

Correlation Between Learning Styles And Academic Achievement

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Abstrak

Penelitian ini bertujuan untuk mengetahui hubungan antara gaya belajar dengan prestasi belajar. Penelitian korelasi ini melibatkan 33 mahasiswa Program Studi Pendidikan Bahasa Inggris Universitas Tadulako Angkatan 2018, Tahun Ajaran 2021/2022. Instrumen yang digunakan untuk mengumpulkan data adalah angket tentang gaya belajar dan transkrip nilai. Data yang diperoleh dianalisa dengan menggunakan Pearson Product Moment dengan SPSS versi 20. Hasil analisa menunjukkan adanya korelasi positif antara gaya belajar dan prestasi belajar mahasiswa Program Studi Pendidikan Bahasa Inggris Universitas Tadulako Angkatan 2018. Tetapi korelasinya pada tingkat sedang. Ini berarti gaya belajar bukan faktor utama yang berkontribusi terhadap prestasi akademik mahasiswa. Ada faktor-faktor lain yang berkontribusi terhadap prestasi akademik. Meskipun demikian, hasil analisa juga menemukan bahwa, dari semua jenis gaya belajar yang diteliti, gaya belajar visual merupakan gaya belajar yang dominan berpengaruh terhadap prestasi belajar.

Kata Kunci: gaya belajar, korelasi, prestasi belajar.

Abstract

This study aims to find out correlation between learning styles and academic achievement. This correlation study involved 33 students of English Education Study Program, Tadulako University Batch 2018, Academic Year 2021–2022. The instruments used to collect data were questionnaire about the learning styles and students' GPA. The data were analyzed by using Pearson Product Moment with SPSS 20. The result shows that there is positive correlation between learning styles and academic achievement of students of English Education Study Program, Tadulako University Batch 2018. However, the level of correlation is moderate. It means that learning style is not the main factor contributing to the students' academic achievement. There are other factors contributing to the academic achievement. Another finding shows that, from all types of learning styles investigated, the visual learning style dominantly influences the students' academic achievement.

Keywords: academic achievement, correlation, learning styles,.

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INTRODUCTION

All students place a high value on academic achievement. (Lawrence & Vimala, 2012) state that academic achievement is obtained from formal education based on test scores, grade points, averages, and degrees. In order to improve students' academic achievement, identifying and controlling variables that affect students' academic achievement is one of the main goals of the education system in the world (Maryam et al., 2019) The entire educational program is a high school general achievement, and the educational system requirements are carefully directed towards this goal. Professional educators aim to provide an environment where students can attain their best academic goals. According to (Dev. M, 2016), scholars, parents, legislators, and planners are concerned about students' academic progress.

Their academic achievement is critical to develop the high-quality graduates who will serve as leaders and a valuable workforce for the country, ensuring that they are responsible for the country's economic and social progress. This demonstrates how crucial the academic achievement is to students' learning results as well as to their prospects in the future.

Academic achievement is closely related to learning styles. This is due to the fact that learning styles have a major influence on how students receive lessons and solve problems. According to (Pashler et al., 2008), the concept of learning styles has a significant impact on the area of education. It is commonly encountered at all levels, from kindergarten to higher education. (Wang, 2007) describes learning style as a method for students to acquire individual information in the way or style that they choose. In other words, learning styles are concerned with how students learn and assimilate knowledge rather than what they have received. It indicates that each person has their unique learning style, which makes it simpler for them to grasp the lessons taught by the teacher. Some students may rely on pictures or presentations while some others prefer to listen to music while studying or may respond better to direct activities.

Each student has a unique way of absorbing, processing, and recreating information. This is the most important factor that can influence the differences in their learning styles. (Yousefi, 2011) stated that culture, sex, age, major, resume, parents' learning styles are some factors which can give impact on people's learning styles. In addition, (Cimermanová, 2018) stated that Individual learning necessitates an independent autonomous learner willing to apply various learning styles effectively, and personal learning is required to develop teamwork and collaboration skills.

In the teaching and learning process, teachers may enhance the students' learning abilities by taking advance their learning style. Furthermore, the teachers' approach to the students has a considerable impact on the students' process of acquiring knowledge and finding solutions to any existing problems. Therefore, the teachers need to recognize the students' learning styles in order to help the teachers reach the learning objectives.

Some researchers have conducted research about the correlation between students' learning styles and their academic achievement. The findings are varied. (Vaishnav, 2013) found that there was a positive correlation between students' learning styles and their academic achievement. Kinesthetic was found to be more prevalent than visual and auditory learning styles. A positive high correlation was found between kinesthetic learning styles and academic achievement. Similarly, (Abdul Jawad HR, 2018) found that there was a significant correlation between students' learning styles and their academic achievement. On the contrary, (Herizal, 2018) found that there was no significant correlation between learning styles and students' academic achievements. Since there was no significant correlation, the regression analysis to find the influence was not further conducted. This finding from Herizal is also supported by (Syazwani et al., 2021), in which the finding of their research was that there was no significant correlation between students' learning styles and their academic achievements, especially in online classes.

Some studies found a significant correlation or positive correlation, while others found no correlation. This research investigated the correlation between students' learning styles and academic achievement to know whether the result supported positive, negative, or no correlation findings. The following are the research questions that lead us in conducting this study: 1) Is there any significant correlation between learning styles and academic achievement of undergraduate students at English Education Study Program batch 2018 in academic year 2021-2022?; 2) What types of learning style is dominant in undergraduate students at English Education Study Program batch 2018 in academic year 2021-2022?

METHOD

This research used a correlational research design. It was used to find out the correlation between two independent variables, i.e., learning styles and academic achievement. In gathering data, questionnaire pertaining to learning styles and students' grades of English Subject were used as the instruments. The questionnaire consisted of 21 statements, which were divided into three sections: visual, auditory, and kinesthetic learning styles. Each statement was assessed using a Likert scale (Sugiyono: 2011) consisting of five chosen answers: strongly agree, agree, undecided, disagree, and strongly disagree which are scored from 1 - 5 (strongly agree = 5, agree = 4, undecided = 3, disagree = 2, and strongly disagree = 1). The result of the questionnaires was used to classified students' learning styles. The student's learning style results were taken from the highest block of each section from the questionnaire. Students who have the highest score in visual learning style will be considered as having the dominant visual learning style as well as in auditory and kinesthetic learning styles.

The sample of this research was 33 students of English Education Study Program, Tadulako University, and academic year 2018. Before distributing the questionnaire to the

students, the researchers tested its validity and reliability. The questionnaire has been validated by a lecturer in the English education study program. Furthermore, the researchers tried the questionnaire out on 44 students in the population. The result of the validity test showed that the questionnaire is valid. In addition, the reliability test result also showed that the questionnaire is reliable.

To gather the data, the students were assigned to answer the questionnaire. It was sent to the students from Google After that, the questionnaire was checked and analyzed. Before analyzing the data, we divided the students' learning styles into 3 categories: visual, verbal, and kinesthetic learning styles. The detail of the questionnaire divided by the types:

Table 1. Questionnaires Items Number

No	Types of Learning Styles	Number of items	Total item
1	Visual	1,2,3,4,5,6,7	7
2	Auditory	8,9,10,11,12,13,14	7
3	Kinesthetic	15,16,17,18,19,20,21	7

Dealing with the students' academic achievement, their English grades were categorized based on the scoring rubric category proposed by (Sudijono, 2003). This category is used to indicate the level of the students' academic achievement.

Table 2. Scoring Rubric for Students' Academic Achievement

Score classification	Category
	Students' achievement
81-100	very high
61-80	high
41-60	medium
21-40	Low
0-20	Very Low

(Sudijono: 2003)

Both data from the questionnaire and the students' English grades were analyzed to know the correlation between learning styles and academic achievement by using Pearson product moment. Then, the result was interpreted using the score of r product moment proposed by (Best & Khan, 2013)

Table 3. The score of r Product Moment (r_{xy})

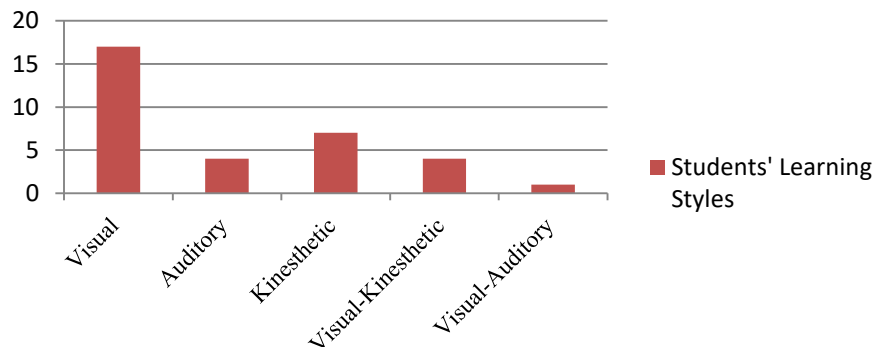
Coefficient (r)	Relationship
0.00 – 0.19	Negligible
0.20 – 0.39	Low
0.40 – 0.59	Moderate
0.60 – 0.79	Substantial
0.80 – 1.00	High to very high

(Best and Khan: 2013)

RESULTS AND DISCUSSION

Findings

Before answering the research questions, we categorized the students' learning styles based on the students' responses derived from the questionnaire. The results can be seen below:



The results of students' learning styles were determined by combining students' responses to 21 items in the questionnaire. Based on the chart above, the results of the students' learning styles show that 17 students belong to visual, 4 students belong to auditory, and 7 students belong to kinesthetic, 4 students belong to both visual and kinesthetic, and 1 student belong to both visual and auditory learning styles.

After that, the researchers calculated the mean score of students' academic achievement and the result is presented below:

Table 4. Mean of Students' Academic Achievement

Variable	Mean Score	Category
Academic Achievement (Y)	86.80	Very High

As for the result of academic achievement, the mean academic achievement score for students is 86.80, which is considered very high. We may assume that undergraduate students in the English Education Study Program are in very high category of academic achievement. To answer the first research question, pertaining to whether there is any correlation between students' learning styles and academic achievements, we analyzed the data by using Pearson Product Moment formula through SPSS 20. The result can be seen below.

Table 5. Students' Learning Styles and Academic Achievement Correlations

		X	Y
X	Pearson Correlation	1	.423*
	Sig. (2-tailed)		0.014
	N	33	33

Y	Pearson Correlation	.423*	1
	Sig. (2-tailed)	0.014	
	N	33	33

*. Correlation is significant at the 0.05 level (2-tailed).

The calculation results above show that from a total sample of 33 students, the correlation coefficient value obtained is r_{xy} 0.423, which means that the two variables have positive correlation. From the table above, it can be seen that the r_{xy} value is 0.423, indicating that the correlation is at the "moderate" level. It can be concluded that the correlation between students' learning styles and academic achievement of undergraduate students in English education study program is moderate which means that the learning style contributes to the academic achievement, but only slight. There must be other factors contributing to the academic achievement.

Discussion

Based on the finding of the first question, there is moderate correlation between the students' learning styles and their academic achievement. These finding is consistent with the earlier study by Jawad (2018) which found significant correlation between students' learning styles and academic achievement, showing that these two variables are related in some way. In addition, (Ganesen et al., 2020) discovered the same result, demonstrating positive correlation between students' learning styles and academic achievement, which is consistent with previous research. Both recent and prior studies found positive relationship between students' learning styles and academic achievement. These findings indicate that the students' academic achievement increase as a result of their learning styles. Since the correlation is moderate, the students' learning styles are not the primary factor influencing the students' academic achievement.

Aside from the learning styles, there were numerous additional factors that affected students' academic achievement. Musthaq and Khan (2012) classify four aspects that influence the students' academic achievement. Firstly, are communication skills and the more kids communicated with others, the higher their academic achievement will be. This statement is supported by (Harb, Nasri and El-Shaarawi, 2006), who argue that one of the most important elements influencing students' academic achievement is their ability to communicate in English. In other words, they can improve their performance if they communicate well with others. Secondly, the learning facilities provided to students can have an influence on their academic performance. As stated by (Karemera, Reuben, & Sillah, 2003) the satisfaction of academic environment and amenities such as the use of libraries, labs, and so on can have a positive influence on students' academic results. Schools are built to make studying and teaching easier. Next, proper guidance, particularly from parents, may have a significant impact on students' academic achievement. (Hussain Ch, 2006) stated that students who receive proper guidance do better in their examinations. Guidance can also be used to enhance students' attitudes, particularly in social circumstances. Lastly,

family stress is also one of the elements that might impact students' academic achievement, such as parents' education and income in supporting their children's academic success. This statement also supported by (Raychaudhuri et al., 2010), who argues that various factors can have an influence on students' performance. Two of these determinants are family income and the education of the parents. In terms of academic performance, family stress has a substantial influence on students' GPAs and their ability to achieve their goals.

Learning styles are one of the factors that can affect student learning achievement. Although the correlation between learning styles and academic achievement was moderate, student learning styles are still important to be considered by every educator. The second objective of this research is to find out what types of learning styles are dominant among other learning styles. Based on the findings, it showed that more than half of the students tend to have a visual learning style as the dominant learning style, followed by an auditory learning style in second place, and a kinesthetic learning style in last place. This result showed that each student have different style in learning. According to Jawad (2018), Humans are always different from one another, whether physically, behaviorally, naturally, or in other ways. Even if they are twins, no two people have the same physical form, behavior, or nature. It also occurs among learners; not every learner has the same motivation or learning style. The result of students' learning styles indicated by the highest number of answers from each section

The first section contains statements concerning visual learning styles, with more than half of the students' tendencies relating to visual learning style features. When asked to recall what they had read, more than half of the students did it successfully. They enjoy writing and taking notes when learning and they prefer to learn about an interesting subject through reading. While almost half of the students carefully verified their answers after finishing the exam, they preferred to read a book with images, mark essential areas with various colors, and envision visuals in their thoughts. These are some of the characteristics of students that prefer visual learning. In line with the statement by (De Porter & Hernacki, 2004), students with visual learning styles have several characteristics of the learning model they use, including: neat and orderly; attention to everything; maintaining appearance; easy to remember with pictures; preferring to read; remembering what is seen rather than what is heard; and needing complete pictures and objectives..

Students that prefer visual learning styles succeed academically. This is evidenced by the fact that almost half of students with a visual learning style have a "Very High" category in their academic achievement, with four students having a "High" category. This indicates that nearly half of the students have visual learning styles that are very high and high, which is consistent with their visual learning styles. This conclusion is supported by (Pourhosein Gilakjani, 2011), who finds that the majority of Iranian EFL students have visual learning styles, followed by auditory learning styles, and kinesthetic learning styles. (Wahab & Nuraeni, 2020) discovered that almost half of the students were classified as visual learners. It can be seen that the visual learning style is the most dominant learning style

among English education study program students in batch 2018, academic year 2021–2022. It can be seen that visual learning style is the most dominant learning style among English education study program students in batch 2018, academic year 2021–2022.

In terms of student academic achievement in the findings, the mean score of student achievement in English education study programs was categorized as very high. Most of the students were categorized as very high, while the rest were categorized as high in academic achievement. Whereas there were no students who were categorized as medium, low, or very low. Based on this result, we can conclude that students' academic achievement in English education study program is in a very high category. The teaching method that the teacher uses is often assumed as the factor that causes the student's academic achievement (Widodo & Mugiyo, 2021).

According to the results about students' academic achievement, most of the students have a very high category for their academic achievement, which means they really pay attention to their academic achievement and know how important academic achievement is. This also supported by the statement by (Mushtaq & Khan, 2012) who stated that students' academic achievement has received attention in several previous studies due to aspects of academic literature that have an impact on social, psychological, economic, environmental, and personal factors. Students' learning styles affects towards students ability in absorbing information (Widodo, 2020).

CONCLUSION

According to the findings, discussion, and data analysis results, the correlation between students' learning styles and academic achievement of undergraduate students in English education study program batch 2018, academic year 2021-2022 is a moderately positive correlation. It is possible to conclude that students' learning styles are related to their academic achievement; nevertheless, learning styles are not the only factor that might increase students' academic achievement. This study also discovered that visual learning style is the most dominant in students' learning styles, with the majority of students having a strong visual learning style.

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