LIGHTHOUSE INTERNATIONAL CONFERENCE PROCEEDING
2023, VOLUME 1, 185 – 189

The effect of the JIGSAW learning method on high school students' interest in learning

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ABSTRACT

Interest in learning is a sense of liking and interest in something without someone telling it. Problems that occur in students when participating in education are feeling bored, lazy, monotonous learning, choosing to work individually, passively, and low teacher stimulus. This study aimed to determine the effect of the jigsaw learning method on students' interest in learning. This research was located in senior high schools in Pesawaran Regency, Lampung. This study uses a survey method with a descriptive quantitative approach. The technique in taking the sample uses a saturated sample or a total sample through all members of the population employed in the study. Data processing techniques are based on the results of distributing questionnaires. The number of pieces in this study was 23 respondents. The steps used to test the magnitude of the effect are using simple linear regression with the help of the SPSS 16 program. The results of data analysis can be concluded that there is an effect of the jigsaw learning method on students' interest in learning and was also influenced by other factors.

KEYWORDS

Jigsaw Learning MethodL; earning Motivation; Student Learning Interest; Learning Innovation

Received: 1 November 2022
Accepted: 10 December 2022
Published: 30 January 2023

Introduction

Education can help foster and develop the personality of every human being. Achieving educational goals is due to professional teachers who can find learning ideas that can attract students' attention. So that students are also able to accept, understand, and master the subject matter given (Abbas, 2019). Interest in learning becomes a factor for students in participating in learning. Students with a high interest in learning will easily follow each learning process. With increasing interest in learning, educators must think that the material presented can be well received by students and attract students' attention to continue learning (Dores et al., 2019). This study aimed to determine the effect of the jigsaw learning method on high school students' interest in learning, and how much influence the jigsaw learning method had on learning interest.

The problems in this study include: students are bored and lazy to follow learning, monotonous learning, working individually, not paying attention to the teacher teaching, being passive in class, and the teacher's stimulus is still low. The problems that have been determined are based on the results of a survey researchers have carried out. This research was conducted to see how much influence the jigsaw learning method had in increasing students' interest in learning. Because the Jigsaw learning method itself can make students interact with each other and be more active when participating in learning or in problem-solving (Aryanti, 2014). To determine if there is an influence between the jigsaw learning method and interest in learning, research is carried out using questionnaires distributed to respondents (Mukrimaa, 2014). Based on the study above, there are theoretical benefits, and it can provide knowledge for readers about the effect of the jigsaw learning method in increasing student interest in learning. At the same time, the practical benefits add insight for researchers in compiling and analyzing the data obtained using the scientific method properly.

Literature review

Based on the existing problems, the research deserves to be researched because students' interest in participating in learning is very lacking, so achieving the objectives of implementing learning is not earned. Therefore, it is necessary to apply a method that can increase student interest in learning. The jigsaw method can encourage students to listen, agree, and take responsibility for a given task or problem (Abbas, 2019). This can benefit students to understand better the material provided so that student's interest in learning can be increased. Therefore, based

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on the existing problems that make students' interest in learning low, it is necessary to do this research to influence the jigsaw learning method on students' interest in learning. Because the jigsaw learning method has directed learning process steps (Nggumbe, 2019), this research is suitable to be studied to increase students' interest in learning using the jigsaw learning method.

The research that will be carried out has previously been found to be used as research support. The first relevant research study was Berkah (2018) stated that the Influence of Jigsaw Learning Methods on Students' Interest in Learning History" This research aims to increase students' creativity, especially in learning history. Furthermore, research conducted by Utari & Nasral, (2021) under the title "The Effect of Jigsaw Learning Model With Mind Mapping Media on Students' Interests and Cognitive Learning Outcomes." To increase student interest and learning outcomes by using mind mapping media.

Based on the relevant research above, the researcher believes the jigsaw learning method needs to be tested in depth. Because, based on the problems that have been found, it needs to be overcome using the jigsaw learning method. Because the purpose of the research is to find out whether there is an effect of the jigsaw learning method on students' interest in learning and how much influence the jigsaw learning method has on students' interest in learning. Based on the statement above, the hypothesis in this study is the influence of the jigsaw learning method on the interest of high school students.

Methods

This research was conducted at SMA Negeri 1 Katon and SMA Negeri 1 Adiluwih. There were Buddhist high school students from the two schools, totaling 23 students. Based on the number of students, there are ten (X) and eleven (XI) grades. In SMA Negeri 1 Katon, there are seven students in class X and nine in class XI. While in SMA Negeri 1 Adiluwih, in class X, there are five students, and in class XI, there are two students, so a total of all students there are 23 students are respondents in the study. Based on this research, there are conceptual and operational definitions. The abstract description of the jigsaw learning method is a method that can encourage students to listen, agree, and be responsible by giving a problem or task for each member of the group that is important to be discussed in the group. In contrast, interest in learning is an activity that can encourage students to have attention, concentration, and understanding of lessons in the learning process. The operational definition of the jigsaw learning method is that the jigsaw learning method is assessed using a questionnaire instrument that is compiled based on the following indicators: (a) active, (b) cooperative, (c) critical thinking, (d) effective. Meanwhile, interest in learning is assessed using a questionnaire instrument which is based on the following indicators: (a) attention, (b) feeling of pleasure, (c) willingness, (d) effort. This study uses descriptive quantitative research methods. The sampling technique uses saturated samples or total samples. So in this study a population of 23 respondents was used in the implementation of research or what is usually referred to as non-probability sampling. Obtaining data in this study used a questionnaire distributed to respondents using a google form or distributed online.

This research phase consists of a preliminary study phase by conducting an initial survey, research trials, and data analysis. After completing a preliminary survey, a test was conducted by distributing questionnaires to respondents. After obtaining the research trial data, validation was carried out to determine whether the instrument used was valid. Material experts and linguists carried out the validity test to state whether the instruments used were suitable for use or not yet eligible. The testing of this research was limited to Buddhist high school students in Pesawaran Regency as research subjects.

The design was used to determine the effect of the jigsaw learning method on students' interest in learning. The implementation of this research was carried out in 2 schools, namely SMA Negeri 1 Negerikaton and SMA Negeri 1 Adiluwih; 23 respondents to research the influence and how much power the jigsaw learning method had on the learning interest of Buddhist high school students in Pesawaran Regency.

Results

Validity Test Results

The results of the validity test state that in the jigsaw learning method (variable X) of 40 items there are three invalid items, namely items at numbers 12, 21, and 28. The three items are declared invalid because by comparing the r tables on 23 respondents, the significance level is 0.4132, meaning that items that are not valid in the X variable are not used in the study. While the interest in learning (variable Y) of the 40 items there are four invalid variables, namely items at numbers 52, 61, 72, and 79. The four invalid items were not used in the study because the number of items in variables X and Y was sufficient. number of research instruments.

Reliability Test Results

The reliability test results showed that the reliability coefficient on 73 statement items using SPSS 16 obtained an Alpha value of 0.968 because p> 0.05 means that the measuring instrument is declared reliable. Judging from these results, it can be concluded that the instruments used in this study have met the requirements of validity and reliability well.

Table 1. Instrument Reliability

Reliability Statistics	
Cronbach's Alpha	**N of Items**
.968	73

Result Description Indicator Variable Jigsaw Learning Method

The results of the description of indicators on the jigsaw learning method variable obtained a range score of 69, a minimum score of 116, a maximum score of 185, a mean score of 135.52, a std score. deviation of 17,560, and a variance score of 308,352. These results were obtained from filling out questionnaires conducted on 23 respondents.

Table 2. Description of Jigsaw - Learning Variable Statistical Indicators

Descriptive Statistics								
	N	**Range**	**Minimum**	**Maximum**	**Mean**		**Std. Deviation**	**Variance**
	Statistic	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Std. Error**	**Statistic**	**Statistic**
Statistic	23	69	116	185	136.52	3.662	17.560	308.352
Valid N (listwise)	23							

Result Description Indicator Variable Interest in Learning

The results of the indicator description on the learning interest method variable obtained a range score of 75, a minimum score of 103, a maximum score of 178, a mean score of 123.30. std score. deviation of 20,621, variance score of 425,221. These results were obtained from filling out questionnaires conducted on 23 respondents.

Table 3. Statistical Description of Learning Interest Variables

Descriptive Statistics								
	N	**Range**	**Minimum**	**Maximum**	**Mean**		**Std. Deviation**	**Variance**
	Statistic	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Std. Error**	**Statistic**	**Statistic**
Statistic	23	75	103	178	123.30	4.300	20.621	425.221
Valid N (listwise)	23							

Normality Test Results

The normality test results were based on the one sample Kolmogorov Smirnov test. The conditions used are from a population with a normal distribution with a significant level of 0.05 or 5%. The jigsaw learning method variable obtained a value of 0.581 which means 0.581 0.05, and then the data is usually distributed. While the learning interest received a value of 0.071 which means 0.071 0.05, the data is usually distributed.

Table 4. Normality Test

One-Sample Kolmogorov-Smirnov Test

		X	**Y**
N		**23**	**23**
Normal Parameters a	Mean	136.52	123.30
	Std. Deviation	17.560	20.621
Most Extreme Differences	Absolute	.162	.269
	Positive	.162	.269
	Negative	-.121	-.162
Kolmogorov-Smirnov Z		.777	1.291
Asymp. Sig. (2-tailed)		.581	071
a. Test distribution is Normal.			

Homogeneity Test Results

The homogeneity test results based on the output test of homogeneity variance obtained a significant value of the jigsaw learning method and learning interest of 0.517. from these results, the significance value is 0.517 > 0.05, which means that the two data are said to have standard homogeneity.

Table 5. Homogeneity Test

Test of Homogeneity of Variances			
Jigsaw towards interest			
Levene Statistic	df1	df2	Sig.
.427	1	44	.517

Linearity Test Results

The linearity test results obtained a significant value of 0.218, which is more than 0.05 (0.218 > 0.05). It can be concluded that the relationship between the two variables X and Y variable jigsaw learning method and interest in learning there is linear.

Table 6. Linearity Test

ANOVA Table						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Y * X Between Groups	(Combined)	9174.659	16	573.416	9.579	.005
	Linearity	7458.151	1	7458.151	124.591	.000
	Deviation from Linearity	1716.508	15	114.434	1.912	.218
Within Groups		359.167	6	59.861		
Total		9533.826	22			

Simple Linear Regression Test Results

The results of simple linear regression analysis obtained values that F count = 75,456 with a significance level of 0.000 < 0.05, then simple linear regression analysis can be used to predict the participation variable or in other words, there is an effect of the jigsaw learning method variable (X) on interest in learning (Y).

Table 7. Simple Linear Analysis

ANOVA[b]					
Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1 Regression	7458.151	1	7458.151	75.456	.000a
Residual	2075.675	21	98.842		
Total	9533.826	22			
a. Predictors: (Constant), X					
b. Dependent Variable: Y					

The result of the Coefficient of Determination

The results of the analysis of the coefficient of determination obtained the value of the output percentage of the influence of the jigsaw learning method variable on interest in learning from the analysis of the coefficient of determination (R square) of 0.782. it means that the jigsaw learning method affects the learning seminar by 78.2%, while other factors outside the study influence the remaining 11.8%.

Table 8. Analysis of the Coefficient of Determination (R2)

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.884a	.782	.772	9.942
a. Predictors: (Constant), X				

Statistical Hypothesis Results

The results of hypothesis testing obtained constant values of -20,060 and coefficients of 1,049, so the regression equation between the jigsaw learning method variables and learning interest was Y = -20,060 + 1.049. the results of the significant value that 0.000 0.05. a positive coefficient means a positive and significant influence between the jigsaw learning method and students' interest in learning.

Table 8. Coefficients

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-20.060	16.609		-1.208	.241
X	1.049	.121	.884	8.687	.000
a. Dependent Variable: Y					

Discussion

The result of this research is that the jigsaw learning method influences the learning interest of Buddhist high school students. The preliminary survey provides an overview of the problems that occur in students when participating in the learning process. So that students' interest in learning does not increase and tends to decrease, it is necessary to increase student interest in learning by using the jigsaw learning method. Problems occur when the student learning process is bored and lazy, learning is monotonous, choosing to work individually, being more preoccupied with the world itself, and being passive when participating in classroom learning. The problems that occur make the learning process ineffective.

Conclusion, Acknowledgements, Funding

Based on the results of research and discussion on the effect of the jigsaw learning method on the learning interest of high school students in Pesawaran Regency, it can be concluded that the known results are that t count > t table (8.687 > -1.208) or sig (0.000 0.05), so it can be supposed that H_0 rejected Ha accepted. Thus, there is an influence of the jigsaw learning method on the interest in learning of Buddhist high school students. And the significant impact of the jigsaw learning method on the excellent learning of Buddhist high school students in Pesawaran Regency can be seen from the R square of 78.2% influenced jigsaw learning method. In comparison, other factors not examined by researchers influence 11.2%. Based on the results of this study, theoretical and practical implications can be stated as follows: (1) this study implies that the jigsaw learning method has a significant role for Buddhist high school students in Pesawaran Regency because the jigsaw learning method is done by forming all small groups and trying to build good cooperation with group friends in solving a problem. (2) the results of this research have a significant impact in context on the learning process. This can be applied to Buddhist high school students in Pesawaran Regency who try to follow the learning process well in class. The results of the research conducted by this researcher indicate the influence of the jigsaw learning method on students' interest in learning. The researcher realizes that there are shortcomings in the implementation of this research, so the researchers give suggestions for high school students to keep a passion for learning, be active in learning, be able to work together in groups, and be able to develop how to think critically, and continually increase their interest in learning in following the learning process. Schools are used as places for researching to continuously improve students' interest in learning by using the jigsaw learning method. And for readers, this research is expected to provide a good picture so that readers can train themselves to increase their interest in learning by using this learning method in the teaching and learning process in the classroom.

All praise and gratitude the writer prays to the presence of god Almighty. Because of His blessings and gifts, so the writer can finish this research. With completion of this research, it is not an end, but a new beginning to start a new life advanture. The author is fully aware that there are people who contribute to the completion of this research. There is no best offering that the author can give other than thank Eko Pramono, S.Pd.B., M.Pd, and Hendri Ardianto, S.Pd.B., M.Pd as supervising lectures who have been patient, took the time, volunteered their energy and thoughts and also paid attention in providing assistance during the process of writing this research. Thank you alse to STIAB Jinarakkhita Lampung for giving the opportunity to be able to conduct research there. All the shortcomings and imperfections of this research, the authors really look forward to input, criticism, and constructive suggestions towards the improvement and refinement of this research. There were quite a lot of difficulties that the writer experienced in preparing this research, but praise God, it was resolved properly. Finally, the writer hopes that this research will be useful for all parties and that good deeds that have been given will be rewards by God Almighty.

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