

The Influence of Reading Habit on The Science Learning Outcomes of Class VII Even Semester Students at MTS Negeri 2 Surakarta

Anggi Setyani Febrian^{a,1}, Annur Indra Kusumadani^{b,2*}

^aBiology Education, Universitas Muhammadiyah Surakarta, Jl. Ahmad Yani, Tromol Pos1, Pabelan 57102, Indonesia

^bFaculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta, Pabelan 57162, , Indonesia

¹anggi_setyani@ums.ac.id; ²aik120@ums.ac.id;

* Corresponding Author



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ABSTRACT

Literacy skills especially reading in Indonesia are still low. To improve reading literacy, literacy training can be done before learning. Literacy reading habits can be done with 15 minutes of reading material before learning begins. The aim of this research is to determine the effect of reading habits on the science learning outcomes of class VII students in the even semester at MTs Negeri 2 Surakarta for the 2023/2024 academic year. This research method is a quantitative descriptive method. The type of research is quasi-experimental research with purposive sampling technique. The data collection techniques used were observation, interviews, tests, questionnaires and documentation. Based on the results of data analysis that has been carried out using the linearity test, it gets a significant value of $0.734 > 0.05$, so there is a linear relationship between the two research variables and the results of the Mann Whitney test, a significant value of $0.0007 < 0.05$, meaning there is a difference in the average of the samples. second. So it can be concluded that there is a significant influence between the habit of reading on the science learning outcomes of class VII students at MTs. Negeri 2 Surakarta Academic Year 2023/2024

KEYWORDS

Learning outcome
Reading habit
Science

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1. Introduction

Education plays an important role in life because education is a vehicle used to create quality and competent human resources in their fields. Education is an effort to provide certain knowledge, insight, skills and expertise to individuals in order to develop their talents and personalities (Jufri, 2017). Education is a process by which a person acquires knowledge, hones skills or abilities and broadens one's horizons. To be able to obtain this, someone must learn. Learning and teaching are processes that cannot be separated from activities in the field of education.

Learning effectiveness is very useful as a student's success in achieving certain goals that can bring optimal learning results. The effectiveness of learning can be obtained through efforts and is a useful result obtained after the teaching and learning process (Pangestika, 2018:). In the school environment, one of the duties of a teacher is to develop students' reading attention and writing skills. Reading and writing are important factors for entering the world of education. This can be done by getting used to reading activities before learning begins. According to Rianda (2019) in his research, he explains that reading is an activity process that is carried out and used or exploited by someone to obtain messages conveyed through written language.

Nowadays, with the development of technology, many students are reluctant to read books. For them reading books seems like a heavy and boring activity. It cannot be denied that the increasingly rapid sophistication of technology has made students more interested in gadgets than books. Therefore, so that book reading activities can continue to be carried out, electronic books (e-books) are being held by taking advantage of digital advances. Along with advances in technology, now we are no stranger to electronic books (e-books) which are useful for making learning easier. With this technological advancement, it is hoped that learning can take place effectively.

Compared to other countries in the world, it must be acknowledged that literacy in Indonesia is still very low and far behind. Indonesia's literacy index in the world based on the 2018 PISA Survey states that Indonesia is ranked 74th out of 79 countries. According to Fuadi (2020) stated in his research that there are several factors causing the low scientific literacy abilities of Indonesian students which were put forward by researchers in relation to the results of PISA Indonesia. These include a). Selection of textbooks, b). Misconceptions, c). Non-contextual learning, d). Low reading ability, and e). The learning environment and climate are not conducive. Reading literacy plays a crucial role in improving student learning achievement. Good reading skills enable students to understand and analyze information from various sources, which in turn supports their understanding in various subjects. Regular reading enriches students' vocabulary. A broad vocabulary helps students understand complex concepts and express their ideas better in exam answers or papers.

Based on observations made at MTs Negeri 2 Surakarta, it was found that grade 7 students were not accustomed to reading teaching materials without assignments or orders from the teacher. Although there are some students who are interested in reading fiction books, fairy tales, or other reading materials, it is not uncommon for students to be reluctant to read books without a teacher's order. Most research on reading habits and science learning outcomes has been conducted in the context of general education (Purnamaningwulan, 2019; Kumara & Kumar, 2019; Hassan, Latiff, Muhamad & Abdullah 2021). This study fills the gap by focusing on the MTS setting, which has unique characteristics as it combines the general curriculum with Islamic education. Science and religious literacy integration research has the potential to explore how reading habits that include religious and scientific texts can influence science learning outcomes (Nisa, Gloria, & Ubaidillah. 2021; Khofifah & Yuliani, 2023; Astutik, Putri, Masruroh, Alfariza & Fauzi, 2022).

Reading literacy is an important factor that can improve junior high school students' science learning outcomes. Therefore, efforts are needed to improve students' reading literacy skills in science learning. School literacy activities will run well if all school members can be involved. It is expected that the application of literacy activities in learning will have a significant positive effect on improving student learning outcomes. Therefore, the author is interested in conducting experimental research with the title "The Effect of Literacy Habituation in Science Learning on Student Learning Outcomes at MTs Negeri 2 Surakarta Academic Year 2023/2024".

2. Method

The research that will be carried out is experimental research with a quasi-experimental type of research. Quasi-experimental research is a design that uses a control group, but does not fully function to control external variables that can influence the implementation of the experiment. The research was carried out at MTs Negeri Muhammadiyah 2 Surakarta. The research was carried out in the even semester of January 2024 – June 2024.

The population in this study were class VII students for the 2023/2024 academic year . The samples used in this research were classes VII A2 and VII A3 with 28 students in each class. The sampling used is by using a purposive sampling technique, namely taking samples based on sample data sources with certain considerations. This research took samples from class VII A2 and class VII A3, because these two classes were equivalent after class equalization testing.

This research uses interview, test and documentation methods. The interview method is the process of obtaining information from sources by asking several questions related to research face to face. Interviewers usually question sources/respondents using a guide . This test method uses questionnaires, pre-test and post-test as research instruments to obtain student learning outcomes. The research object is at MTs Negeri 2 Surakarta. Documentation in a broad sense means any process of evidence that is based on any type of source, whether written, oral, pictorial or archaeological (Nilamsari, 2014). This documentation method consists of searching for data in the form of the profile of MTs Negeri 2 Surakarta, the learning process, and data on the number of students.

Data analysis from data collection is an important stage in completing a scientific research activity. Data collected without analysis becomes meaningless, meaningless, dead and silent data (Tabrani, 2023). Data analysis used to determine the effect of reading habits on the science learning outcomes of class VII students in the even semester of MTs Negeri 2 Surakarta for the 2023/2024 academic year was using the SPSS measuring instrument with the Linearity Test and the Mann Whitney U Test.

3. Results and Discussion

Based on the results of the linearity test, the Sig value is known. Division form Linearity is $0.734 < 0.05$. So it can be concluded that there is a direct relationship between the values control class pre-test and experimental class pre-test. Based on the results of the Mann Whitney U test, the Sig value is known. equal to $0.007 < 0.05$. So it can be concluded that there is a significant difference in the post-test scores for the control class and the post-test for the experimental class.

This research aims to determine the effect of the habit of reading before learning on the science learning outcomes of class VII students in the even semester. Of the 5 classes that made up the population in this study, only 2 classes were used as research samples, namely class VII A2 as the experimental class and class VII A3 as the control class. In these two classes, a pre-test and post-test were given on science learning and a linearity test and Mann Whitney U test were carried out.

Based on the results of the linearity analysis, it shows that there is a linear relationship between the independent variable and the dependent variable. This test was carried out to determine whether there was a relationship between the two research variables. The data used to see whether there is a relationship between these two variables was taken from pre-test data for the control and experimental classes. Giving a pre-test at the beginning of research activities to both groups to measure group equality. After being declared equal, then the two classes/groups are given action. The pre-test was carried out before learning started in the control class and experimental class with 10 multiple choice questions about the material to be taught. The experimental class implemented reading literacy activities during learning and the control class without reading literacy activities.

A part from the linearity test, the Mann Whitney U test was carried out, with the data used to determine whether there were differences between the two unpaired samples was post-test data. The reason why the Mann Whitney U test is used is because this test condition is that the data is distributed non-normally and is not homogeneous. So the Mann Whitney U test is used to test the hypothesis using post-test data. The post-test is given at the end of the lesson, after the delivery of classification material is complete in both classes. 10 multiple choice questions were given with a higher and deeper cognitive level compared to the pre-test questions. In the experimental class, after the presentation of the material was finished, students were given a break and ice-breaking, then given instructions to re-read the material that had been given from the beginning of the meeting to the end, and finally they were given a post-test. Meanwhile, in the control class, after the presentation of the material was finished, students were given a break and ice-breaking, without instructions to re-read the material and then given a post-test. This is what is being studied, whether there is a difference between the experimental class that was given treatment for reading and the control class that was not treated. So that a significance value is obtained as in table 3, it can be concluded that there is an influence between the habit of reading and science learning outcomes.

Based on the results of tests that have been carried out, the implementation of reading literacy activities during learning shows an increase in student learning outcomes. The source of reading literacy during learning is not only in the form of reading the material to be taught, but can be done by watching videos of learning material and then summarizing them, it can also be done by presenting the results of students' understanding during learning. This activity can build a literacy habit of 15 minutes of reading during learning, either at the beginning, middle or end of the lesson. Therefore, after carrying out the post-test, significant results were obtained between reading habits and student learning outcomes. Apart from that, the habit of reading can be done during free time such as break time, free class hours. So that the more students get used to reading without direction, it will have a positive impact on their learning outcomes and habits at school.

The influence of reading habits on student learning outcomes is in line with research by Tabrani (2023) which states that there is a significant relationship between literacy skills and influential learning outcomes,

in accordance with Alberta's theory which states that literacy is the ability to read and write, increase knowledge and skills, think critically. in solving problems, as well as the ability to communicate effectively which can develop potential and participate in community life. So the results stated that literacy towards learning outcomes was positive. According to Hendrika and Zainuddin in Antoro (2021), their research explained that they found that there was a significant influence between literacy programs on student learning achievement. The literacy program variable used is the frequency of students carrying out the 15 minute program of reading non-learning books, while student learning achievement is seen from their report card grades. Reading habits have long been considered an important factor in academic success. In the context of science learning, good reading habits can help students understand complex scientific concepts, expand their technical vocabulary, and develop critical thinking (Mol & Bus, 2011). Research by Torppa et al. (2020) shows that there is a positive relationship between reading habits and students' academic achievement in various subjects, including science.

The results of this study could have important implications for teaching practices at MTS Negeri 2 Surakarta and similar schools. If a significant positive relationship was found between reading habits and science learning outcomes, this could encourage the implementation of programs that support and encourage reading habits among students. For example, schools might consider enriching their libraries with interesting and age-appropriate science books, or integrating more reading activities in the science curriculum (Cuevas et al., 2012). However, it is important to consider other factors that might affect science learning outcomes besides reading habits. These could include teaching quality, students' socio-economic background, or access to educational resources. Research Tsai (2004) showed that while reading habits are important, factors such as intrinsic motivation and learning strategies also play a significant role in science learning outcomes. Research by Jerrim and Moss (2019) shows that the type of reading can affect students' academic performance differently.

Based on theoretical studies and relevant research, it increasingly strengthens that the habit of reading has an influence on student learning outcomes. Proving this hypothesis can provide information that the more often reading activities are carried out before learning, the higher the science learning outcomes of class VII students. Thus, it can be concluded that reading literacy has an important role in supporting students' success in science learning. The better students' reading literacy skills, the higher their chances of achieving optimal science learning outcomes.

4. Conclusion

Based on the results of the data analysis, there is a significant influence between the habit of reading on the science learning outcomes of class VII students in the even semester at MTs. Negeri 2 Surakarta Academic Year 2023/2024. To improve student learning outcomes, a high interest in reading is needed. Therefore, the habit of reading in the school environment can be implemented from an early age.

This study only focuses on the influence between reading literacy and student achievement. It does not cover other factors that may affect learning achievement, such as motivation, learning style, family environment, and so on. In addition, this study does not take into account external factors that may affect the relationship between reading literacy and learning achievement, such as socio-economic background, culture, and education policy. Considering the limitations above, suggestions for further research are to expand the scope, increase the sample size, use more valid and reliable instruments, and consider relevant external factors.

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