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THE INFLUENCE OF PARENTS ECONOMIC LEVEL AND MOTIVATION ON MATHEMATICS LEARNING OUTCOMES

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ABSTRACT

This research aims to determine the influence of parents' economic level and student motivation on mathematics learning outcomes in private vocational school students in Indramayu Regency. This research uses quantitative research methods with correlational survey research techniques. The analysis technique used in this research is path analysis. The population is all class X vocational school students in Indramayu Regency. The sample in the research was 50 students. The results of the research prove that there is an insignificant direct influence of the economic level of parents on mathematics learning outcomes which is proven to obtain a sig value of 0.078 > 0.05 with t_{obs} 1.804, there is an insignificant direct influence of motivation on mathematics learning outcomes. with a sig value of 0.866 > 0.05 with a t_{obs} of 1.70 and there is a significant direct influence on the economic level. parents' influence on motivation is proven by a sig value of 0.010 < 0.05 with a value of t_{obs} 2.663 and there is an insignificant direct influence on economic level. parents on mathematics learning outcomes through. motivation as evidenced by t_{obs} 0.498 < $t_{table.}$ 1.677. The results of the research can be used as input to vocational school level teachers, especially mathematics teachers, to always motivate students and provide learning support so that they can optimize student learning outcomes.

Keywords: Parental Economic Level, Motivation, Math Learning Outcome

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PRELIMINARY

Education is very important for every human being in society. Education is very important for humans in all aspects of life (Marwah et al., 2018). Meanwhile, according to (Nurkholis, 2013) education is also an activity that has certain aims and objectives which are directed at developing the potential that humans have as humans or as a society to the fullest.

Student success in learning is also influenced by external factors, one of which is economic conditions that influence student success. The economic condition in this case is the economic situation of the student's parents. Socio-economic conditions according to (Abdulsyani, 2002). explain that socio-economic conditions are a person's position or position in a human group which is determined by the type of economic activity, income, level of

education, age, type of residence and wealth owned. Each person's economic situation is different and tiered, some have high, medium and low economic conditions. Parents' economic conditions have an impact on their children's learning process.

This is because the learning process requires supporting facilities and infrastructure. Agrees with (Gerungan, 2004) who states that household economic conditions have an influence on children, if we pay attention, that with sufficient economic conditions, the material environment faced by children in the family is wider, children get wider opportunities to develop some skills that children cannot develop if there is no infrastructure.

Agrees with (Djaali, 2004) who states that parents' education level, economic conditions, place of residence, percentage of parental relationships, communication and parental guidance influence children's achievement of learning outcomes. The low economic condition of parents influences learning outcomes. This causes students whose parents' economic conditions are low to go to school only as a routine (Bramantha & Yulianto, 2020).

Apart from parental economic factors, motivation also plays a role in student learning activities. Students' learning development is said to have reached optimal levels if they are able to obtain education and achievements that are in accordance with their abilities, interests, talents and learning motivation (Nurfaliza & Hindrasti, 2022) All efforts made by students are due to motivation (Lestari et al., 2019). Motivation is a change in energy in a person's self, which is characterized by the emergence of feelings and reactions to achieve goals. Motivation can change the energy that exists in humans, so that it will be attached to feelings and emotions later, act or do something (Sardiman, 2011). Learning motivation is the driving force to do something, which can come from within oneself and also from outside (Laka et al., 2020). Motivation is not only important because it is a factor that causes learning, but also facilitates learning and learning outcomes (Anni, 2006). Learning motivation also means students' internal and external motives in the process of changing behavior which are supported by several indicators such as (a) having the desire and desire to succeed; (b) have a need for learning; (c) have high hopes and aspirations; (d) have an appreciation for learning; (e) there is interesting learning and; (f) a conducive learning environment, so that students can study well and comfortably (Yarangga, 2016).

In most private schools, this factor even creates a dilemma, because with low learning motivation, it is actually impossible for students to master the learning material well, but they must pass it for the sake of the continuity of the school (Laka et al., 2020). In general, student learning outcomes are low due to several factors, namely factors that exist within the student (internal) and outside the student (external). Mathematics education can shape,

educate, train (either training patience, thoroughness, accuracy, way of thinking, self-discipline, etc.), why is it also said to be an Islamic society, because the majority of the population is Muslim and a modern society will be formed in accordance with today's times which is all sophisticated because of education, science and technology which are increasingly advanced and developing rapidly (Yudha, 2019).

The factors that exist within students, in detail include: level of intelligence, existing knowledge of students, age and level of maturity, gender, readiness and maturity to learn. Meanwhile, factors that lie outside the students include: facilities and infrastructure for teaching and learning activities, strategies and learning models used by teachers, and teacher motivation (Syamsuddin, 1990) Based on the results of research conducted by (Ardila & Hartanto, 2017), it is stated that there are four factors that influence low student learning outcomes, namely, lack of student interest in mathematics lessons, lack of student concentration during the learning process, low understanding of students' concepts, and lack of discipline student.

In the research, the author focuses on two factors that will be studied, namely the motivational factors of students (internal factors) and the economic level factors of parents (external factors). From several research descriptions above, the author is interested in carrying out research on the influence of parental economic level and motivation on mathematics learning outcomes.

METHODS

The approach in this research is quantitative research using correlational survey research techniques. Qualitative method, namely research based on the philosophy of postpositivism, which is used to examine the condition of natural objects, here the researcher's position is as the key instrument, then the data collection technique is triangulation, data analysis is qualitative, and research results emphasize meaning rather than generalization (Sugiyono, 2012). The analysis technique used in this research is path analysis. Path analysis is a development technique from multiple linear regression. Used to determine the magnitude of the influence shown by the path coefficient. in each path diagram of the causal relationship between variables X1 and X2 towards X3. Path analysis is a technique for analyzing cause and effect relationships that occur in multiple regression if the independent variables influence the dependent variable not only directly but also indirectly (Supardi, 2013).

Before carrying out data analysis regarding the influence of data variables, data analysis techniques are used using inferential statistics, simple correlation and multiple correlation, partial correlation, and path analysis. Correlation requires a minimum of two variables, while path analysis requires three variables. In this study, the independent variable is Level. Parents' Economy (X1), Motivation (X2) and the dependent variable is Mathematics Learning Outcomes (X3).

In this case, the target population is all research objects with certain characteristics contained in the research area. In accordance with this, the population is Class X Vocational High School students in the Indramayu Regency area for the 2021/2022 academic year. The samples used in the research were 53 students. The opinion Arikunto (2002) is that for descriptive research it is recommended to use a sample size of between 10% and 25% of the accessible population. With the aim of obtaining more complete and accurate data on research variables, the author determined the size of the sample size at 10% of the entire population using a multi-stage sampling technique. Next, samples were given to students in Indramayu District.

The collection technique consists of 3 instruments in the form of a questionnaire and a test, the data in the form of a questionnaire is to collect data about parents' economic level and motivation and a test for mathematics learning outcomes. In this study, to obtain data about the parents' economic level, the researchers created it themselves based on the characteristics of each independent variable, namely the parents' economic level and motivation. Meanwhile, data about mathematics learning outcomes was taken from a mathematics learning outcomes test questionnaire in the form of multiplechoice questions.

After a trial was carried out on 53 respondents, a validity analysis was carried out on all variables of parents' economic level, motivation and results. learning mathematics is declared valid because rcount > rtable (0.390). Reliability test for the variable instrument for parents' economic level and motivation using Cronbach's Alpha formulation. Based on the results of calculations using the Cronbach's Alpha formula on the parent's economic level variable, it was obtained $r11$= 0.770, it can be concluded that the instrument used has high reliability, so it can be used for data collection. The self-motivation variable obtained $r11$= 0.610, so it can be concluded that the instrument used has high reliability, so it can be used for data collection. Furthermore, the mathematics learning outcome variable was obtained with Kuder Richardson (KR-20) $r11$= 0.814, so it can be concluded that the instrument used has very high reliability, so it can be used to collect data. Before data analysis is carried out,

the analysis requirements are first tested. In this research, the data normality test, linearity test, multicollinearity test and heteroscedasticity test were used.

The results of the test above state that the normality test of all variables is normal, the linearity test of all variables is linear, based on the results of the multicollinearity test that there is no multicollinearity so that regression analysis can be used in this research, and there is no heteroscedasticity in the regression model, so it can used to predict variables. Mathematics learning outcomes based on economic level, parents, and motivation.

RESULT AND DISCUSSION

In this research there are four hypotheses and they are tested using statistical methods through multiple regression analysis. The results of data calculations using the SPSS 23 application program are as follows.

Table 1. P21 Path Coefficients (Raw Score Data)

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	82.636	17.646	P21=0.359	4.683	.000
Parent economic level	.367	.138		2.663	.010

a. Dependent Variable: motivation

Based on analysis. The path is concluded that the path coefficient of the variable parental economic level (X1) on motivation (X2) is obtained sig. 0.010 < 0.05 with a value of 2.66. So H1 is accepted and the conclusion is that there is a significant direct influence of parents' economic level on motivation.

Table 2. Path Coefficients P31 and P32 (Raw Score Data)

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	-3.227	11.080	p31=0.172	-.291	.772
Parents economic level	.138	.077	p32=0.022	1.804	.078
Motivation	.013	.075		.170	.866

a. Dependent Variable: mathematics learning outcomes

Based on path analysis, it was concluded that the path coefficient for the variable Parental Economic Level on Student Mathematics learning outcomes p31 = b31 = 0.172 was obtained sig. 0.078 > 0.05 with a value of 1.804, so it can be concluded that there is an

insignificant direct influence of parents' economic level on mathematics learning outcomes. Meanwhile, based on analysis. It was concluded that the path coefficient of the motivation variable on Mathematics learning outcomes was p32 = b32 = 0.022 (Table 2).

Based on table 2, sig is obtained. 0.866 > 0.05 with a value of 1.70, the conclusion is that there is no direct influence. motivation has a significant impact on mathematics learning outcomes.

Table 3. Correlation Coefficient

Correlations				
		Parent economic level	**Motivation**	**Mathematic Learning Outcomes**
Parent economic level	Pearson Correlation	1	.359**	.280*
	Sig. (1-tailed)		.005	.025
	N	50	50	50
Motivation	Pearson Correlation	.359**	1	.123
	Sig. (1-tailed)	.005		.198
	N	50	50	50
Mathematic Learning Outcomes	Pearson Correlation	.280*	.123	1
	Sig. (1-tailed)	.025	.198	
	N	50	50	50

**. Correlation is significant at the 0.01 level (1-tailed)
*. Correlation is significant at the 0.05 level (1-tailed)

Table 4. Summary of Correlation Analysis Results (Correlation Coefficient)

Relationship Between Variables	Corelations	Value
Parents' Economic Level with Mathematics Learning Outcomes	r_{13}	0,280
Motivation with Mathematics Learning Results	r_{23}	0,123
Parents' Economic Level with Motivation	r_{12}	0,359

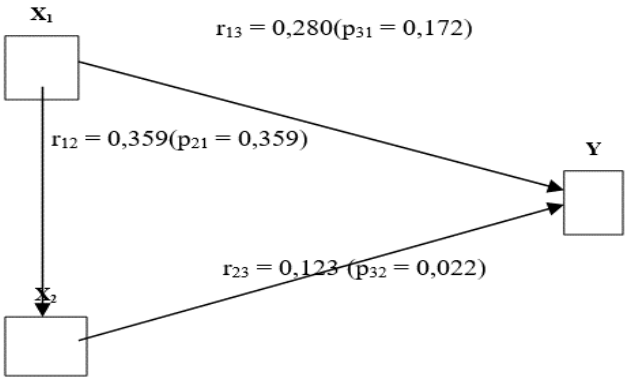

Figure 1. Correlation Coefficient and Path Coefficient Diagrams

Explanation Figure 1: the numbers outside the brackets are the correlation coefficients and the numbers inside the brackets are the path coefficients.

Based on path analysis, it can be concluded that the coefficient. variable path of parents' economic level towards. The results of learning mathematics with motivation obtained are $p_{123} = p_{21} \times p_{32} = 0.359 \times 0.022 = 0.381$. When compared with the p_{31} value, the p_{123} value = 0.381 > p31 = 0.172. So the combined standard deviation $S_{gab} = 0.762$ is obtained and the th (t-count) value is 0.498.

For $\alpha = 0.05$ and dk = n – k – 1 = 50 – 2 – 1 =47 in the two-way test, the t-table value = $t_{table} = 1.677$. Because the value of $t_{obs.} < t_{table}$(0.498 < 1.677), then accept H1 and it can be concluded that there is an indirect influence which is not significant, the economic level of parents on learning outcomes in Mathematics through the level of motivation.

The economic status of students' parents who are classified as middle to upper class can motivate students' learning because it can meet students' learning needs. This makes student learning outcomes good. Meanwhile, the relatively low economic status of students' parents has an impact on students' declining learning motivation. This has an impact on students' low learning outcomes.

Families who have poor socio-economic status will tend to think about how to meet their basic needs, so they will also pay less attention to improving their children's education. The social and economic status of parents certainly plays a role in the development of their children. Families that have good social and economic status will certainly pay good attention to meeting their daily needs and will consider their children's future. In this case, good parental education and sufficient parental economic income can improve student learning outcomes. Likewise, students with parents with low socioeconomic status have relatively low economic learning outcomes. Good learning results cannot be obtained only by relying on the information given by the teacher in front of the class, but also requires

adequate tools such as notebooks, pencils, maps, pens and first of all reading books. Most of the learning tools must be provided by the students themselves. For parents whose economic conditions are inadequate, they certainly cannot fulfill their children's needs satisfactorily. If this situation occurs to the student's parents, the student concerned will bear unexpected risks such as missing out on lesson material and lack of interest in learning.

Ahmadi (2009), opinion states that the influence of socio-economic background that is beneficial for children's social development is only middle socio-economic status compared to lower socio-economic status. As well as students whose socio-economic background is middle class, they can achieve high levels of achievement. These results are in line with research results, some of which states that socio-economic status contributes to student learning outcomes and the rationale for the findings is that if parents have high socio-economic status they have high hopes for success in school.

Another thing that researchers found is that it is different from research conducted by (Rahmawati, 2016). with the title the relationship between parents' socio-economic status and PAI learning motivation for Darussalam Middle School Students in Ciputat, with a correlation coefficient value of 0.64 indicating that there is a significant correlation between socio-economic status. parents with motivation to learn PAI among students. Where students whose parents have high (adequate) socio-economic status, then these students will also have high learning motivation to be more active in studying and research conducted by (Syafitri, 2016). with the title of the relationship between socio-economic status and students' learning motivation. VI MIN Wonosari 2015/2016 academic year, with a correlation coefficient value of 0.381 shows that there is a significant correlation between socio-economic status and learning motivation.

The existence of this strong relationship is influenced by the availability of studentlearning facilities and facilities, parents who have high incomes can meet the students' learning facilities and facilities needs. Meanwhile, students who have parents with low socio-economic status cannot obtain adequate learning facilities from their parents. Apart from that, their concentration can also be disturbed by the economic situation in their family. Prabawa et al., (2014) revealed that there is a significant/positive influence of socio-economics on learning achievement, stating that different financial capabilities will influence student learning achievement.

The economic situation of parents has a big impact on student learning achievement, so parents need to pay attention to daily school activities, including providing breakfast before going to school, learning facilities and paying attention to children's play hours so

that they balance studying at home and playing or watching television. For teachers to know the characteristics of each student to find out the condition of students who have problems in their class, especially those whose learning achievement is poor. Parents provide more motivation for their children to learn by paying attention to the achievements they get at school. The role of schools as educational institutions provides greater synergy between homeroom teachers and teachers in reporting learning achievements to parents so they know learning conditions at school. The government should pay more attention to the socio-economic conditions of its people in increasing people's income. More in-depth research needs to be done on socio-economic conditions, learning motivation on learning achievement.

CONCLUSION

From the results of the research and discussion that the author has described in the previous chapter, the following conclusions can be drawn:

1. There is a direct, insignificant influence on the economic level of parents on the mathematics learning outcomes of private vocational school students in Indramayu Regency.
2. There is an insignificant direct influence on motivation. mathematics learning outcomes of private vocational school students in Indramayu Regency.
3. There is a significant direct influence of parents' economic level on the motivation of private vocational school students in Indramayu Regency.
4. There is an indirect and insignificant influence of parents' economic level on learning outcomes. mathematics through.motivation.private vocational school students in Indramayu Regency. Thus, it can be concluded that there is an indirect and insignificant influence of parents' economic level on mathematics learning outcomes through motivation.

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