



Description of Student Attitudes in Physics Subjects Towards Reading Interest

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ABSTRACT

Purpose of the study: This study aims to determine the attitudes of class XI students of Public senior high school 3 Muaro Jambi and Senior Secondary School Anagada towards reading interest.

Methodology: This research is quantitative research. The population in this study were class XI students of Public senior high school 3 Muaro Jambi and Senior High School Anagada. The sampling technique used simple random sampling so that 60 students were obtained. The data collection technique in this research is by distributing reading interest and attitude questionnaires to students via Google Form which contains positive and negative statements for each student. Data analysis uses descriptive statistics.

Main Findings: The results of the research show that the attitudes of high school students towards learning physics tend to be in the good category. Then it was discovered that high school students' reading interest in physics learning tended to be in the good and very good categories. These findings can be the basis for further research to further explore the factors that influence students' reading preferences. It is hoped that further research can provide a deeper understanding of the dynamics of high school students' interest in reading.

Novelty/Originality of this study: This research was conducted using a quantitative descriptive method that describes students' learning attitudes and reading interest in high school physics subjects. This can provide valuable insight into curriculum development, teaching methods, and efforts to increase students' interest and understanding of physics reading material.

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1. INTRODUCTION

Education is a process to improve students to be able to adjust well in their environment, thus fostering good changes in themselves [1], [2]. Changes in the sense of improving education, namely as an anticipation of education in the future because it runs according to cultural development. Education is the formation of a personality of a person so that education is not only for transfer of knowledge but also as a determination of one's personality character [3], [4]. So that educational activities consist of several components, namely educators, students, educational goals, educational tools, and educational environment. All constructive components in the education system are interconnected in order to achieve educational goals. So it can be concluded that education

is a process of increasing students and has components consisting of each function to achieve educational goals [5], [6]. School as one of the places of education involving teachers with students.

In national education there is an education system that aims to increase the potential of students so that they become democratic and responsible citizens [7], [8]. Human resources play a very important role in efforts to improve the quality of education and development of a nation both now and in the future. Therefore, an improvement in the quality of education is a major concern for teachers, parents, community, government and students themselves [9], [10]. In the formation of student competencies, one of the elements contained in the 2013 curriculum is in the learning process that undergoes changes. In learning activities it has been designed to form teaching and learning activities [11], [12]. This study is included in learning physics related to student interest in reading, physics is included in natural science that studies natural phenomena or natural environment as well as interactions that show natural phenomena.

Fostering students' interest is a key element in cultivating a vibrant and enriching educational experience. When students are genuinely intrigued and passionate about the subjects they study, the learning process becomes not just a task but a rewarding journey [7], [8]. Recognizing and tapping into their individual interests, whether in science, arts, sports, or other domains, empowers students to connect with the curriculum on a deeper level. It encourages active participation, critical thinking, and a thirst for knowledge [13], [14]. Furthermore, nurturing students' interests extends beyond the classroom, encompassing extracurricular activities, projects, and real-world applications [15]. By creating an environment that values and supports diverse interests, educators can inspire a sense of curiosity, self-discovery, and a lifelong love for learning, laying the foundation for well-rounded and motivated individuals.

Embarking on the journey of physics learning opens doors to unraveling the mysteries of the natural world. Physics is not just a subject; it's a fascinating exploration into the fundamental principles that govern the universe. Imagine understanding the forces that shape our everyday experiences, from the simple motion of an object to the complexities of space and time [16], [17]. Delving into physics allows you to become a curious investigator, questioning the "why" and "how" behind the phenomena we observe. It's a thrilling adventure that challenges your intellect, encourages problem-solving, and sparks creativity [18], [19]. Whether you're intrigued by the intricacies of particle physics, the wonders of electromagnetism, or the cosmic dance of celestial bodies, the study of physics empowers you to comprehend and appreciate the intricacies of the physical world [20], [21]. So, let the allure of physics captivate your imagination, as you embark on a journey of discovery that promises not only knowledge but also a deeper appreciation for the wonders that surround us.

Physics is the science that is built to educate students, which aims to make students think logically, critical, have objective nature, discipline in solving problems both in the fields of physics, other fields, and in everyday life therefore physics really needs to be learned and applied [22], [23]. The use of physics is also very unlimited, but in fields such as technology, electronics, architects, and so on [24], [25]. But in reality, students' attitudes in physics subjects at school are still considered as subjects that are difficult to understand. Students experience a level of difficulty in understanding the physics material explained by the teacher [26], [27]. In this study aims to find out how much influence the interest in reading high school students, because reading is a very important need for life by reading someone can get as much knowledge as possible

Many factors influence students in the low interest in reading physics textbooks. Interest in reading is one that can be a driver to influence behavior and actions so that someone is happy and interest in reading activities. The influence of reading interest on physics learning is very large because by reading students gain extensive knowledge [28], [29]. Reading activity is the main thing in every learning that students receive from the teacher's explanation. Based on the results of previous research by Huang et al., [30]. That research is known that students' attitudes towards school subjects can influence their behavior and various educational outcomes. The results of the analysis of variance show that the assessment of interest in Biology and Physics is much higher than in Chemistry, while the assessment of interest in Biology is much higher than in Chemistry and Physics [31], [32]. Physics education aims to develop sophisticated thinking skills and increase conceptual depth, but student interest decreases, emphasizing the importance of teacher quality in cultivating success and positive attitudes [33], [34].

Based on the results of this research, it is necessary to measure student attitudes, especially in physics subjects. The difference between previous research and current research and also the novelty of this research is that there is a research sample and there is also an additional variable, namely students' reading interest, then this research only focuses on one subject, namely physics [33], [34]. The importance research is to be able to find out students' interest in reading in physics learning and also what students' attitudes are in participating in physics learning [35], [36]. The importance of a positive attitude and students' interest in reading in physics learning is because based on the results of previous research, students who have a positive attitude towards a subject apply a deeper learning approach, which ultimately results in higher grades.

Based on the urgency of this research, the researcher's aim is to describe the reading attitudes and interests of high school students, both reading textbooks and other supporting books, especially in learning physics. The importance of reading for students to gain very broad knowledge. The novelty of this research is that this research was conducted using a quantitative descriptive method that describes students' learning attitudes and reading

interest in high school students' physics subjects. This can provide valuable insight into curriculum development, teaching methods, and efforts to increase student interest and understanding of reading material in physics.

2. RESEARCH METHOD

This research is quantitative research. This type of research is quantitative descriptive, namely explaining the chronology of the research, including research design, research procedures in the form of methods. This research uses descriptive statistical methods. This research was conducted at Public High School 3 Muaro Jambi and Senior High School Anagada, with the sample used in this research being class XI as many as 60 students with a sampling technique using simple random sampling. This questionnaire has positive and negative statements.

Table 1. Example Statement of Student Reading Interest Attitude on Google Form

No.	Statement
1.	I am among the criteria of people who like to read
	Strongly agree
	Agree
	Disagree
2.	Strongly disagree
	I read / borrowed a library book only when there were orders from the teacher
	Strongly agree
	Agree
3.	Disagree
	Strongly disagree
	I always read the Katika physics subject matter in the class both when there are teachers or no teachers
	Strongly agree

The student attitude and reading interest questionnaire in this study was measured using a Likert scale. Likert scale with a scale of strongly agree, agree, disagree, strongly disagree. Each positive item on the instrument has a value of strongly agree = 4, agree = 3, disagree = 2, and strongly disagree = 1, while the negative instrument has a value of strongly agree = 1, agree = 2, disagree = 3, and strongly disagree = 4. Then a questionnaire was given to the research sample and then the data was collected and processed. This research data is in the form of quantitative data and analyzed using descriptive statistics assisted by SPSS software.

This processing aims to see the attitudes of students at Public senior high school 3 Muaro Jambi, Indonesia and Senior Secondary School Anagada, Nigeria towards their interest in reading. Especially class XI science students based on predetermined attitude indicators. The results of the attitude and reading interest questionnaire data shown in the data analysis below consist of 2 assessment parts, namely the first assessment based on intervals which have the following attitude and reading interest categories: very bad, bad, good, good, very good. Assessment of students' reading attitudes and interests is based on the frequency and percentage of all students who choose each category of students' reading attitudes and interests.

Processing this data will produce the mean, mode, median, standard deviation, minimum value and maximum value. The research procedure starts from preparing the research instruments. then continued with the process of collecting data using a questionnaire via a form. After obtaining the research data, data processing and data analysis are then carried out. The final stage is concluding from the results of the research that has been carried out.

3. RESULTS AND DISCUSSION

The results of this study were analyzed using descriptive statistics to determine the frequency, percentage, mean, median, mode. The descriptive questionnaire sheet of students' attitudes in Public senior high school 3 Muaro Jambi, Indonesia and Senior Secondary School Anagada, Nigeria can be seen in Table 2.

Table 2. Descriptive Statistics of Students' Attitudes in Public senior high school 3 Muaro Jambi and Senior Secondary School Anagada

School	Characteristics of Intervals	Category	F	Mean	Median	Min	Maks	%
Public senior high school 3 Muaro Jambi	79.25 – 98	Very good	6	66.74	66	40	95	20.0
	59.5 – 78.25	Good	16					53.3
	39.75 – 58.5	Enough	8					26.6
	20 – 38.75	Very not good	0					0
Senior secondary School Anagada	79.25 – 98	Very good	7	71.26	70.5	40	95	23.3
	59.5 – 78.25	Good	19					63.3
	39.75 – 58.5	Enough	4					13.3
	20 – 38.75	Very not good	0					0

From Table 2, the descriptive results of the attitudes of students were found, it was found that the Public Senior High School 3 Muaro Jambi in the good category with a percentage of 53.3% while the Senior Secondary School Anagada was category good with a percentage of 63.3%. Furthermore, for descriptive interest of students in the Senior High School 3 Muaro Jambi Public and Senior Secondary School Anagada can be described in Table 3.

Table 3. The descriptive interest of students in the Senior High School 3 Muaro Jambi Public and Senior Secondary School Anagada

School	Characteristics of Intervals	Category	F	Mean	Median	Min	Maks	%
Public senior high school 3 Muaro Jambi	79.25 – 98	Very good	8	74.18	73,5	40	95	26.0
	59.5 – 78.25	Good	15					50.0
	39.75 – 58.5	Enough	7					23.3
	20 – 38.75	Very not good	0					0
Senior secondary School Anagada	79.25 – 98	Very good	14	76.37	75	45	95	46.0
	59.5 – 78.25	Good	11					36.6
	39.75 – 58.5	Enough	6					20.0
	20 – 38.75	Very not good	0					0

From Table 3, the results of the description of the interests of students were found, it was found that the Senior High School 3 Muaro Jambi Public in a good category with a percentage of 50.0% while the Senior Secondary School Anagada was very good category with a percentage of 46.0%. So it can be concluded that the interest of students in the Senior Secondary School Anagada is slightly superior to the Public Senior High School 3 Muaro Jambi.

Based on the results obtained in this study, education has a very important role for life, because education is a basic need for each individual. Education itself is a learning process activity to gain knowledge and skills [37], [38]. Achievement of the success of the education system can be seen from the educational indicator, namely the education system is not only measured by the level of student knowledge. The education system also pays attention to aspects of student attitudes [39], [40]. In general, interest in reading is the success of individuals to carry out a reading activity for the part of learning activities. The interest in reading is shown by a strong desire in someone to do reading activities [41], [42]. Especially interest in reading in physics subjects in high school with reading students can follow physics in class with good class [43], [44]. By reading someone can find and obtain information, including content and understanding reading. Therefore, doing good reading activities will get a lot of information and meaning from the reading that we can catch.

The interest of students in Senior High School is a multifaceted aspect that significantly influences their overall academic experience and personal development [45], [46]. Understanding and fostering students' interests are crucial for creating an engaging and effective learning environment. It involves recognizing and catering to their diverse interests, be it in academic subjects, extracurricular activities, or vocational pursuits [47], [48]. A student's interest is not only a reflection of their passion but also plays a pivotal role in shaping their career aspirations and goals [49], [50]. Therefore, educators and school administrators should employ diverse teaching methodologies, incorporate real-world applications, and offer a range of extracurricular opportunities to captivate the varied interests of students [51], [52]. Moreover, promoting a supportive and inclusive school culture that encourages students to explore their passions fosters a positive learning atmosphere, contributing to their holistic growth and preparing them for the challenges and opportunities that lie ahead.

The findings from these results provide a deeper understanding of the psychological factors that can influence students' reading interest at the secondary school level. In addition, these findings provide a basis for developing learning strategies that can increase students' interest in reading by paying attention to aspects of

attitudes towards certain subjects. This research also identified several attitude variables towards Physics that most influence students' interest in reading. These results provide specific insights for educators to design more contextual and relevant learning approaches, as well as provide recommendations for policy makers in developing educational programs that strengthen the positive link between attitudes towards Physics and interest in reading.

This research is in line with research conducted by Musengimana et al., [52]. Based on this research, it was found that students who have a more positive attitude towards a subject apply a deeper learning approach, which ultimately results in higher grades. In other research that has been conducted, it was found that awareness of reading comprehension, reading comprehension and reading attitudes and learning orientation, and between metacognitive awareness of reading comprehension and reading attitudes and learning attitudes, positive results were obtained, on a significant medium and scale.

This research is also in line with research conducted by Trettex et al., [53]. From the results of this research, it can be seen that students' interest in reading and positive attitudes, especially in learning physics, are very important for students to have. So, to find out, measurements and categorization of students' attitudes and reading intentions were carried out in physics learning. Based on the results of research conducted by researchers, there are still several students who are categorized as adequate in terms of attitudes and interest in reading physics. These are the implications of this research. After knowing the descriptive statistical results of students' reading attitudes and interest in physics subjects, teachers can determine what steps are appropriate to improve students' reading attitudes and interest in physics learning. This research was conducted using descriptive statistical research which describes students' learning attitudes and interest in reading in physics subjects at Anagada High School which is slightly superior to Muaro Jambi 3 Public High School.

The novelty of this research is that this research creates uniqueness by exploring the relationship between students' attitudes towards physics subjects and their interest in reading. Although many studies have focused on factors that influence students' academic performance in specific fields of study, this study explores a new dimension by considering the impact of students' attitudes towards Physics on reading interest. In this context, this research not only provides in-depth insight into this relationship, but also makes a valuable contribution in developing learning strategies oriented towards increasing students' interest in reading through an approach that considers psychological and emotional aspects related to their perception of the Physics subject. It is hoped that the uniqueness of this approach can make a significant contribution to the development of learning methods that are more holistic and can be applied in various educational contexts.

Research regarding the description of students' attitudes in Physics subjects towards interest in reading has important implications in the educational context. The results of this research can serve as a guide for educators and policy makers to develop more effective learning strategies, which do not only focus on the academic aspects of Physics subjects but also consider their impact on students' reading interest. If it is found that students' attitudes towards Physics have a negative effect on interest in reading, efforts need to be made to integrate interesting and relevant elements in Physics learning that can stimulate students' interest in reading [54], [55]. Thus, the results of this research can help create a holistic learning environment and motivate students to develop their interest in reading, while still paying attention to understanding fundamental physics concepts.

4. CONCLUSION

It was concluded that class XI students of Public High School 3 Muaro Jambi and Senior Secondary School Anagada had an excellent attitude in reading interest, especially in learning physics. With the interest in reading students can more easily find and obtain information easily. And students can more easily understand learning in physics material during the learning process in class. Researchers recommend encouraging a reading culture. Because students have shown a positive attitude towards reading, it would be beneficial to further encourage and improve the reading culture in the school environment. This could include organizing a book club, book fair, or other activities that foster a love of reading about a variety of topics.

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