
THE INFLUENCE OF THE JIGSAW-TYPE COOPERATIVE LEARNING MODEL IN INCREASING STUDENT CONFIDENCE IN PARTICIPATING IN ATHLETIC LECTURES

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Abstract

This study is an experiment that aims to determine the effect of the jigsaw cooperative learning model to increase students' self-confidence in participating in athletics lectures. The research design used in this study is one group pre-test and post-test. The sample in this study amounted to 43 students using the purposive sampling technique. The criteria set in determining the sample are being healthy, taking athletics courses, and willing to follow all research processes. The collection of research data was carried out using a self-confidence questionnaire totaling 20 questions that had been tested with a reliability level of 0.923. While the data analysis technique was carried out using the T test with a normality test as a prerequisite test. Based on the results of the statistical analysis, it is known that the average value at the time of the pre-test was 82.86, while after treatment was given through Jigsaw learning, the average value increased to 88.67. The average difference between the two measurements was 5.810, which indicates a significant increase in the level of student self-confidence. So it can be concluded that the jigsaw type cooperative learning model has a significant influence on increasing student self-confidence in the athletics lecture process.

Keywords: Cooperative, Jigsaw, Confident, Athletic

INTRODUCTION

Accumulated Confidence is one of the most important psychological aspects in the learning process, including in practical courses such as athletics. Students who have a high level of confidence tend to be more active, do not hesitate to try new things, and are able to face challenges and difficulties in the learning process (Wijaya, 2024). In the context of athletic lectures, confidence is the main capital for students to perform optimally in performing various movements and techniques taught. However, not all students have high self-confidence, especially when they feel physically incapable or are not used to practical situations in public (Blegur, 2020).

The problem of low student confidence in participating in athletic lectures is often a

significant obstacle to achieving maximum learning outcomes. Students with low confidence levels tend to be passive, reluctant to perform, and easily give up when they experience difficulties. This certainly has an impact on the quality of their learning and the results of their practice. Therefore, a learning approach is needed that is able to increase the active involvement of students and encourage them to support each other in the learning process, one of which is through the application of a cooperative learning model (Sinarwati, 2014).

According to (Kahar et al., 2020) The cooperative learning model is an approach that emphasizes cooperation between students in small groups to achieve shared learning goals. One type of this model that has proven effective in increasing student interaction and confidence is the Jigsaw-type cooperative model. In this model, each group member is responsible for mastering and delivering a specific part of the material to his or her group mates. This system encourages students to be more confident because they have an important role in the success of their group.

The application of the Jigsaw-type cooperative learning model in athletic lectures is believed to create a more inclusive and supportive learning atmosphere. With the division of responsibilities and interdependence between group members, students are encouraged to contribute more actively and not feel alone in facing learning challenges. In addition, communication in groups is also a means for students to develop social skills and build confidence gradually (Linlin, 2023).

Previous research (Wulandari & Jariono, 2022) states that cooperative learning, including the Jigsaw type, can improve various aspects of the learning process such as motivation, participation, concept understanding, and learning outcomes. However, there is still little research that specifically highlights the impact of this model on improving student confidence in the context of sports lectures, particularly athletics. In fact, confidence in this field is very closely related to success in mastering motor skills.

Based on this phenomenon, it is important to explore more deeply how the Jigsaw-type cooperative learning model can be used as a strategy to increase student confidence in attending athletic lectures. This research is expected to provide an empirical picture of the effectiveness of the model and become a reference in the development of more adaptive learning methods and in favor of student psychological development.

Thus, this study aims to determine the influence of the Jigsaw-type cooperative learning model on increasing student confidence in participating in athletic lectures. The results of this study are expected to make a positive contribution to the world of physical education, especially in the development of learning strategies that not only emphasize the physical skills aspect, but also the mental and emotional aspects of students.



METHODOLOGY

This study is an experiment that aims to determine the influence of the jigsaw-type cooperative learning model to increase students' confidence in participating in athletic lectures. The research design used in this study is one group pre-test and post-test. The sample in this study amounted to 43 students using purposive sampling techniques. The criteria set in determining the sample are being in good health, participating in athletic courses, and willing to participate in all research processes. The collection of research data was carried out using a confidence questionnaire consisting of 20 question numbers that had been tested with a reliability level of 0.923. Meanwhile, the data analysis technique was carried out using the T test with the normality test as a prerequisite test.

RESULTS

To find out the answer to the research hypothesis, it is necessary to analyze the results of the research that has been carried out. The results of the data analysis of this study are as follows.

Table 1. Descriptive Test

Data	N	Mean	Median	Std. Deviasi	Min.	Max.
Pre-test	42	82,86	83	3,2	77	89
Post-Test		88,67	89	3,4	83	95

The results of the descriptive test on the pre-test and post-test data showed an increase in the level of student confidence after being treated in the form of a Jigsaw-type cooperative learning model. At the time of the pre-test, the number of respondents was 42 students with a mean score of 82.86 and a median score of 83. The standard deviation value of 3.2 indicates that the data is quite homogeneous, with a spread of values that is not too far from the average. The lowest score obtained by students in the pre-test is 77, while the highest score is 89.

After intervention through the application of the Jigsaw-type cooperative learning model, there was an increase in post-test results with an average increase to 88.67 and a median of 89. This indicates that most students have experienced an increase in their confidence. The standard deviation at the post-test was 3.4, which still showed a fairly uniform data spread, although slightly larger than the pre-test. The minimum score on the post-test increases to 83, while the maximum score increases to 95.



Table 2. Normality Test

Data	N	Sig.	α	Hasil
Pre-Test	42	0,522	> 0,05	Normal
Post-Test		0,268		Normal

The results of the normality test on student confidence data showed that the distribution of data in the pre-test and post-test was in the normal category. For the pre-test data, with a total of 42 respondents, the significance value (Sig.) obtained was 0.522. This value is greater than the significance level (α) set, which is 0.05. This shows that the pre-test data does not deviate significantly from the normal distribution.

Similarly, in the post-test data, the significance value of 0.268 is also greater than 0.05. This indicates that the post-test data is also distributed normally. Although the number of N is not explicitly stated in the post-test, it is assumed that the number of respondents remains the same as the pre-test, which is 42 people. These two results indicate that the normality assumptions have been met for the pre-test and post-test data.

Table 3. Hypothesis Test

Data	N	Rata-Rata	Selisih Rata-Rata	Sig.
Pre-Test	42	82,86	5,810	0,000
Post-Test		88,67		

The results of the paired sample t-test on pre-test and post-test data showed that there was a significant difference in the level of student confidence before and after the implementation of the Jigsaw-type cooperative learning model. The average score at the pre-test time was 82.86, while after the treatment was given through Jigsaw learning, the average score increased to 88.67. The average difference between the two measurements was 5.810, which indicates a significant increase in student confidence levels.

The significance value (Sig.) obtained from the test is 0.000. Since this value is much smaller than the significance threshold of 0.05, it can be concluded that the average increase is statistically significant. This means that the changes that occur are not caused by chance factors or random variations, but are the real effects of the treatment given. Thus, the Jigsaw-type cooperative learning model has been proven to have a positive influence on increasing student confidence in participating in athletic lectures. These results reinforce previous findings that show an increase in scores in post-tests and support the effectiveness of cooperative-based learning approaches in developing students' psychological aspects.



DISCUSSION

Based on the results of the research that has been conducted, it can be concluded that the Jigsaw-type cooperative learning model has a positive influence on increasing student confidence in participating in athletic lectures. This can be seen from the increase in average scores between pre-test and post-test, which shows that students experience significant development after receiving treatment. Before the application of the Jigsaw model, the average student confidence was at 82.86, and after the treatment increased to 88.67. This increase reflects a significant change in the psychological aspects of students, especially in terms of belief in one's own abilities in the context of practical learning.

This increase is not only seen from the average score, but is also strengthened by the results of the paired sample t-test which shows a significance value of 0.000. This value is much smaller than the significance threshold of 0.05, which means that the difference between pre-test and post-test is statistically significant. Thus, the use of the Jigsaw-type cooperative learning model has been proven to be effective in increasing student confidence. This effectiveness may be due to the characteristics of the Jigsaw model that encourage active engagement, individual responsibility in groups, and positive social interactions between students.

The Jigsaw model places students as an important part of the learning process, where each individual has a role to play in the success of his or her group. This approach encourages students to study actively and responsibly with the material they have to master, thus increasing their confidence as they realize the importance of their contribution to learning. In addition, the process of sharing knowledge between group members also provides opportunities for students to develop communication skills and increase self-confidence when conveying their understanding.

In the context of hands-on athletic learning, confidence plays a very important role. Students who are confident will be more prepared and brave to try new movements or techniques, and more resistant to pressure when demonstrating in front of lecturers or colleagues. Therefore, learning approaches that are able to create a positive and collaborative atmosphere, such as the Jigsaw model, are particularly relevant. The increase in the minimum and maximum scores on post-test results also indicates that the increase in confidence does not only occur in some students, but is relatively evenly distributed throughout the group.

The results of the normality test showing that the pre-test and post-test data are normally distributed also provide support for the validity of the results of this study. Normal distribution ensures that the results of the statistical analysis used are reliable. With this condition, the conclusions drawn from the data become stronger and more trustworthy. Normality also reinforces that the Jigsaw model is not only effective for certain students, but also has an overall impact on



the entire sample population.

From a pedagogical perspective, these results support constructivist learning theories that hold that meaningful learning occurs when students are actively involved in building their own understanding. Interaction in small groups, such as those in the Jigsaw model, provides space for students to learn from each other and support each other. This process indirectly strengthens students' confidence because they feel valued and have an important role in the learning process.

According to (Wibowo, 2020) From a pedagogical perspective, these results support constructivist learning theories that state that meaningful learning occurs when students are actively involved in building their own understanding. Interaction in small groups, such as those in the Jigsaw model, provides space for students to learn from each other and support each other. (Arjanggi & Setiowati, 2013) states that cooperative learning such as Jigsaw is able to increase students' intrinsic motivation because they feel more responsible for their respective roles in the group. Apart from the aspect of increasing values and statistical results, the success of the Jigsaw model can also be seen from the motivational aspect. Students who feel confident tend to be more motivated in participating in learning activities. This motivation will ultimately encourage them to be more active, initiative, and responsible in learning activities, both inside and outside the classroom. The cooperative learning model creates an atmosphere conducive to the simultaneous growth of motivation and confidence.

Overall, this research makes an important contribution to the development of learning methods in higher education, especially in practice-based courses such as athletics. Lecturers can consider the application of the Jigsaw model as a strategy to overcome students' low confidence. These findings may also serve as a basis for further research in different contexts or with other psychological variables, such as learning motivation or performance anxiety. Supported by strong empirical data, Jigsaw-type cooperative learning has been proven to improve not only academic outcomes, but also the affective aspects that are very important in the educational process.

CONCLUSION

Based on the results of data analysis and discussions that have been carried out, it can be concluded that the Jigsaw-type cooperative learning model has a significant influence on increasing student confidence in participating in athletic lectures. This is proven through the comparison of pre-test and post-test results, where there was an increase in the average score from 82.86 to 88.67, with a difference of 5.810. A significance value of 0.000 from the results of the paired sample t-test shows that this difference is statistically significant.

The application of the Jigsaw model has been proven to be able to create a collaborative,



interactive, and supportive learning atmosphere, so that students feel more confident in expressing opinions, sharing information, and being actively involved in the learning process. Student confidence increases due to individual responsibility in the group and a sense of belonging to the learning process. Thus, the Jigsaw-type cooperative learning model is highly recommended to be applied in practical courses, especially in the field of physical education and sports, to support the development of students' affective aspects, such as self-confidence.

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