization Training Towards Students's Self-Confidence in the Taekwondo Sniper Club Extracurricular Activity at SMP Negeri Pageruyung

Elora Nuro Nailasshofa^a, Hijrah Maulidiah Afifah^b

^{ab}Universitas Negeri Semarang, Indonesia

Correspondence: nuronailasshofa23@students.unnes.ac.id

Received: 1 April 2026 Accepted: 9 April 2026 Published: 12 May 2026



Abstract

Confidence is one of the main psychological factors that support student performance in sport, including extracurricular activities. Even so, there are still students who feel less confident when participating in the exercise. This Study aims to find out whether there is a effect of visualization exercises on the confidence of extracurricular students and how much influence visualization exercises have on the confidence of extracurricular students of Taekwondo Sniper Club. This Study uses an experimental design with a pre-test and post-test one group design. The instrument used was a confidence questionnaire. The subjects of the study were nine extracurricular students of the Taekwondo Sniper Club at SMP Negeri 1 Pageruyung. The data analysis technique used the paired sample T-test and effect size. The hypothesis tes throught the paired saple T-test revealed a significant influence with a significance value of 0,006 ($p < 0,05$) and a tcount value of 3,758. The effect size result showed that visualization exercises had a great influence with a score of 1,25 on student confidence. It can be concluded that the result of this study show that there is an effect size of visualization exercises on student confidence and the exercises are effective in increasing the confidence of extracurricular students of Taekwondo Sniper Club.

Keywords: self-confidence; visualization exercises; taekwondo

1. Introduction

Sports activities in schools are not only limited to the usual curriculum, but are also developed through extracurricular activities aimed at encouraging students' interests, talents, and potential in sports. Extracurricular sports activities are additional practice sessions that take place outside of class hours, which provide opportunities for students to improve their physical abilities and technical skills, while also instilling values such as discipline, cooperation, responsibility, and confidence. (Fauzen, 2025).

From a psychological point of view, this activity gives students the opportunity to interact with their environment while expressing their potential (Pradana, 2024) In addition, extracurricular activities serve as a means for character development that cannot always be improved by learning in the classroom (Inda Yuliana Ngabito et al., 2025) Through interaction with peers and competitive experiences, students gradually learn to manage their emotions, maintain morale, and develop a sense of responsibility towards themselves and the group (Rizal et al., 2025) This shows that extracurricular activities have an important role in supporting the overall educational process in schools.

One of the most in-demand sports in extracurricular activities in schools is taekwondo. Taekwondo is a martial art characterized by dynamic movements, an emphasis on kick techniques, and a high level of physical and mental readiness (Solissa, 2023). In taekwondo matches, the winner is determined by the athlete who obtains the highest score. Kick technique is the most dominant, but punches and attack combinations also play an important role. During training and match simulations, taekwondo athletes are required to focus, face opponents with courage, and have confidence in their abilities (Lim & O'Sullivan, 2016). Therefore, self-confidence is one of the most important psychological aspects for students who take part in taekwondo extracurricular activities.

Strong confidence helps athletes to demonstrate optimal technical skills, make bold decisions, and manage emotions when facing pressure during training or matches (Gunarsa, 2008). In addition, during the training process, the students often face various challenges, such as difficulties in mastering techniques, pressure to perform well in front of coaches and friends, and comparing abilities with their peers. In these situations, confidence becomes an important element that helps students stay focused, dare to try, and stay strong in the face of pressure during practice. Without sufficient confidence, students tend to be hesitant when making movements, lack the courage to take initiative, and are unable to show their best abilities (Akbar et al., 2023). These findings are in line with the opinion that self-confidence is an aspect that can be improved through structured mental training (M.Riyan Prawitama & Prima Aulia, 2020).

Confidence in athletes does not appear suddenly, but can develop through the training process and experience that athletes undergo. Research conducted by (Juriana & Tahki, 2017) shows that mental training has an important role in increasing self-confidence. The results of this study indicate that improving mental skills tends to be accompanied by an increase in athletes' confidence. Strategies or methods are needed to systematically increase the confidence of athletes. One of the methods that can be applied in sports mental training is visualization exercises. Visualization exercises are a form of mental training that is carried out by consciously imagining certain movements or situations in a person's mind (Karimah et al., 2021). According to Weinberg and Gould (1995) in (P.Setiadarma, 2000), there are several strategies that can be applied to increase athletes' confidence, including achieving results, behaving confidently, and thinking positively. using visualization exercises, developing physical abilities and skills, and ensuring adequate preparation.

In practice, visualization exercises are usually brief, structured, and performed repeatedly (Liu et al., 2025). Visualization exercises give athletes the opportunity to imagine a competition situation before actually experiencing it on the field. By repeating a focused image, athletes can create a mental image of success, improve tactical readiness, and strengthen confidence in their abilities (Cumming & Williams, 2012). In addition, this practice also helps reduce anxiety and improve concentration, so that athletes are better prepared to face various possibilities during the game (Williams & Cumming, 2015). However, not all athletes can directly visualize effectively, guidance, regular training, and support from coaches are needed for the visualization process to run effectively (Williams et al., 2013). Without clear guidance, visualization exercises do not provide optimal results in boosting athletes' confidence. Therefore, it is important to evaluate the implementation of proper visualization exercises, especially for students who are still in the growth phase.

The Taekwondo Sniper Club is an extracurricular activity at SMP Negeri 1 Pageruyung. Based on the researchers' initial observations and interviews, the lack of confidence among students is a real problem in the field. Some students seem unsure when attacking, prefer to wait for directions from the coach, and hesitate to take the initiative when dealing with opponents. In addition, there are also students who easily feel nervous during simulation exercises, which results in suboptimal movements. This situation shows that their mental aspect has not developed well, although technically, the students already have a fairly adequate foundation. If this issue is not addressed immediately, this can result in poor student performance during practice.

This situation shows the mismatch between the technical skills that students have and their mental readiness to demonstrate those skills. In other words, students do have the ability, but they lack the confidence necessary to apply those skills well. This situation is an important basis for implementing interventions through systematic and continuous mental training.

A number of previous studies have examined the impact of mental exercise, especially visualization, on the psychological aspects of athletes. Research conducted by (Elhaque et al., 2021) shows that visualization exercises can improve athletes' performance accompanied by increased confidence. In addition, research by (Satriya & Jannah, 2017) shows that visualization exercises have a positive effect on athletes' confidence when facing competition. However, most of the research was conducted on professional athletes and focused more on the context of sports achievements.

Therefore, the purpose of this study is to test the effectiveness of visualization exercises on student confidence. As a form of intervention, visualization exercises in this study were applied through a structured procedure for 8 meetings with a frequency of twice a week. This method combines the use of video as a cognitive stimulus with movement imagination exercises. Operationally, each session begins with a relaxation phase to build focus, followed by observation of technique videos or match simulations as visual references. Next, students are guided to perform a mental simulation in which they imagine themselves executing the movement successfully as if they were experiencing it in real life. The study focused on a group of junior high school students, who were physiologically different from professional athletes; Most previous researchers have focused more on athletes at the professional level or high competition, so their findings may not be entirely relevant to the student's situation in school. This research is expected to provide an empirical picture that is more in line with the characteristics of students as research subjects. In addition, the results of this study are expected to be a guide for trainers and teachers in designing training programs that not only focus on physical and technical aspects, but also consider the psychological dimension of students as a whole. Therefore, increasing students' confidence is expected to have a positive impact on the quality of their training and their ability to perform optimally.

2. Method

This study uses a quantitative approach with an experimental method. In this study, the type of research is pre-experiment with one group pre-test and post-test design. The research design begins with a pre-test before being given treatment and a post-test after being given treatment. Pre-experiment is a type of experiment that does not use a control group. In this design, measurements are taken twice using a questionnaire, namely before and after being treated. (Sodik & Siyoto, 2015)(states that population is a comprehensive scope that accommodates subjects and

objects with certain qualities. The population in this study is all extracurricular students of the Taekwondo Sniper Club which is 9 students. The sampling technique in this study is total sampling, namely all students in the population are used as research samples.

The data collection technique in this study used a confidence questionnaire with 15 statement items. This instrument is used to collect pre-test and post-test data. Each statement item has a tier that is low, medium, high. The questionnaire has been tested before being used for research. In the validity test, fifteen items of statements are said to be valid because each statement has a significance value of <0.05 . In each statement, the significance value is in the range of 0.000 to 0.001. In the reliability test of this instrument of $0.930 > 0.60$, it means that this questionnaire is reliable. The confidence value in this study is the total score from the results of the confidence instrument measurement.

The initial test (pre-test) is carried out to find out the level of confidence of students before being given treatment. Furthermore, the sample was given treatment in the form of visualization exercises using video as a stimulus. Visualization exercises are a form of cognitive exercise that is done by re-imagining movements or match situations, where athletes mentally imagine the movements as if they were doing them in real-time. Treatment was given 8 times with a frequency of 2 times a week. After the treatment is completed, a final test (post-test) is carried out to measure changes in the student's confidence level.

The data analysis technique in this study began with a normality test using the Shapiro-wilk formula to determine whether the data was normally distributed, considering that the number of subjects was less than 30 people. Furthermore, the hypothesis test was carried out using a paired t-test sample to determine the effect of visualization exercises on student confidence. In addition, an effect size test was also carried out to determine the effect of treatment on the confidence of extracurricular students. The entire data analysis process was carried out with the help of the IBM SPSS Statistics program.

3. Result

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. deviation
Confidence pretest	9	71	113	88.44	12.856
Posttest confidence	9	82	115	97.67	10.198
Valid N (listwise)	9				

Based on Table 1, the number of samples was 9 people with an average *pret-confidence test* score of 88.44 with a standard deviation of 12,856 and had the highest score of 113 and the lowest score of 71. Descriptions of the results of the study are presented in the distribution:

Table 2. Distribution of pre-test data categoris for extracurricular student athlete confidence

No.	Name	Pre-test result	Category
1.	Participant1	85	Medium III
2.	Participant 2	113	Height II

No.	Name	<i>Pre-test</i> result	Category
3.	Participant 3	98	Height I
4.	Participant 4	87	Medium III
5.	Participant 5	83	Medium III
6.	Participant 6	73	Medium II
7.	Participant 7	93	Height I
8.	Participant 8	71	Medium II
9.	Participant 9	93	Height I

Then in table 1, an average *post-confidence test* score of 97.67 with a standard deviation of 10,198 was also obtained and had the highest score of 115 and the lowest score of 82. Descriptions of the results of the study are presented in the distribution:

Table 3. Distribution of post-test data categories of athlete confidence of extracurricular students

No.	Name	<i>Post-test</i> result	Category
1.	Participant 1	109	Height II
2.	Participant 2	115	Height II
3.	Participant 3	102	Height I
4.	Participant 4	93	Height I
5.	Participant 5	90	Medium III
6.	Participant 6	91	Height I
7.	Participant 7	101	Height I
8.	Participant 8	82	Medium III
9.	Participant 9	96	Height I

Table 4. Normality test

Variabel	Sig.	Description
Confidence pretest	0.767	Normal
Posttest confidence	0.954	Normal

Based on the results of the normality test using *the Shapiro-Wilk technique*, the significance value for the confidence pretest variable was 0.767 and the confidence posttest variable was 0.954. Because the significance value of the two variables is greater than 0.05 ($p > 0.05$), it can be concluded that the data of this study is normally distributed.

Table 5. Uji paired sample t-test

Variable	T_{Hitung}	<i>Sig. 2 tailed</i>	Description
Confidence pretest-Confidence posttest	3.758	0.006	Significant

Based on table 1, it is known that the average score of students' confidence before treatment is 88.44 while after treatment it increases to 97.67. Based on the Paired Test, the T-Test sample was obtained with a calculated value of 3.758 with a significance value of 0.006. The significance value

< from 0.05, so it can be concluded that there is a significant difference between confidence scores before and after being given visualization exercises.

Table 6. Effect size

Variable	Point estimate	Description
Confidence pretest-Confidence posttest	1.253	Big influence

Based on the results of the effect size test on the table, a value of 1,253 can be found, so it can be concluded that visualization exercises have a great influence on increasing the confidence of extracurricular students.

Data analysis was conducted on 9 Taekwondo Sniper Club extracurricular students who participated in a study on the effect of visualization exercises on student confidence. Descriptive analysis showed that the average score of students' confidence in the pre-test was 88.44 with a minimum score of 71 and a maximum of 113, after being given the visualization exercise treatment, the average score increased in the post test of 97.67 with a minimum score of 82 and a maximum of 115.

The Shapiro Wilk test showed that the data was normally distributed, with a significance value at the pre-test of 0.767 and of the post-test of 0.954. Furthermore, the hypothesis test used a paired sample t-test, which produced a significance value of 0.006, so that there was a significant difference between the level of self-confidence of students before and after being given visualization exercises. Thus an alternative hypothesis was accepted, which stated that there was an effect of visualization exercises on the confidence of extracurricular students of the Taekwondo Sniper Club at SMP Negeri 1 Pageruyung.

To determine the effect size of the treatment, an effect size test was carried out using Cohen's formula d. Based on the results of the calculation referring to a t value of 3,758 with a sample of 9 students, a score of 1.25 was obtained. These findings indicate that visualization exercises have a great influence on increasing the confidence of Taekwondo Sniper Club extracurricular students at SMP Negeri 1 Pageruyung.

4. Discussion

The findings of the study showed that there was an effect of visualization exercises on self-confidence of 3,758 with a point of 1.25 which indicated that visualization exercises had a great influence on student confidence. This is also in line with research (Satriya & Jannah, 2017) revealing that visualization training has a positive influence on athletes' confidence, visualization training is a way to overcome problems in matches, making athletes' confidence maintained. In the context of sports, visualization plays an important role in helping athletes build confidence in their abilities. Visualization mental training programs can increase confidence in taekwondo athletes, especially after they achieve structured success in the exercise, thereby strengthening the athlete's perception of his or her abilities (Aulia et al., 2024). When students regularly imagine success, a more optimistic attitude is formed, which in turn increases self-confidence (Parnabas & Parnabas, 2015). This shows that confidence is formed not only through direct experience, but also through structured mental experiences.

The influence of visualization training can be felt and has a good impact on athletes' confidence. The influence of visualization training can be applied to the athletes because it provides an advantage to the athlete. The use of the effect of visualization exercises on improving athlete achievement is evidenced by research (Elhage et al., 2021). The results of the study show that visualization training can improve athletes' achievements. The achievement in question is achievement in archery. The effect mentioned in the results of this study was the increase in athlete confidence, which can be seen from the test scores after treatment of all subjects were higher compared to the test scores before treatment. This effect occurs because visualization training has an effect on increasing athletes' confidence, a finding that is theoretically supported.

Theoretically, these findings are in line with the Psychoneuromuscular Theory put forward by Carpenter in 1894 as quoted in (Gunarsa, 2008). This theory explains that every movement imagined in the mind produces neural impulses similar to those produced when the movement is performed in real life. Thus, visualization exercises allow athletes to mentally simulate movements without the need to perform physical activity directly. This process helps strengthen the connection between the nervous system and muscles, so that athletes are better prepared and more confident when performing movements in real-life situations.

Visualization exercises also provide students with the opportunity to conduct mental self-evaluations (Rhodes et al., 2024). When students imagine a movement, they can indirectly recognize the less than optimal parts and make adjustments in their minds before applying them in physical exercise. This shows that visualization not only contributes to increasing confidence, but also in improving understanding of the skills being learned.

Through relaxation stages, the viewing of stimuli in the form of videos, and repetitive movement imagination exercises, students are guided to create positive mental experiences. This process helps students increase their confidence in their abilities. In the context of school students, taekwondo exercises performed in a structured manner can also shape discipline, self-control, and increase confidence in adolescents (Maheswari; et al., 2025) This suggests that the combination of physical and mental training makes an optimal contribution to the process of sports development.

In the context of school students, the application of visualization exercises is very important because not all students have enough experience in competitions. The absence of this experience can result in low confidence when dealing with training situations. By using visualization, students can gain mental experiences that support their preparation, so that their confidence continues to grow even though their hands-on experience is still limited.

Thus, the results of this study are in accordance with the hypothesis proposed regarding the impact of visualization exercises on student confidence. Overall, visualization exercises have been shown to boost confidence through the process of creating structured mental experiences and strengthening confidence.

5. Conclusion and Recommendation

Based on the results of data analysis and discussion, this study concludes that there is a significant influence in increasing confidence through visualization exercises in Taekwondo Sniper Club extracurricular students. This is evidenced by the results of the paired sample T-test with a tcal

value of 3,758 with a significance value of 0.006. The significance value $<$ from 0.05. There is a big influence through visualization exercises in the extracurricular students of the Taekwondo Sniper Club. This is evidenced by the effect *size result* with 1.25 points from the calculation of the paired sample T-test.

The study had several limitations, mainly related to the small sample size and the application of a pre-experimental design that did not have a control group. This limitation allows for other factors that may also affect the results of the study. Thus, it is recommended to conduct further research using a more robust experimental design and involving a larger sample so that the results can be more widely generalized.

Acknowledgement

The author would like to thank Hijrah Maulidiah Afifah, S.Pd., M.Pd. as a supervisor who has provided direction and guidance during this research. The author also expressed his gratitude to SMP Negeri 1 Pageruyung and the extracurricular students of the Taekwondo Sniper Club who had participated in the research.

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