

The Relationship Between Student Learning Styles and Student Learning Outcomes on Prophetic Da'wah Material in Class X PPLG SMKTI Muhammadiyah Cikampek

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Abstract

This study aims to determine the relationship between learning styles and student learning outcomes on the Prophet Muhammad's da'wah material in class X PPLG SMKTI Muhammadiyah Cikampek. The method used in this study is a quantitative method with a correlation approach. The population in this study were students of class X PPLG by taking samples from the entire population, namely as many as 60 respondents. Data collection was taken from a learning style questionnaire according to Bobbi De Porter and Mike Hernacki. The results of research on the relationship between learning styles and learning outcomes are: 1). There is a relationship between Learning Style (X) and Learning Outcomes (Y) with a significance value of $0.000 < 0.05$ and a correlation value of Learning Style (X) variable of 0.705. This shows that the degree of relationship between Learning Style (X) and Learning Outcomes (Y) variables is strongly correlated. 2). The learning style of class X PPLG SMKTI Muhammadiyah Cikampek is dominant in the auditory learning style with a large percentage obtained as much as 70%

Keywords: Learning Style, Learning Outcomes



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INTRODUCTION

The process of teaching and learning is the main key in the world of education. Learning is the student's job, while teaching is the teacher's job. Learning and teaching are two things that are interrelated. The achievement of an educational goal, there are two things that are interrelated, namely the process of learning and teaching. The learning outcomes of a student is one of these goals. In general, the learning outcomes seen by a teacher are the grades obtained by students. Students' understanding of the material can determine what learning outcomes will be obtained. Each individual has a different way of absorbing and understanding the material presented by the teacher. This is the cause of the learning outcomes obtained by each student is different. How to learn is often also called the learning style.

Meanwhile, according to Gagne in Rusman quoted by (M. Sholeh Hapudin, 2021: 6) suggests changes in behavior resulting from learning can be in the form of verbal information, intellectual skills, cognitive strategies, attitudes, and motor skills. The high and low student learning outcomes are closely related to the way the teacher delivers the material. In this case, Yestiani and Zahwa, cited by (Agung Wibowo et al., 2022), said that teachers must be able to deliver structured learning, easy-to-understand and fun delivery. To make it easier for students to understand the material, techniques are needed to visualize the material according to the wishes of students. A teacher who knows the various student learning styles, can make it easier to determine what kind of learning system, so that it can adapt to student learning styles. Besides that, it can also be used as material for the teacher's approach to students. This is in line with the expression of (Bobbi de Porter and Mike Hernacki, 2001: 110) that having knowledge of different learning styles can help teachers to approach all their students in

different styles when conveying information. According to (Kadir et al., n.d.) in general, there are 3 types of learning styles, namely visualization, auditory, and kinesthetic.

Meanwhile, in terms of PAI students, there are still many teaching staff who predominantly use the lecture method from the beginning to the end of learning, and the scope of PAI material includes moral principles, history of Islamic culture, hadith, and fiqh. These subjects can use a variety of teaching methods, but unfortunately educators focus on one method, namely lectures. The use of the lecture method will be easily accepted for students who have an auditory learning style that only originates from sound. But it will be difficult to accept for students who have visualization and kinesthetic learning styles. Where, the visualization learning style can be in the form of pictures, lines, and symbols.

Based on the problems above, the researcher is interested in conducting research with the title "Relationship between Student Learning Styles and Student Learning Outcomes in the Dalwah Rasulullah SAW Material in Class X SMKTI Muhammadiyah Cikampek" with the research objective of wanting to find out what learning styles students have in that class, and whether the learning outcomes obtained are in accordance with the application of their learning styles.

Understanding Learning Styles

According to Bire et al in (I Gede Sedana, et al, n.d. 2020: 7) Learning style is one that is owned by individuals in the process of absorbing, organizing, and processing the information received. According to Sarasin in Sugihartanto et al cited by (Muhammad Irham and Novan A. W. 2014: 98), learning styles are specific behavior patterns for each individual in the process of receiving new information and developing new skills, as well as the process of storing new information or skills during the learning process. Bobby de Porter and Mike Hernacki (2000: 110) learning styles are the key to developing performance at work, at school, and in interpersonal situations.

Based on some of the definitions above, the authors conclude that learning styles are the ways a person uses to receive and absorb information. Each individual has a different learning style, so the process of receiving information is also different. Students who know the type of learning style, this can make it easier for students to take part in learning optimally, as well as teachers should identify the types of student learning styles in class, so that it makes it easier for teachers to determine models or methods that adapt to student learning styles. So that the objectives of learning can be achieved as expected.

Kinds of Learning Styles

In general, most students learn using many learning styles, namely visual, auditory, and kinesthetic. However, many do not realize that dominant students only use one learning style. The various learning styles are as follows:

1. Visualization. People with a visual learning style are more likely to use their sense of sight, meaning that someone with a visual learning style needs concrete evidence regarding what they will learn. According to Fleming and Mills (Wibowo, 2016: 131) this tendency consists of describing information in the form of maps, diagrams, graphs, flowcharts, and visual symbols such as arrows, circles, hierarchies, and other materials used by teachers to provide information that cannot be expressed in words. A person with a visual learning style prefers to read books rather than being read or heard by the teacher. Tends to speak quickly, looks and observes demonstrations. So that people with a visual learning style prefer learning models that present more pictures, diagrams, and so on.
2. Auditory. Auditory learning techniques focus on hearing to understand and remember information. That is, for someone to remember and understand anything, they must first

hear it (Wibowo, 2016:132). A person with an auditory learning style tends to talk to himself when doing work, prefers to listen and remember what is discussed rather than what is seen, likes to explain back what is heard to others. So a person with this type of learning style prefers learning activities in a group atmosphere.

3. Kinesthetic. Someone with a kinesthetic learning style requires that person to touch something that has specific information so he can remember it (Wibowo, 2016: 132). This learning style requires him to move to get information, so he relies heavily on his physique optimally to be a qualified learning tool. According to Sukadi, who was quoted (Supit et al., 2023) said that someone with a kinesthetic learning style can catch lessons easily when moving, touching, or taking action, so that they can feel the characteristics of an object and understand the meaning of the object when their senses have felt it.

Definition of Learning Outcomes

According to Sudjana cited by (Ahmadiyanto, 2016: 984) learning outcomes are changes in behavior that include cognitive, affective and psychomotor fields that students have after receiving learning experiences. This is in line with Bloom's theory in Sudjono quoted by (Thobroni, 2015: 21) saying that learning outcomes include cognitive, affective, and psychomotor abilities, cognitive aspects include knowledge (knowledge and memory); comprehension (understanding, explaining, summarizing, examples); application (apply); analysis (describing, determining relationships); synthesis (organizing, planning, forming new buildings); evaluate (assess). While the affective aspects include receiving (accepting attitude); responding; valuing; organization; characterization. While Psychomotor includes Initiatory, pre-routine, routineized, productive skills. From the several opinions that have been stated above, it can be concluded that learning outcomes are the final results of learning achieved by students after taking a series of tests, in which the end result is a change in behavior both from knowledge, attitudes, experience, and skills.

Factors Affecting Learning Outcomes

The factors that affect learning outcomes according to Munadi, in (Rusman, 2017: 130) include internal and external factors, namely:

1. Internal Factors
 - a. Physiological Factors. In general, physiological qualities such as excellent health, free from fatigue and fatigue, free from physical defects, and so on. These factors can have an impact on how students perceive subject matter.
 - b. Psychological Factors. Every individual, in this case students, has a unique psychological condition. Of course, this has an impact on learning outcomes. Intelligence (IQ), attention, interests, talents, motives, motivation, cognition, and reasoning powers are some of the psychological aspects that students must consider.
2. External Factors
 - a. Environmental factor. Environmental influences can have an impact on learning outcomes. These environmental factors include the physical and social environment. Temperature and humidity in the natural environment. Studying in the middle of the day in a room with poor ventilation will of course have a different learning atmosphere from studying in the morning where the air is still fresh and in a room that is supportive enough to breathe freely.
 - b. Instrumental Factors. Instrumental factors are factors whose existence can be used in accordance with the expected learning outcomes. These factors should serve as a means to achieve the planned learning objectives. Curriculum, facilities, and teachers are examples of instrumental factors.

RESEARCH METHODS

This study uses a quantitative method with the Pearson product moment correlation approach to measure the level of closeness of a linear relationship between two variables in which the data is normally distributed (Duwi Priyatno, 2014: 123). As for the population that will be used in this study are students of class X PPLG in SMK TI Muhammadiyah Cikampek. Due to the small number of population in this study, less than 100 respondents, the researchers took 100% of the population in class X PPLG, namely as many as 60 respondents. The data collection technique used in this research is by using a questionnaire, observation and interviews. As for the data analysis technique using descriptive statistical analysis, and inferential statistics which includes the Pearson correlation test, simple linear regression analysis test and hypothesis testing.

RESEARCH RESULTS AND DISCUSSION

Results of Student Learning Styles

Table 1. Learning Style Statistics

VAK Learning Style Statistics				
		Visual	Auditorial	Kinestetik
N	Valid	60	60	60
	Missing	0	0	0
Mean		24,6	26,56666667	27,6
Std. Error of Mean		0,462247	0,512205085	0,602818
Median		24	26	27
Mode		24	22.00 ^a	30
Std. Deviation		3,58055	3,967523527	4,66941
Variance		12,82034	15,74124294	21,80339
Range		13	22	22
Minimum		18	13	19
Maximum		31	35	41
Sum		1476	1594	1656
a. Multiple modes exist. The smallest value is shown				

The table above is a statistical calculation table whose calculation includes the mean (average value), median (middle value), mode (value that occurs frequently), range (range), maximum and minimum values. Meanwhile, to determine the category of student learning styles in class X PPLG SMKTI Muhammadiyah Cikampek uses level categorization by classifying subjects as many as 3 categories with each learning style. The following is a table of categories for each learning style.

Table 2. Categorization of Visual Learning Styles

Category Limit	Interval	F	%	Category
$X < (\mu - 1,0\sigma)$	$X < 21,02$	11	18,3	Low
$(\mu - 1,0\sigma) < (\mu + 1,0\sigma)$	$21,02 \leq 28,18$	40	66,7	Medium
$(\mu + 1,0\sigma) < X$	$28,18 \leq X$	9	15,0	Height
Total		60	100%	

Table 3. Categorization of Auditory Learning Styles

Category Limit	Interval	F	%	Category
$X < (\mu - 1,0\sigma)$	$X < 22,6$	9	15,0	Low
$(\mu - 1,0\sigma) < (\mu + 1,0\sigma)$	$22,6 \leq 30,52$	42	70,0	Medium
$(\mu + 1,0\sigma) < X$	$30,52 \leq X$	9	15,0	Height
Total		60	100%	

Table 4. Categorization of Kinesthetic Learning Styles

Category Limit	Interval	F	%	Category
$X < (\mu - 1,0\sigma)$	$X < 22,94$	8	13,3	Low
$(\mu - 1,0\sigma) < (\mu + 1,0\sigma)$	$22,94 \leq 32,26$	41	68,3	Medium
$(\mu + 1,0\sigma) < X$	$32,26 \leq X$	11	18,3	Height
Total		60	100%	

Based on the three tables above, it can be seen that each learning style is in the medium category, in which the visualization learning style is 66.7%, the auditory learning style is 70%, and the kinesthetic learning style is 68.3%. However, it can be concluded that the learning style used by students of class X PPLG dominantly uses an auditory learning style, because the percentage obtained for this learning style is 70%.

Student Learning Outcomes

Table 5. Statistics on Learning Outcomes

Statistic		
Learning Outcomes		
N	Valid	60
	Missing	0
Mean		78,7667
Median		78,0000
Mode		78,00
Std. Deviation		9,30895
Variance		86,656
Range		47,00
Minimum		52,00
Maximum		99,00
Sum		4726,00

To determine the category of student learning outcomes in class X PPLG SMKTI Muhammadiyah Cikampek uses level categorization by classifying subjects as many as 3 categories. The following is a table of learning outcomes categories.

Table 6. Categorization of Learning Outcomes

Category Limit	Interval	F	%	Category
$X < (\mu - 1,0\sigma)$	$X < 77,08$	5	8,3	Low
$(\mu - 1,0\sigma) \leq (\mu + 1,0\sigma)$	$77,08 \leq 85,32$	41	68,3	Medium
$(\mu + 1,0\sigma) \leq X$	$85,32 \leq X$	14	23,3	Height
Total		60	100%	

Based on the table above, it can be seen that the learning outcomes obtained by students on Da'wah Rasulullah SAW material were 8.3% in the low category, 68.3% in the medium category, and 23.3% in the high category. So it can be concluded from the table above that the score of student learning outcomes on the Da'wah Rasulullah SAW material is in the moderate category.

Pearson Correlation Test

Basis for Decision Making: If the value of sig. < 0.05, then it is correlated. If the sig. > 0.05, then it is not correlated. Relationship Degree Guidelines

1. Pearson Correlation value 0.00 to 0.20 = no correlation
2. Pearson Correlation value 0.21 to 0.40 = weak correlation
3. Pearson Correlation value 0.41 to 0.60 = moderate correlation

4. Pearson Correlation value 0.61 to 0.80 = strong correlation
5. Pearson Correlation value 0.81 to 1.00 = perfect correlation

Table 7. Correlation Test Results

Correlations			
		Learning Style	Learning Outcomes
Learning Style	Pearson Correlation	1	.705**
	Sig. (2-tailed)		.000
	N	60	60
Learning Outcomes	Pearson Correlation	.705**	1
	Sig. (2-tailed)	.000	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the table above on the Learning Style variable (X) the sig value is obtained. (2-tailed) of 0.000 < 0.05, this shows that there is a relationship between Learning Styles (X) and Learning Outcomes (Y). The Pearson Correlation value of the Learning Style variable (X) is 0.705. This indicates that the degree of relationship between the Learning Style variable (X) and Learning Outcomes (Y) is strongly correlated because it is in the correlation interval value of 0.61-0.80.

Simple Linear Regression Analysis

Simple linear regression analysis is used to predict the dependent variable when the independent variable is increased or decreased. From the data processing that has been done, the following results are obtained:

Table 8. Simple Linear Regression Equation

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.293	1.314		5.550	.000
	Learning Style	.337	.044	.705	7.570	.000

a. Dependent Variable: Learning Outcomes

From the table above, the following equation is obtained: $Y = \alpha + bX = 7.293 + 0.337X$. Based on the results of the regression model above, it can be concluded that the positive constant value is 7.293. These results indicate that the variable Learning Style (X) has an effect on Learning Outcomes (Y). The Learning Style variable (X) has a positive value of 0.337. This shows that each increase in the Learning Style variable (X) will increase Learning Outcomes (Y) by the value of the beta coefficient on the independent variable multiplied by the magnitude of the increase that occurs. For example, each increase in Learning Style (X) by one unit will increase Learning Outcomes (Y) by 0.337.

Analysis of the Coefficient of Determination

The coefficient of determination is a value that expresses the simultaneous influence of the independent variable on the dependent variable. The problem being studied is the influence of Learning Style (X) simultaneously in contributing to the influence of Learning Outcomes (Y). By using SPSS, the following output is obtained:

Table 9. Coefficient of Determination

Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.705 ^a	.497	.488	1.80718
a. Predictors: (Constant), Learning Style				
b. Dependent Variable: Learning Outcomes				

Based on table 9, information is obtained that the R-square is 0.497 or 49.7%. This value indicates that Learning Style (X) simultaneously contributes or influences the Learning Outcome variable (Y) of 49.7%. While the remaining 100% - 49.7% = 50.3% is the influence of other variables not examined.

Partial Hypothesis Testing (t test)

By using SPSS, the partial hypothesis test results are obtained as follows:

Table 10. Partial Regression Coefficient Testing

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.293	1.314		5.550	.000
	Learning Style	.337	.044	.705	7.570	.000

a. Dependent Variable: Learning Outcomes

Based on the table above, it can be seen that the Learning Style variable (X) has a significance value of 0.000 < 0.05, and with $\alpha = 0.05$, $df = n - k - 1 = 60 - 1 - 1 = 58$, the t-table value obtained for testing two parties is (2.001) so that $T_{count} > T_{table}$ is $7.570 > 2.001$ which is obtained on the Learning Style variable (X), a positive t value indicates that the Learning Style variable (X) has an influence in the direction of Learning Outcomes (Y), so that it can be concluded that H_a is accepted, that is, there is a relationship between student learning styles and learning outcomes in class X Dakwah Rasulullah SAW material at SMK TI Muhammadiyah Cikampek.

CONCLUSION

The learning style of students on the Prophet Muhammad's da'wah material in class X PPLG SMKTI Muhammadiyah Cikampek, the learning style was obtained as much as 70% and is in the medium category. The learning outcomes obtained by students on the Prophet Muhammad's da'wah material in class X PPLG SMKTI Muhammadiyah Cikampek were obtained as much as 68.3% and were in the medium category with an average value obtained based on statistical calculations of 78. So it can be concluded that student scores in this material have reached the Minimum Completeness Criteria (KKM). Based on SPSS 25 calculations, the t-count is 7.570 and the t-table value is 2.001 with a significance value of 0.000 < 0.05. With a two-way influence, the significance value is $0.05/2 = 0.025$. Because t-count is $7.570 > 2.001$, it can be concluded that H_a is accepted, namely that there is a relationship between student learning styles and learning outcomes in class X Da'wah Rasulullah SAW material at SMK TI Muhammadiyah Cikampek.

BIBLIOGRAPHY

- Agung Wibowo, Aulia Rahman, Muh. Ishaq, Anita Yus, & Aman Simaremare. (2022). Analisis Efektifitas Media Pembelajaran Pkn Terhadap Gaya Belajar Kelas III SD. *Journal of Educational Analytics*, 1(1), 1-8
- Ahmadiyanto, A. (2016). Meningkatkan Aktivitas Dan Hasil Belajar Siswa. *Jurnal Pendidikan Kewarganegaraan*, 6(2), 980-993., 6(2), 980-993.

- De Porter, B., & Mike, H. (2001). Quantum Learning. Bandung: Kaifa
- Hapudin, M Soleh. (2021). Teori Belajar dan Pembelajaran. Jakarta: Kencana
- Irham, M., Novan, A,W. (2017). Psikologi Pendidikan Teori Dan Aplikasi Dalam Proses Pembelajaran. Jogjakarta: Ar-Ruzz Media.
- Kadir, F., Permana, I., & Qalby, N. (n.d.). Pengaruh gaya belajar siswa terhadap hasil belajar fisika SMA PGRI maros. 3, 1–5.
- Priyatno, Duwi. (2014). SPSS 22 Pengolahan Data Terpraktis. Yogyakarta: CV Andi Offset 22
- Rusman. (2017). Belajar dan Pembelajaran Berorientasi Standar Proses Pendidikan. Jakarta: Kencana.
- Suci, I Gede Sedana., Irjus Indrawan., Dkk . (2020). Transformasi Digital & Gaya Belajar. Purwokerto: CV Pena Persada.
- Thobroni, M. (2015). Belajar dan Pembelajaran Teori dan Praktik. Yogyakarta: Ar-Ruzz Media.