

The Influence Between Ice Breaker and Learning Motivation Toward Learning Achievement of Elementary School Social Science Subject

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Abstract—This study aims to examine the influence between ice breaker and learning motivation toward social science subject learning achievement. This study used correlational research design with quantitative approach. The sample of this study were 117 of fourth grade students of Elementary School in Dawe Sub-district, Kudus Regency, Province of Central Java taken by using nonprobability sampling technique. Meanwhile, the data collection techniques in this study were realized by the use of questionnaires, documentation, and interviews. The instruments were validated through validity test and reliability test. The eligible data were judged by having prerequisite analysis in the test of normality, linearity, or multicollinearity. The data were analyzed by using several techniques, including descriptive statistics analysis, simple correlation analysis, multiple correlation analysis, simple linear regression analysis, and multiple regression analysis. The results showed that: (1) there was a positive influence between ice breaker toward Social Science subject learning achievement proven by the correlation coefficient showing strong influence with the contribution of 39,2%; (2) there was a positive influence between learning motivation toward Social Science subject learning achievement proven by the correlation coefficient showing strong influence with the contribution of 51.1%; (3) there was a influence between ice breaker and learning motivation together toward Social Science subject learning achievement proven by the correlation coefficient showing strong influence with the contribution of 55.2%. Based on the results, it can be concluded that there is a positive influence between ice breaker and learning motivation toward the Social Science subject learning achievement of the fourth grade students of State Elementary School.

Keywords—*Social Science subject learning achievement; ice breaker; learning motivation.*

I. INTRODUCTION

Education has a very important role in the process of improving the quality of human resources. The quality of education can be measured through the quality of the young generation who have a position in

accordance with educational objectives. Based on Law no. article 4 of 1989, it is mentioned that the national education aims to educate the life of the nation and develop a complete Indonesian man,

Law of the Republic of Indonesia no. 20 of 2003 on the National Education System affirms that the National education functions to develop the ability and shape the character and civilization of dignified nation in order to educate the life of the nation, aim to develop the potential of learners to become humans who believe and piety to God Almighty, noble, healthy, knowledgeable, capable, creative, independent, and responsible citizens.

To encourage the achievement of national education objectives, the regulation of the ministry of national education (permenodikbud) no. 41 of 2007 on the standard process which states that learning in every elementary and secondary education unit should be interactive, inspirational, fun, challenging, and motivate learners to participate actively was issued.

The implementation of education is closely related to learning. According to Susanto (2014: 4), learning is an activity that a person deliberately performs in a conscious state to acquire a new concept, understanding, or knowledge to enable a person changing his behavior in thinking, feeling, or acting

The seriously rigid learning process without the slightest nuance of excitement would be very quickly boring. According to Lucy (2012: 50), our brain cannot be forced to focus for a long time. This can be examined by the use of age benchmark. For example, for a 5-year-old children, the optimal focus time span that can be done is only 5 minutes, for 15-year-olds, the focus time span is only 15 minutes. Meanwhile, if a person is 35 years old or 60 years the optimal focus is 30 minutes. Therefore, 30 minutes is the maximum focus time range to avoid excessive brain fatigue. [15] states that when the mind can no longer be focused, it immediately needs efforts to accelerate its concentration again. The possible

effort that can be done by conventional teachers is to increase the intonation of a louder voice, threat or even pound the table to call attention again. Such effort can actually further aggravate the learning situation because the actual learning process needs student emotional involvement. Thus, it is very important for teachers to master various ice breaker techniques in an effort to continue to maintain the stamina of learning the students.

Another effort to improve students' learning achievement is to improve students' learning motivation. Motivated learners will show a high cognitive process in learning, absorb, and remember what has been learned (Rifa'i, 2012: 135). Motivation has a strategic role in one's learning activities. No one learns without motivation. No motivation means no learning activity. The principle of motivation in learning is as a driving force that encourages learning activities, can foster optimism in learning, and can give birth to achievement in learning (Djamarah, 2015: 152).

According to Setyasto (2014: 129) Social Science (IPS) subject has a very wide material coverage and consists of aspects of memorization which may result in low levels of learners' understanding of the material and further can affect the low score of students' learning achievement. These are in line with Feriady's opinion (2012: 2) that IPS subject is regarded as a boring lesson and poorly understood by students because most of the material in IPS subject is memorizing subject material. "The teaching of IPS subject in schools tends to focus on the mastery of memorization, uses teacher centered learning process, and lacks of utilization of existing learning resources so that the learning situation bores the learners" (Sanusi in Winataputra, 2007: 1.44).

The quality of learning in Indonesia is still not optimal. Learning at school should be done by creating an atmosphere of learning that is inspirational, fun, effective and motivating students. However, it is still found that the learning is less inspirational and less fun. Therefore, it will affect the enthusiasm of students in education. This is evidenced in the ASEAN regional education ranking data in 2017 that Indonesia ranked fifth from nine countries with a score of 0.603. Based on UNESCO data, in Indonesia there were 11% of students failed to complete education. This means that the quality of education in Indonesia has not been optimal. From these problems, there is a need to do efforts in order to improve the quality of education covering learning factors, teachers and students.

The problem also occurred in SDN Raden Said Cluster Dawe Sub-district, Kudus regency. Based on the findings of researchers, the IPS subject learning achievement of the school have not been optimal because 40.2% of students did not pass the passing grade score of the subject (KKM). Also, the ice breaker conducted by teachers has not been implemented optimally. As a result, students were also less active in learning which then can create lack of motivation and concentration of students in following learning activities. From the results of identification, there found several problems that affected the acquisition of IPS subject

learning outcomes, namely, the ice breaker has not been implemented optimally, and the lack motivation of students to study IPS subject.

To strengthen reasons used by the researchers in studying ice breakers and learning motivation, here are some studies that have been done by previous researchers which show significant results between giving ice breakers and learning motivation with learning achievement. One of which is a research conducted by [19] with the title "The Implementation of Ice Breaking in Physics Learning to Improve Motivation and Learning achievement ". The results show that learning activities by applying ice breaking games can improve the learning motivation and physics learning outcomes of tenth grade students of Senior High School (SMA) Muhammadiyah 1 Trimurjo.

Another example of the previous research comes from the results of a research conducted by Hsiang-Yung Feng, Jin-Jun Fan, Hui-Zhen with the title "The Relationship between Learning Motivation and Achievement In EFL". The results show that learning motivation is the key factor in learning English as a foreign language and there are some differences in gender for students' learning motivation. However, the achievement of EFL learning is influenced by motivation and previous learning experiences. Another research comes from a research conducted by Anike Putri, Emilia Dewiwati Pelipa about "The relationship between students' learning motivation toward the students' learning achievement of Natural Science (IPA) subject in primary school". The results show that there is a significant relationship between learning motivation and students' learning achievement in IPA subject in State Elementary School (SDN) 2 Merpak.

Based on the description of the background, the researchers consider that this study is very important for researchers themselves in order to increase the variety of the study of ice breakers, learning motivation, and learning achievement. For that, there is a need to do investigation in the form of research with the title "The Influence between Ice Breaker and Learning Motivation toward the IPS Subject Learning Achievement of the Fourth Grade Students of SDN Raden Said Cluster, Dawe Sub-district, Kudus Regency".

For more, the purpose of this study were (1) to examine the influence between ice breaker toward IPS subject learning achievement; (2) to examine the influence between learning motivation toward IPS subject learning achievement; (3) to examine the influence between ice breaker and learning motivation together toward IPS subject learning achievement.

II. METHOD

The research method of this study was quantitative research with correlational research design. Correlation research is a research conducted by researchers to determine the level of influence between two or more variables without making changes, additions, or manipulation of data that already exists.[1].

The population in this study were the fourth grade students of SDN Raden Said Cluster, Dawe Sub-district, Kudus Regency, amounting to 117 students. Meanwhile, this study took place at: SDN 2 Kajar, SDN 3 Kajar, SDN 1 Colo, SDN 1 Kuwukan, and SDN 1 Dukuh Waringin. For more, the type of sampling used by the researchers in this study was Saturated Sample. In addition, the variables in this study were independent variables (ice breaker and learning motivation) and dependent variable (students' IPS subject learning achievement).

The data collection techniques in this study were performed by the use of questionnaires for ice breaker data and learning motivation, while documentation was aimed at IPS subject learning achievement data and supported by interviews to teachers and students. Before the research instruments were used, the researchers tested the validity and reliability of the instrument. They were tested especially in other Elementary Schools (SD) which were not used as research samples in order to avoid instrument leakage. It was done to make the researchers know the instruments that have been made right or not. After knowing the accuracy of the instrument, the researchers chose the instrument items used as a tool to measure research variables. This study used 30 students as respondents to the trial. Then r count should be bigger than r table, namely 0,61 (with significant level 5%). The formulae used to test the validity of the instrument and the instrument was Pearson Product Moment formula. Alternatively, to know the reliability, this study used Alpha Cronbach formula. At last, to help the calculations, the researchers used SPSS software version 16.

The prerequisite test of data analysis was done by normality test, linearity test, and multicollinearity test first. After that, it proceeded with the hypothesis test consisting of simple correlation analysis, multiple correlation analysis, simple linear regression analysis, and multiple regression analysis.

III. RESULTS AND DISCUSSION

The results of the study about the influence between ice breaker and learning motivation toward the IPS subject learning achievement of the fourth grade students of SDN Raden Said Cluster, Dawe Sub-district, Kudus Regency cover several things as follows.

Descriptive Analysis Results

Descriptive Analysis of Ice Breaker (X1)

The descriptive data analysis of ice breaker obtained from students' questionnaires consisted of 26 statements with four answer choices (Likert scale). Based on data processing, the results of the descriptive analysis of students' ice breaker questionnaire were as follows:

Table 1. Ice Breaker Data

Interval	Criteria	Frequency	Total percentage
82 - 100	Very Good	40	34.19%
63 - 81	Good	60	51.28%
44 - 62	Fair	17	14.53%
25 - 43	Poor	0	0%
Total		117	100%

Table 1 shows the results of breaker frequency distribution. There were 40 students with very good criterion which was 34,19%, 60 students or 51,28% had good criterion, 17 students or 14,53% had fair criterion, and 0% (0 students) in poor criterion.

Descriptive Analysis of Learning Motivation (X2)

The data of the descriptive analysis of learning motivation obtained from questionnaires of student respondents consisting of 28 statements with four answer choices (Likert scale). Based on the data processing, the results of the descriptive analysis on students' questionnaire in learning motivation were as follows:

Table 2. Learning Motivation Data

Interval	Criteria	Frequency	Total percentage
82 - 100	Very Good	64	54.70%
63 - 81	Good	51	43.58%
44 - 62	Fair	2	1.70%
25 - 43	Poor	0	0%
Total		117	100%

Table 2 shows the results of the frequency distribution of learning motivation. It was found that there were 64 students with very good criterion equal to 54.70%, 51 students or 43.58% gained good criterion, 2 students or 1.70% had fair criterion, and 0 % (0 students) in poor criterion.

Descriptive Analysis of Social Science Subject Learning Achievement (Y)

The students' learning achievement data were obtained from the cognitive domain of IPS subject. Specifically, they were derived from the documentation of midterm test scores. Further, the scores were grouped according to permendikbud No. 53 Year 2015. Moreover, based on data processing, it was obtained the results as follows.

Table 3. The Data of Students' Learning Achievement (cognitive domain)

Categories	Scores	Frequency	Percentage	Average
Very Good	86-	35	29.9%	
Good	100			

Good	71-85	65	55.6%	79
Fair	56-70	13	11.1%	
Poor	≤ 55	4	3.4%	
Total	117		100%	Good

Table 3 shows the results of the frequency distribution of learning motivation. There were 35 students with very good criterion equal to 29.9%, 65 students or 55.6% had good criterion, 13 students or 11.1% obtained fair criteria, and 3.4% (4 students) in poor criterion.

Prerequisite Data Analysis Test

Normality test

Normality test was conducted to determine whether the data of ice breaker, learning motivation, and students' learning achievement of IPS subject were normally distributed or not. The test was conducted using Liliefors test method with Kolmogorov-Smirnov. It resulted that the normality test of the ice breaker data gained significance value of 0.256, learning motivation data of 0.544, and IPS subject learning achievement data of 0.146. Thus, it could be concluded that the distribution of data from the three variables were normally distributed because of the significance values were more than 0.05.

Data Linearity Test

Linearity test aimed to determine whether two variables had a linear influence or not significantly. To do so, this study used SPSS by using Test for Linearity at significance level 0,05. The results obtained by the linearity test of ice breaker data with IPS subject learning achievement was 0.182 and the result of the linearity test of learning motivation with IPS subject learning achievement data was 0.078. Thus, it could be concluded that the influences between ice breaker with IPS subject learning achievement and learning motivation with IPS subject learning achievement were linear because of the significance of more than 0.05.

Multicollinearity Test

This multicollinearity test is used to prove whether or not there is a linear relationship between independent variables should because they are not allowed to have a perfect relationship. In this study, this test was conducted by using SPSS for Windows 16 series program. The decision criteria was based on the condition that if VIF value has less than 10 and Tolerance value is more than 0.1 then there is no correlation of multicollinearity. Additionally, the multicollinearity test obtained that the tolerance value of ice breaker in the Collinearity Statisticseh column was 0.561 and the VIF value was 1.783, while the tolerance value of learning motivation in the Collinearity Statisticseh column was 0.561 and the VIF value was 1.783. These results showed that there was no

multicollinearity correlation if VIF value less than 10 and Tolerance value more than 0.1. Thus, it could be concluded that the research data had no influence multicollinearity.

Hypothesis testing

Simple Correlation Test

Hypothesis test analysis was used to test the research hypothesis that has been proposed in this study. In this study, the researchers used the formula of Product Moment correlation.

Table 4. Simple Correlation Results

Notes	Sig	Pearson Corellation	r _{table}	Notes
X₁ and Y	0.000	0.626	0.195	Strong
X₂ and Y	0.000	0.715	0.195	Strong

Table 4 shows that there was a strong influence between ice breaker (X1) toward IPS subject learning achievement with the value of r_{count} of 0.626. It was because they were at interval of 0.600 – 0.799 with positive direction of relation. It was said to because the higher positive r value, the higher IPS learning achievement would be. Meanwhile, the influence between learning motivation (X2) toward IPS learning achievement obtained r_{count} of 0.715 indicating that there was a strong influence between learning motivation toward IPS learning achievement because it was at interval 0.600 – 0.799. For more, the direction of the influence was positive because the value of r positive means the higher the independence of learning, the higher IPS learning achievement.

Some of previous studies results which supported these findings came from Parisa Yeganehpour's study with the title "Using Ice Breakers in Improving Every Factor Which Considers in Testing Learners Speaking Ability". Her study shows that Ice breaker is able to improve English speaking skills as a foreign language which has four main aspects: (1) Structure or grammar; (2) Pronunciation; (3) Smoothness; (4) Vocabulary so that the learning achievement of EFL learners increases.

Another study supporting these findings was from the study of [3] entitled "The Influence of Student Motivation to Student Achievement of Science in Elementary School (Case Study to Students of Class IV of SDN Tarumanagara Tawang Subdistrict of Tasikmalaya City)." The results show that learning motivation has effects on student's learning achievement.

Multiple Correlation Analysis (R)

Multiple correlation analysis is also used to find the direction and strength of the influence and proves the hypothesis of the influence of two independent variables or more together with one dependent variable using multiple correlation techniques [17]. The results of the calculation of multiple correlation analysis can be seen in the table as follows.

Table 5. Multiple Correlation Analysis Test Results

Notes	R	R Square	Adjusted R Square	Std. Error of the Estimate
X1 and X2 toward Y	.743 ^a	.552	.554	6.99172

Table 5 shows that the value of R calculation was greater than the value of R table or $0.743 > 0.195$, then H_a which read "there is a positive influence between ice breaker and learning motivation toward IPS subject learning achievement" received with a strong influence level.

The supporting research to this finding is a research by [9] which entitled "The First Class: Using Icebreakers to Facilitate Transition in a Tertiary Environment" indicating that ice breakers are capable of spurring initial student experience and affecting students' perceptions of developing skills. Ice breakers are used for the transition of learning situations. They are designed to facilitate the involvement and development of students in the disciplines that have been provided. It turns out that this activity provides a success criterion.

Also, the research of Dimas Qondias with the title "Determination of Motivation to IPS Learning Result" shows that there is direct determination between achievement motivation with IPS subject learning achievement of 16.9% with ($r = 0.412$; $\rho = 0.016$). This condition indicates that the result of IPS learning is contributed by motivation.

Simple Linear Regression Analysis

Simple linear regression analysis according to [17] is based on the functional or causal relationship of one independent variable with one dependent variable. For more, the results of simple linear regression analysis of this study can be seen in the table as follows.

Table 6. The Results of Simple Linear Multiple Regression Analysis

Variables	R Square	Sig.	Notes
X1 and Y	0.392	0.000	Significance, 39,2%
X2 and Y	0.511	0.000	Significance, 51,1%

Table 6 presents that the influence between ice breaker toward IPS subject learning achievement contributed 39.2% sig,0,000 <0.05 and the influence of learning motivation to IPS subject learning achievement contributed 51.1% sig,0.000 <0.05 value. Based on sig level. 0.000 or less than 0.05, it could be concluded that the regression coefficient was significant which meant the ice breaker significantly influenced the IPS subject learning achievement as many as 39.2% and learning motivation significantly influenced IPS subject learning achievement by 51.1%, while the rest was influenced by other factors.

Mappease (2009: 2) argues that poor learning motivation is one of several factors causing low learning outcomes leading to a decrease in the quality of education. According to David (2012: 247) Motivation learning is important in determining learning achievement. Thus, the greater the motivation the greater the success of learning it has (Mulyaningsih: 2014: 442)

Multiple Regression Analysis

Multiple regression analysis, according to [17] is used by the researcher if the researcher intends to predict how the state (ups and downs) of the dependent variable (criterium), if two or more independent variables as predictors are manipulated (i.e decreased in value). Meanwhile, the results of the calculation of multiple linear regression analysis in this study can be seen in the table as follows.

Table 7. The Results of Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.743 ^a	.552	.544	6.99172

a. Predictors: (Constant), Motivasi Belajar, Ice Breaker

b. Dependent Variable: Hasil Belajar

Table 7 shows that the influence of ice breaker and learning motivation toward IPS subject learning achievement achieved R Square of 0.552 with contribution of 55.2%. It could be concluded that the multiple regression coefficient was significant, which meant that ice breaker and learning motivation had significant influence toward IPS subject learning achievement of 55.2%.

The result of motivated behavior is a consequence of previous similar behavior. If students gain reinforcement for certain behaviors, they tend to repeat them with enthusiasm. Otherwise, students tend to lose interest and perform poorly. (Junear, 2016: 67)

IV. CONCLUSIONS

Based on the analysis and discussion of this research, it can be concluded that: (1) There is positive influence between ice breaker toward IPS subject learning achievement with pearson correlation of 0,626 and contribution equal to 39,2%; (2) There is a positive influence between learning motivation toward IPS subject learning achievement with pearson correlation value of 0.715 and contribution of 51.1%; (3) There is a influence between ice breaker and learning motivation together toward IPS subject learning achievement with pearson correlation value equal to 0.743 and contribution equal to 55.2%. From these research results, it can be concluded that there is a positive influence between ice breaker and learning motivation toward the IPS subject learning achievement of the fourth grade students of SDN Raden Said Cluster, Dawe Sub-district, Kudus Regency.

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