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Research Article

DOES THE INQUIRY LEARNING MODEL HAVE AN IMPACT ON SOCIAL ATTITUDES AND RESPONSIBLE CHARACTER?

Astalini^{1,*}, Darmaji^{1,}, Dwi Agus Kurniawan¹, Rahmat Perdana¹, Andriyanto²

Corresponding author email: astalinizakir@unja.ac.id

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Abstract

This groundbreaking research endeavors to unveil the transformative potential of the inquiry learning model, transcending its conventional academic applications to delve into its profound impact on high school students' social attitudes and responsible character. Employing an innovative mixed methods research design, this study pioneers a comprehensive analysis that seamlessly integrates quantitative and qualitative methodologies. Through the meticulous administration of a carefully constructed questionnaire, the research uncovers compelling insights gleaned from sophisticated t-test and regression analyses. Results illuminate a significant correlation between students' social attitudes and responsible character, highlighting the intricate interplay between these pivotal dimensions of adolescent development. Furthermore, regression analysis reveals the substantive influence of the inquiry learning model in fostering positive social attitudes and instilling a sense of responsibility among students. Novelty is intrinsic to this research, as it boldly ventures beyond traditional academic metrics to prioritize the cultivation of empathy, integrity, and civic engagement among learners. By challenging established educational paradigms, this study advocates for a transformative shift that recognizes inquiry-based approaches as catalysts for nurturing wellrounded individuals poised to effect positive societal change. Ultimately, this research represents a paradigmatic advancement in education, emphasizing the indispensable role of pedagogy in shaping not only intellectual acumen but also moral fortitude and social consciousness.

Keywords: Attitude, Character, Inquiry, Physics



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INTRODUCTION

Learning is a process that is carried out by providing education and training to students to achieve learning outcomes (Al-Nofaie, 2020; Hamilton et el., 2021; Supena et al., 2021). Learning is a combination of two learning and teaching activities (Puspitarini, 2019; Checa & Bustillo, 2020; Zhou, 2020; Azis et al., 2024). Methodological learning activities tend to be more dominant in students, while

¹ Faculty of Teaching and Education, Universitas Jambi, Jambi, Indonesia

² Department of Biomedical Science and Environmental Biology, Kaohsiung Medical University, Kaohsiung, Taiwan

instructional teaching is carried out by teachers (Prasetyo et al., 2021; Kang, 2022 Yuan et al., 2022). Learning takes place in an atmosphere and teaching and learning situations. So, the term learning is a summary of the words learning and teaching.

High school is the level of students who occupy a period of formal education before entering college (Inzunza et al., 2019; Martin, 2019; Amit, 2022). High school is completed within 3 years, starting from grade 10 to grade 12. In a psychological study, high school students are classified as teenagers (Duan et al., 2020; Dragun et al., 2020; Genta et al., 2021). The aim is to increase spiritual intelligence, social intelligence and knowledge, personality, noble character, and skills to live independently and take further education (Saputra, 2021; Karimullah et al., 2022; Aningrum, Aliazas, & Kim, 2024; Ridwan et al., 2024). In the world of schooling is also taught about a good attitude.

Social attitude is individual awareness to determine behavior or actions in real life towards social objects (Han, 2020; Li & Wu., 2020; Yanti et al., 2020; Buti, & Ansyah, 2024). A person's attitude will color the individual's behavior (Kim, 2019; Alves et al., 2020; Bergner, 2020; Hidayati, Thet, & Nouanthong, 2024). Students' social attitudes at school need to be developed in terms of mutual respect and appreciation, mutual assistance, cooperation, and caring for others (Fausi, 2020; Firdaus et al., 2020; Kholis & Mufidah, 2020; Andriani, Ramanayaka, & Bhatt, 2024). The attitude of social students at school needs to be developed in terms of mutual respect and appreciation, mutual assistance, cooperation, and caring for others.

The character of responsibility is a noble character that encourages a person to carry out tasks that burden him (Intania & Sutama, 2020; Haq et al., 2022; Zulela et al., 2022). By having someone's responsibility, the community will appreciate it (Tyas et al., 2020; Prilleltensky, 2021; Westall, 2021). Because by having the character of responsibility a person will be responsible for the tasks he has been assigned and not neglect them (Coeckelbergh, 2020; Schirmer, 2020; Van & Sand, 2021). So that someone will not make a mistake on the task that has been assigned to him.

Character education is a conscious and systematic human effort to educate and empower students to build their personalities so that they can become individuals who are beneficial to themselves and the environment (Husni, 2020; Freire, 2021; Ekasari, & Maulidinah, 2023). Character education is an educational system that aims to instill certain values in students who have the knowledge, awareness, or willingness and behavior to apply these values (Kristjánsson, 2021; Paul et al., 2020). The function of character education is to develop the core potential of students to become human beings who develop kindness, are kind, and behave well (Bamberger, 2021; Waters et al., 2020). Character education is very closely related to character education, the purpose of which is to continuously develop and train one's abilities to improve themselves and lead to a better life.

The learning model is a framework that provides a systematic explanation for carrying out learning and helps students learn certain things they want to achieve (Sihotang & Hariani, 2021; Ouhi et al., 2022). In other words, the learning model is a general description, but still has a specific purpose (Rachmadtullah et al., 2019; Atmoko et al., 2024). The inquiry-based learning model is a process of obtaining and obtaining information through observation and/or experimentation and using critical thinking and logistical skills to find answers or problem-solving regarding questions or problem formulation (Mahanal et al., 2019; Supena et al., 2021). The inquiry learning model in physics subjects needs to be applied as a guide in the design to the implementation of effective learning.

This research is in line with previous research conducted by (Fausi, 2020) regarding student attitudes. Where asocial attitude is one of the important aspects that students must have in life at school and in everyday life. However, this research did not examine two classes, so it is not known whether the comparison between attitudes using the inquiry learning model was carried out correctly in each class. So, this research is a novelty from previous research because this study compared two classes to determine the effect of the inquiry learning model on social attitudes and students' responsible character.

The urgency in this research is to improve the way teachers teach with the inquiry learning model so that students' character in learning physics becomes better. The novelty in this research is the application of the inquiry learning model which is useful for character development in the physics learning process. Where in this study connecting social attitudes and the character of student responsibility

This study aims to determine the effect of applying the inquiry learning model to social attitudes and the character of student responsibility in learning physics. With this aim, the guarantor formulates research questions, namely: 1) What is the social attitude and character of student

responsibility using the inquiry learning model in physics?; 2) How does the application of the inquiry learning model influence social attitudes and the character of student responsibility in learning physics?

METHODOLOGY

This study uses mixed research methods. The mixed method is a combination of quantitative and qualitative approaches that will produce a better understanding of the research problem than using only one approach (Timans et al., 2019). The research sample population is the research subject whose characteristics and other things will be examined in a study. The population of this study was 50 high school students from 10 Jambi City, consisting of 25 students from X Science 1 and 25 students from X Science 2. The sampling technique was random sampling. The reason for taking research subjects from X IPA 1 and X IPA 2 is because these schools have done a lot of learning so that it can be seen the use of the inquiry learning model on the variables of students' social attitudes and the character of student responsibilities in the upper middle school range.

The instrument in this study used a questionnaire and interview type of instrument. Where the questionnaire is in the form of student social attitudes and the character of student responsibility and the questionnaire used consists of. There are 24 valid statement items on this instrument using a Likert scale. Likert scale of social attitudes and character of student responsibility 5 points consisting of 5 very bad, 4 not good, 3 enough, 2 good, 1 very good. Each representative is a representative of each indicator of students' social attitudes and the character of student responsibilities. In understanding the concept, general indicators are used. There are 2 character indicators, namely the character of discipline and the character of students' hard work. There are 2 indicators of student attitudes, namely seriousness in studying physics and pleasure in solving eyeglass problems. The instrument lattice of students' social attitudes and the character of student responsibility is shown in the following table 1.

Table 1. The questionnaire instrument grid of students' social attitudes and the character of student responsibilities

responsionnes					
Variable	Statement Item Number				
Student social attitudes	1,2,3,4,5,6,7,8,9,10,11				
The character of student responsibility	1,2,3,4,5,6,7,8,9,10,11,12,13				
Amount	24				

The description of the social attitude category and the character of student responsibility is as table 2.

Table 2. Categories of students' social attitudes

	Variable intervals/Indicators					
Category	Student social attitudes					
	Discipline	Self-confident				
Very not good	7.0-12.6	4.0-7.2				
Not good	12.7-18.2	7.3-10.4				
Enough	18.3-23.8	10.5-13.6				
Good	23.9-29.4	13.7-16.8				
Very good	29.5-35.0	16.9-20.0				

The description of the character category of student responsibility is as follows:

Table 3. Character categories of student responsibility					
	Variable intervals/Indicators				
Category -	The character of stud-	ent responsibility			
Cutegory	Take responsibility for words,	Setting a good example for			
	actions and attitudes	others			
Very not good	6.0-10.8	7.0-12.6			
Not good	10.9-15.6	12.7-18.2			
Enough	15.7-20.2	18.3-23.8			
Good	20.3-24.6	23.9-29.4			
Very good	24.7-30.0	29.5-35.0			

The data collection technique in this research used a questionnaire given to students. The questionnaires used were social attitude questionnaires and student responsibility character questionnaires. By using a questionnaire, respondents can provide their responses directly to questions carefully prepared by researchers. This makes it possible to obtain extensive and representative data regarding social attitudes and the character of responsibility in the population studied. Thus, data collection techniques through questionnaires are a very useful instrument in gaining an in-depth understanding of psychological aspects related to social attitudes and responsible character.

The data analysis technique used was random sampling because the sample used was high school students by looking at the variables of students' social attitudes and the character of student responsibilities. The use of random sampling in this study is to save time, money and effort. It also makes it easier and more detailed to analyze all data from smaller survey subjects, enabling more accurate and comprehensive survey results. From these data, descriptive statistical tests and inferential tests were carried out in the form of assumptions and hypothesis tests. In the assumption test, three tests were carried out, namely the normality test, homogeneity test, and linearity test. The normality test functions to determine whether the data being tested is normally distributed. The homogeneous test serves to find out whether several groups of research data have the same variance or not. The linearity test serves to determine whether the data is linearly distributed. Then test the hypothesis in the form of t test and correlation test. The t test serves to determine the comparison of attitude variables and scientific literacy variables. correlation test to determine the relationship between the variables of students' social attitudes and the character of student responsibility. These tests were then tested using SPSS 26 to obtain accurate results. The following is the research procedure:



Figure 1. Research procedure

RESULTS AND DISCUSSIONS

The following describes the results of the variables of student social attitudes and the character of student responsibility in physics subjects. In student responses used general indicators. On student character variables: the character of discipline and the character of student hard work. On student attitude variables: seriousness in studying physics and pleasure in solving glasses problems. Where are the results obtained from the distribution of questionnaires and interviews in X IPA 1 and X IPA 2. The description of the variable understanding of student concepts in the subject is shown in the following table 4.

Table 4. Description of students' social attitude variables on discipline indicators								
Class	Category	Interval	F	%	Mean	Med	Min	Max
	Very not good	7.0 - 12.6	.6 0 0					
	Not good	12.7 - 18.2	3	12				
X IPA 1	Enough	18.3 - 23.8	5	20	4.2	4.1	2.0	5.0
	Good	23.9 - 29.4	12	48				
	Very good	29.5 - 35.0	5	20				
	Very not good	7.0 - 12.6	1	4				
	Not good	12.7 - 18.2	4	16				
X IPA 2	Enough	18.3 - 23.8	6	24	4.1	4.0	1.0	5.0
	Good	23.9 - 29.4	10	40				
	Very good	29.5 - 35.0	4	16				

From the description of the table 4 it can be seen that the comparison with the good category in X IPA 1 is higher than X IPA 2 so that it can be said that X IPA 1 is superior to X IPA 2 in the variable of students' social attitudes on discipline indicators. The description of the social attitude variable on the self-confidence indicator is shown in the following student table 5.

Table 5. Description of students' social attitude variables on self-confidence indicators

Class	Category	Interval	F	%	Mean	Med	Min	Max
X IPA 1	Very not good	4.0 - 7.2	2	8	3			
	Not good	7.3 - 10.4	5	20				
	Enough	10.5 - 13.6	7	21	3.5	3.3	1.0	5.0
	Good	13.7 - 16.8	8	32				
	Very good	16.9 - 20.0	3	12				
	Very not good	4.0 - 7.2	3	12				
	Not good	7.3 - 10.4	6	24				
X IPA 2	Enough	10.5 - 13.6	6	24	3.4	3.2	1.0	5.0
	Good	13.7 - 16.8	7	21				
	Very good	16.9 - 20.0	3	12				

From the description of the table 5 it can be seen that the comparison with the good category in X IPA 1 is higher than X IPA 2 so that it can be said that X IPA 1 is superior to X IPA 2 in the variable of students' social attitudes on self-confidence indicators. then the description of the variable character of student responsibility on indicators of responsibility for words, actions and attitudes.

Table 6. Description of the variable character of student responsibility on indicators of being responsible for words, actions and attitudes

Class	Category	Interval	F	%	Mean	Med	Min	Max
	Very not good	4.0 - 7.2	2	8				
	Not good	7.3 - 10.4	3	12				
X IPA 1	Enough	10.5 - 13.6	11	44	3.3	3.2	1.0	5.0
	Good	13.7 - 16.8	5	20				
	Very good	16.9 - 20.0	4	16				
	Very not good	4.0 - 7.2	3	12				
	Not good	7.3 - 10.4	4	16				
X IPA 2	Enough	10.5 - 13.6	10	40	3.2	3.1	1.0	5.0
	Good	13.7 - 16.8	4	16				
	Very good	16.9 - 20.0	4	16				

From the description of the table 6 it can be seen that the comparison with the sufficient category in X IPA 1 is higher than X IPA 2 so that it can be said that X IPA 1 is superior to X IPA 2 in the student attitude variable on the character variable of student responsibility on the indicator of being responsible for words words, actions and attitudes.

Table 7. Description of the variable character of student responsibility on the indicator of choosing a
good example for others

Class	Category	Interval	F	%	Mean	Med	Min	Max
	Very not good	4.0 - 7.2	0	0				
	Not good	7.3 - 10.4	4	16				
X IPA 1	Enough	10.5 - 13.6	10	40	3.2	3.1	2.0	5.0
	Good	13.7 - 16.8	7	28				
	Very good	16.9 - 20.0	4	16				
	Very not good	4.0 - 7.2	2	8				
	Not good	7.3 - 10.4	5	20				
X IPA 2	Enough	10.5 - 13.6	8	32	3.1	3.0	1.0	5.0
	Good	13.7 - 16.8	5	20				
	Very good	16.9 - 20.0	5	20				

From the description table 7 it can be seen that the comparison with the sufficient category in X IPA 1 is higher than X IPA 2 so that it can be said that X IPA 1 is superior to X IPA 2 in the character variable of student responsibility on the indicator of choosing a good example for others.

The normality test of social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2 is explained in the following table 8.

Table 8. Test for the normality of students' social attitudes and the character of student responsibilities in class X IPA 1 and X IPA 2

		Kolmos	gorov-Sn	nirnov
Variable	Class	Statistic	df	Sig.
Conint attitude	X IPA 1	.077	25	.200*
Social attitude	X IPA 2	.073	25	.200
Daguagi kilitarahan atau	X IPA 1	.090	25	.200
Responsibility character	X IPA 2	.085	25	.200*

Based on the results of the table 8, it can be concluded that the data is normally distributed. The normality test was obtained by the Kolmogorov-Smoirnov test, a significance value of > 0.05.

Test the homogeneity of social attitudes and the character of student responsibility in class X IPA 1 and XIPA 2 in the following table 9.

Table 9. Test the homogeneity of students' social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2

	V-1/1/2						
Class	Variable	N	Sig.	Description			
X IPA 1	Social attitude	25	0.147	Homogen			
X IPA I	Responsibility character	25	0.146	Homogen			
X IPA 2	Social attitude	25	0.145	Homogen			
A IPA 2	Responsibility character	25	0.142	Homogen			

Based on the table 9, it can be concluded that the homogeneity test has a homogeneous pattern in class X IPA 1 and X IPA 2. It is proven that the sig (2-tailed) results are more than 0.05.

The T test of social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2 is explained in the following table 10.

Table 10. Linear test of students' social attitudes and character of student responsibility in class X IPA 1 and X IPA 2

Class	Variable	N	Sig.	Description
X IPA 1	Social attitude	25	0.024	Linear
A IPA I	Responsibility character	25	0.025	Linear
X IPA 2	Social attitude	25	0.023	Linear
A IPA 2	Responsibility character	25	0.022	Linear

Based on the table 10, it can be interpreted that the linearity tests are linearly distributed in class X IPA 1 and X IPA 2. It is proven that the sig (2-tailed) results are smaller than 0.05.

The T test of students' social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2 is explained in the following table 11.

Table 11. T test of students' social attitudes and the character of student responsibilities in class X IPA 1 and X IPA 2

Variable	Variable	t	df	Sig. (2-tailed)	Mean Difference			
Social attitude	X IPA 1	17.234	25	.022	70.55354			
	X IPA 2	18.235	25	.023	75.55634			
Responsibility	X IPA 1	15.454	25	.024	65.55254			
character	X IPA 2	16.321	25	.025	60.51224			

Based on the table 11, it can be interpreted that there is a comparison between students' social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2. It is evident from the results of sig. (2-tailed) smaller than 0.05.

The regression test of students' social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2 is explained in the following table 12.

Table 12. Hypothesis Regression Test with ANOVA of students' social attitudes and student's character of responsibility

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	14.745	1	16.725	.949	.022b
Residual	266.374	49	15.584		
Total	282.116	50			

ANOVA regression test of students' social attitudes and students' responsible character. So, it can be concluded that the social attitude of students and the character of student responsibility influence each other. This is evidenced by sig. < than 0.005. Then the table below is the result of testing the f Regression test with ANOVA from students' social attitudes and students' responsible characters as follows table 13.

Table 13. Regression test of students' social attitudes and the character of student responsibility

R	R Square	Adjusted R	Std. Error of
		Squate	the Estimate
.225a	.056	.003	3.07137

Regression test of students' social attitudes and the character of students' responsibility to R with 0.225, R square 0.056, Adjusted R square 0.003, and Std. Estimation Error 3.07137. Then the table below is the result of regression test on students' social attitudes and the character of student responsibility as table 14.

Table 14. Regression test of students' social attitudes and the character of student responsibilities

	Unstandardized Coefficients Standardized Coefficients			C:~	
	В	Std. Error	Beta	· l	Sig.
Social attitude >< Responsibility Character	66.490	13.698		4.623	.002

It was concluded that there was an influence between students' social attitudes and the character of students' responsibilities. This can be seen from the results of sig. (2-tailed) smaller than 0.05. Next, the results of the interview with the teacher are presented.

In an interview with senior high school 10 Jambi City regarding the teacher's opinion regarding students' social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2. The teacher said that students' social attitudes were good even though there were some students who did not show social attitudes like confident. Only a few students have a high level of self-confidence so that several other students do not have a high level of self-confidence so that social action needs to be increased again. The teacher also said that the character of student responsibility was still not prominent because there were some students who lacked the character of responsibility such as indicators of being responsible for words, actions and attitudes.

The resulting data is processed using three types of tests, namely descriptive statistical tests, assumption tests, and hypothesis tests. Descriptive statistical test to see the results of the percentage, median, mean, minimum, and maximum by analyzing the result data based on the five existing categories (Rubin, 2019). Based on table 4, the average number of students chose the good category with the percentage for X IPA 1 48% good and X IPA 2 40% good. So it can be concluded that X IPA 1 is superior to X IPA 2 in the social attitude variable of students on discipline indicators. Based on table 5, the average number of students chose the good category with the percentage for X IPA 1 32% good and X IPA 2 21% good. So it can be concluded that X IPA 1 is superior to X IPA 2 in the variable of students' social attitudes on self-confidence indicators. Based on table 6, the average number of students chose the sufficient category with the percentage for X IPA 1 44% sufficient and X IPA 2 32% sufficient. So it can be concluded that X IPA 1 is superior to X IPA 2 in student character variable character student responsibility on indicators responsible for words, actions and attitudes. Based on table 7, the average number of students chooses the sufficient category with the percentage for X IPA 1 40% sufficient and X IPA 2 32% sufficient. So it can be concluded that X IPA 1 is superior to X IPA 2 in the character variable of student responsibility on the indicator of setting a good example for others.

The next test is the assumption test which consists of the normality test, homogeneity test, and linearity test. Test the first assumption analysis about the normality test. The normality test was carried out to find out whether the data is normally distributed or not by looking at the Kolmogorov Smirnov results which are greater than 0.05. Based on table 8, the results of the normality test of students' social attitudes and the character of student responsibility, namely at X IPA 1, namely 0.200 and at X IPA 2, namely 0.200, it can be concluded that the results obtained are > 0.05 so that it can be said that the data is normally distributed. Test the second assumption analysis about the linearity test. Next, a homogeneity test is carried out to find out whether the data is homogeneous or not with a sig > 0.05, so the data has a homogeneous pattern. Based on table 9, the results of the homogeneity test of students' social attitudes and the character of student responsibility are in X IPA 1 namely 0.147, 0.145 and in X IPA 2 namely 0.146, 0.142. it can be concluded that the results obtained are > 0.05 so that it can be said that the data is homogeneous. Based on table 10, the results of the linearity test of students' social attitudes and the character of student responsibility are in X IPA 1 namely 0.024, 0.023 and in X IPA 2 namely 0.025, 0.022 so it can be concluded that the results obtained are <0.05 so that it can be said that the data is distributed linearly.

Furthermore, hypothesis testing is carried out, namely the t test and correlation test. The first hypothesis test, namely the t test, was carried out with the aim of knowing the comparison between the two classes by comparing the two variables. Based on table 11, the results of the t-test of students' social attitudes and the character of student responsibility are in X IPA 1, namely 0.22, 0.024. and at X IPA 2 namely 0.023, 0.025. so it can be concluded that there is a comparison between X IPA 1 and X IPA 2. It is evident from the results of sig. (2-tailed) smaller than 0.05. In the second hypothesis test, namely the correlation test was carried out with the aim of knowing the relationship between the two classes with the relationship between the two variables. Based on table 12 the results of the regression test were obtained under the sig. Namely 0.022 can be interpreted that there is influence between students' social

attitudes and the character of student responsibility. It is proven by the results of sig. (2-tailed) smaller than 0.05.

This research is in line with research conducted by (Zulela et al., 2022) which discusses the character of responsibility. Where is the character of the important responsibilities that students have. The character of responsibility makes students trusted, respected and valued and liked by others. However, research by (Zulela et al., 2022; Nahar, 2023; Apeadido, Opoku-Mensah, & Mensah, 2024) did not compare two schools, where school comparisons are very important to do to compare student attitudes in the first and second grades. In our research, we compared two classes with two variables, namely students' social attitudes and student's character of responsibility in order to know the comparison more clearly.

The novelty of this research is that this research highlights a new aspect in education which explores the impact of the inquiry learning model on students' social attitudes and responsible character. By focusing on the influence of the inquiry learning model on social attitudes and responsible character, this research makes a significant contribution to our understanding of how innovative learning approaches can shape students' social behavior. The results of this research can provide valuable insights for educational practitioners in developing curricula that promote creativity, social responsibility, and responsible character among the younger generation, which in turn can produce a positive impact in society as a whole. Thus, this research promises to provide a deeper understanding of how the implementation of the inquiry learning model can improve students' social attitudes and responsible character, bringing a sustainable impact in the educational context and society at large.

The implication of this research is that the use of inquiry learning models on students' social attitudes and the character of student responsibility can be implemented in the student learning process. If an appropriate learning model is used, it will affect social attitudes and the character of student responsibilities (Uge et al., 2019; Yulianti &Sulistiyawati, 2020; Nwune, Oguezue, & Odum, 2023; Jusmaniar et al., 2024). So that students do not experience learning difficulties and student learning outcomes will increase. Thus, the use of learning models can be implemented with students' social attitudes and excellent student responsibility characters in high school students.

The recommendation from the researcher is that it is hoped that there will be research on the effect of applying the inquiry learning model on the attitudes and characteristics of other students. The weakness of this research is that it only discusses some attitudes and characters and only discusses the inquiry learning model. The limitation of this research is that there may be other factors outside the learning model that also influence the social attitudes and responsible character of students. For example, social environmental factors, personal experiences, or genetic factors that were not considered in the research. In addition, research may not be able to observe the long-term effects of using certain learning models on social attitudes and responsible characteristics, due to limited observation time

CONCLUSION

Based on the formulation of the problem in the research, it is concluded that X IPA 1 has students' social attitudes and student responsibility characters that are superior to X IPA 2. There is a comparison of students' social attitudes and student responsibility characters between X IPA 1 and X IPA 2 at physics subject. There is an influence of the inquiry learning model on students' social attitudes and the character of student responsibility in class X IPA 1 and X IPA 2 at the high school level. The novelty of this research is that this research highlights a new aspect in education which explores the impact of the inquiry learning model on students' social attitudes and responsible character. The results of this research can provide valuable insights for educational practitioners in developing curricula that promote creativity, social responsibility, and responsible character among the younger generation, which in turn can produce a positive impact in society as a whole. Thus, this research promises to provide a deeper understanding of how the implementation of the inquiry learning model can improve students' social attitudes and responsible character, bringing a sustainable impact in the educational context and society at large. So that students do not experience learning difficulties and student learning outcomes will increase. Thus, the use of learning models can be implemented with students' social attitudes and excellent student responsibility characters in high school students. The recommendation from the researcher is that it is hoped that there will be research on the effect of applying the inquiry learning model on the attitudes and characteristics of other students. The weakness of this research is that it only discusses some attitudes and characters and only discusses the inquiry learning model. The limitation of this research is that there may be other factors outside the learning model that also influence the social attitudes and responsible character of students.

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AUTHOR CONTRIBUTIONS

Astalini: Conceptualization, design, writing, supervision. Darmaji: data acquisition, data analysis/interpretation. Dwi Agus Kurniawan: concept and design, statistical analysis. Rahmat Perdana: writing, drafting manuscript. Andriyanto: writing, drafting manuscript.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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