# THE RELATIONSHIP BETWEEN STUDENTS' LEARNING PREFERENCE AND STUDENTS' ACHIEVEMENT IN ENGLISH SUBJECT AT MAN 2 POLEWALI MANDAR

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Received on 15 January 2025 / Approved on 28 April 2025

#### Abstract

This research aims to investigate the correlation between students' learning preferences and their achievement in the second grade of MAN 2 Polewali Mandar in learning English. Researchers employed quantitative research approach with a correlation design. There were two types of instruments used in this research, namely the VARK questionnaire for learning preferences and assessment rubric for students' achievement. This study used a non-probability sampling technique to collect data on 26 samples from a total population of 124 students. The research findings show that the correlation value of visual learning preference to students' achievement is 0.607. The correlation value for auditory learning preference to students' achievement is -0.316. The correlation value for read/write learning preference to students' achievement is -0.720, and the correlation value for kinesthetic learning preference to students' achievement is 0.227. Based on the data obtained, it was concluded that each learning preference component has a different level of correlation with student achievement in learning English. The researcher hopes this study can be a reference and useful for further researchers who have the same focus of discussion, they are student learning and achievement. The researcher also hopes that this study will help teachers pay more attention to the learning preferences of each student.

**Keywords:** learning preference; learning style; students' achievement; VARK

#### Abstrak

Penelitian ini bertujuan untuk mengetahui hubungan antara preferensi belajar dengan prestasi belajar siswa kelas II MAN 2 Polewali Mandar dalam pembelajaran Bahasa Inggris. Peneliti menggunakan pendekatan penelitian kuantitatif dengan desain korelasi. Terdapat dua instrumen yang digunakan dalam penelitian ini, yaitu angket VARK untuk preferensi belajar dan rubrik penilaian prestasi belajar siswa. Penelitian ini menggunakan teknik non-probability sampling untuk mengumpulkan data sebanyak 26 sampel dari total populasi sebanyak 124 siswa. Hasil penelitian menunjukkan nilai korelasi preferensi belajar visual terhadap prestasi belajar siswa sebesar 0,607. Nilai korelasi preferensi belajar auditori terhadap prestasi belajar siswa sebesar -0,316. Nilai korelasi preferensi belajar baca/tulis terhadap prestasi belajar siswa sebesar -0,720, dan nilai korelasi preferensi belajar kinestetik terhadap prestasi belajar siswa sebesar 0,227. Berdasarkan data yang diperoleh, disimpulkan bahwa setiap komponen preferensi belajar memiliki tingkat korelasi yang berbeda terhadap prestasi belajar siswa dalam pembelajaran Bahasa Inggris. Peneliti berharap penelitian ini dapat menjadi referensi dan bermanfaat bagi peneliti selanjutnya yang memiliki fokus pembahasan yang sama, yaitu pembelajaran dan prestasi belajar siswa. Peneliti juga berharap bahwa penelitian ini akan membantu guru lebih memperhatikan preferensi belajar setiap siswa.

Kata Kunci: preferensi belajar; gaya pelajar; prestasi belajar; VARK

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#### INTRODUCTION

In learning process, each student has their own way of receiving information and knowledge. Each student has unique way or so-called preference in acquiring any input. The preference used can determine the results of the learning carried out. The preference for each student is different and making it unique for each student. Understanding learning preferences is essential for creating effective and inclusive educational environments. Learning preferences refer students' liking for some element(s) of learning and chosen ways of interaction with the element(s) of learning (Yang & Chen, 2012). It is the ways in which individuals naturally engage with, process, and retain information, whether through visual, auditory, kinesthetic, or reading/writing styles. Recognizing these preferences helps educators design instruction that resonates with diverse learners, promoting deeper engagement and improved outcomes. While the concept of learning styles has been debated in recent research, acknowledging students' preferred ways of interacting with content can still foster greater motivation, autonomy, and confidence. By offering varied instructional methods and encouraging students to develop flexibility in their learning strategies, educators not only honor individual differences but also equip learners with the skills necessary to adapt across contexts, ultimately supporting lifelong learning and success. However, quite a few students do not recognize their own style or way of receiving learning which affect their interest in learning.

Recognizing learners' preferences and style is very important for both students and teachers as it is one of the factors in achieving learning goals which are achievement targets for students and also for teachers. Learning styles refers to the different methods for each individual to gain information. Looking at the learning styles of students can determine their learning preferences.

Each student has a unique way of absorbing, processing, and recreating information. Learning preference in general can be defined as the force used by an individual to learn and each individual with a different type of learning is called a learning style. Each student's learning style can be measured by self-concept, strength, physical condition, and how to receive information. The success of the teaching and learning process is not only determined by the way the teacher teaches but also by the way the students learn. Learning styles play an important role in students' lives, therefore educators try to adjust their teaching style to their students' learning styles (Ishak et al., 2022).

Learning preference is one of the main factors that help how students learn, each students have different ways, styles, and personalities in study. According to James and Gardner learning style is the condition that enables learners to perceive, process, store, and recall the learning contents. In the last few decades, there has been a surge of interest in the effects of learning styles in education which also resulted in various criteria and categorization of learning styles. Thus, it is known that there are various factors, which influence students in learning a language. Brown stated that learning is a relatively permanent change in a(Fitria et al., 2022) behavioral tendency and is the result of reinforced practice (Fitria, et al., 2022). Quoted from Özerem & Akkoyunlu, said that identifying learning styles at the elementary education level will help students reduce negative attitudes toward certain subjects (Ishak et al., 2022).

There are consequences if apply the wrong learning style or force students, this can hinder the teaching and learning process. By knowing the learning style, students can enjoy and maximize the reception of information in the learning process. The learning process by students it is can be created by their own students can freely determine their learning style according to what they want, and choose what methods and strategies will be suitable for them in obtaining information in learning. Kolb states that the concept of learning style used describes each individual because each student's learning type will be different in learning and each individual will not use the same learning process. Each type of learning is based on each individual's characteristics and of course, the results given from each method used for each child will also be different. Magdelena argues that

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students' learning styles can also be seen from their age group because it is closely related to individual learning achievement (Subagja & Rubini, 2023).

Diagnostic models of student learning preference have been developed over the years. Kumar et all observe that there has been a lot of research conducted to observe student learning styles, and several methodologies have been adopted by looking at the most preferred measuring tools for observing learning styles, namely Fleming's VARK Learning Styles are based on empirical, behavioral, cognitive, biological, and psychological traits, a diagnostic model based on human senses: Jacksin's Learning Style Profiler (LSP), and Kolb's Learning Style Inventory (LSI). One of the most widespread approaches is the VARK questionnaire (Minhas et al., 2022). Learning preference, it is means the student's style in learning VARK learning style, VARK is an acronym for four different learning styles, namely visual (V), Auditory (A), Read/Write (R), and kinesthetic (K). Fleming defines learning style as an individual's characteristics in collecting, organizing, and thinking about information in a preferred way. VARK focuses on how students can receive and take knowledge with their senses.

Learning preference, in learning VARK learning style, VARK is an acronym for four different learning styles, namely visual (V), Auditory (A), Read/Write (R), and kinesthetic (K). Fleming opines that those ways of learning as an individual's characteristics in collecting, organizing, and thinking about information in a preferred way. Each individual has their preferred way of learning, each individual's ability to absorb learning is also different, some are slow, and some are fast, therefore they must have their own preferred way to make it easier to obtain information when learning. Learning preference focuses on how students can receive and take knowledge with their senses. Students with the Aurel style prefer to learn through listening, reading, and recording the information obtained, while students with the kinesthetic style learn with the help of visual objects such as through videos, pictures, figures, and movement or practice.

All students place a high value on academic achievement. Lawrence et all state that academic achievement as obtained from formal education based on test scores, grade points, averages, and degrees. Maryam et all argue in order to improve students' academic achievement is one of the main goals of the education system in the world. Academic achievement is closely related to learning styles (Hidayah et al., 2022). Student learning achievement have been formulated in learning objectives, and the learning that has been arranged has been adjusted to the goals or achievements to be achieved from the learning process carried out. Bloom's taxonomy is grouped into three aspects namely cognitive aspects (Knowledge), affective (attitude), and psychomotor (skills).

From the explanation above, learning styles and strategies have benefits for students in improving achievement. Students' learning styles can give rise to the form of learning preference used. It is important to see and prove whether the learning preferences used will reflect different student learning achievements, therefore researchers are very interested in seeing the correlation relationship that exists between student learning preferences and student learning achievement.

## LITERATURE REVIEW

## **Learning Achievement**

Student achievement is a process of giving assignments or tests to students or college students that are used to measure the student's achievement. It can be said that this is a general term for assessment that refers to all activities carried out by teachers and students to assess their own potential. Assessment becomes formative assessment when it is proven to be used to adapt teaching to meet student needs.

Student achievement is a form of behavioral change obtained by students after carrying out learning activities. Acquiring these aspects of behavioral change depends on what students have learned. Therefore, if students learn knowledge about concepts, the resulting change will be in the

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form of mastery of the concept. Changes or new abilities obtained by students after carrying out learning actions are learning achievements. Basically, learning is how a person changes like a cause-and-effect relationship from safety. In learning, the changes produced by students are based on the learning achievement formulated in the learning objectives.

Academic achievement is closely related to learning preference, this is because learning style has a big influence on the way students receive lessons and solve problems. The concept of learning styles has a significant influence on the field of education which can be seen at all levels of education. The learning preferences used by each student make it easier for them to process, receive, and capture the learning provided (Hidayah et al., 2022).

## **The Concept of Learning Preference**

Learning is the key part of someone's life based on a person's experience, practice, ability, and approach without study and learning someone cannot be able to develop their self and will be difficult to master knowledge and technology. Besides that, learning is one of the human needs because by learning someone will be able to increase knowledge, skills, and attitude all be useful in people's life and also change behavior or skills. Learning is to change individuals that occur through experience, and a person's characteristics. Change the behavior of the knowledge and skills obtained to be better than before. The result of change a learning process can be indicated in various forms such us changing knowledge, understanding, attitudes, and behavior, skills, and ability.

Learning can be considered as permanent changes brought about by students through the education provided by their teachers, such as developing special skills, changing attitudes, and understanding scientific laws based on the learning environment. Every student wants to receive special treatment in a learning atmosphere, meaning freedom to ask questions and clearing of doubts (Munna & Kalam, 2021).

Students process information in various ways, which can be through listening and seeing, contemplating actions or reflections, and using logic to reason, analyze, and visualize. Teachers also have an important role in influencing student learning. therefore, teachers should be aware of their students. Seeing the learning needs of different students, teachers are required to adjust the study plan according to the needs of their students (James Nicole Bualat et al., 2023).

Learning change is concerned with the interaction of the environment with facts or phenomena. Stimuli originating from the environment will be responded to so that a person can receive signals. The first feature of learning change is the presence of gaps. That is, the individual deliberately involves himself in terms of the process of achieving goals. Realizing change can be in the form of adding and subtracting knowledge, attitudes, and skills. These changes tend to settle and stick to a person; after carrying out the learning process individuals will have permanent knowledge, attitudes, and skills.

Learning is an active process, learning builds students' knowledge through active activities in various learning opportunities. Therefore, teachers are required to be the driving force and motivator for students to participate in active learning through the application of learning objectives, giving interesting assignments, assessing achievement, and providing targeted feedback. Learning is addictive and incremental and takes time, in the sense that learning takes place in small steps and is built on the knowledge structure possessed by students, with the aim of being integrated into the knowledge structure. Therefore, teachers must make more effort to work by introducing new ideas and methods gradually, with time for assimilation of practical application, and reflection during the learning process.

Learning style is very important to students and teacher, but some teachers did not realize how important to know their students learning style and learning ability. Knowing students' learning styles is very helpful for teachers to create better academic achievement, specifically in English academic achievement. When teacher have understood their students learning style and preference is not only give a benefit for teacher as an educator, but also it can give a benefit for students

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(Tabita et al., 2023). Furthermore, understanding students' learning styles will be helpful for students to reach a high achievement.

There are many methods developed to discover learning styles in different individuals (Bernice McCarthy model, Dunn & Dunn model, Grasha-Riechmann model, Gregorc model, Jung model, Kolb model, Lawrance model), and each method can provide different information about individuals' learning style preferences the VARK learning model is one of the methods developed, Fleming said that visual, aural, reading/writing and kinesthetic learning styles are based on Kolb's learning model by considering that each individual has two or more learning styles as a dual learning model (Türker & Bostancı, 2023).

The following are the components of VARK learning preference:

#### a. Visual learners

In visual form, learning combines ideas, concepts and other information using images and techniques. Students with this type of learning model usually understand information with real depictions. Learning requires the use of vision through observation, drawing, and demonstration on media and teaching aids. Students prefer to see pictures and diagrams as well as shows, demonstrations, and videos.

## b. Auditory learners

This learning relies heavily on hearing and the speaker during learning. Students need to hear what is said to understand and often have problems managing information in written instructions. Students tend to listen to conversations, discussions, and verbal directions. This type tends to learn faster by reading texts aloud and listening to conversations.

Students with this learning style have sharp hearing, specifically, the auditory learning style is divided into two, first, there is linguistics, namely students who easily learn by conveying grammar, variety of vocabulary, rhymes, and sentence content through listening. The second is musical, where students easily receive learning by delivering intonation, tone, and sentences delivered rhythmically or acoustically. Auditory students can learn faster if they are in a group interaction forum or verbal discussion. They can listen well to what other people say down to small things such as high or low tone of voice and speed of speech (Fitria, Baharudin, and Wahyuni B., 2022).

## c. Reading/writing learners

Learn by taking notes and reading what you hear from your surroundings. Students with the ability to read and write usually have to read to find information and write the information to be reread as reinforcement.

## d. Kinesthetic learners

Learning is carried out by students who do physical activities, not listening to lectures or watching performances. Students usually learn by practicing directly through physical activity and direct participation. Prefer to move and touch things that provide information so they can remember them and use their hands as a means of receiving information.

## RESEARCH METHODOLOGY

This type of research uses quantitative research with correlation design research methods. It is used to determine the relationship between two variables, learning preference and academic achievement. Quantitative research can be interpreted as a research method based on the philosophy of positivism used to study certain populations or samples. The sampling technique of this research is used randomly with a minimum sample size in the population, and to collect data using research instruments and analyzing correlation.

According to Samsul et all, the population is the overall form of subjects/objects to be researched, in another view, Sugiono states that the population is the totality of research objects/subjects that have the same characteristics. The population in this research is the second-

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grade students of MAN 2 Polewali Mandar. There are five classes named XI. 1, XI.2, XI.3, XI.4, and XI.5 with a total of 124 students.

The sample is a representative form or part of the number and characteristics of the population to be studied. The sample will be select by using non-probability sampling techniques, where each population does not have the same chance of being sampled. The type of sample collection used incidental sampling, a sampling technique based on needs, members of the population met by the researcher and willing to become respondents are used as samples. The sample used in this research was twenty-six people involving several classes at the second-grade level. The sample used in this study was 26. Sampling in this study uses the Slovin formula by Altares et al, in calculating the number of samples in a population.

To collect the data, the research used a questionnaire and assessment rubric as the instruments. The questionnaire used in this research is a ready-to-use questionnaire taken from the VARK Questionnaire version 8.01 (2019). This questionnaire aims to find out the type of learning preference that students have and consists of 16 questions. Toriano (2023) states that he Cronbach Alpha reliability coefficient of the VARK questionnaire version 8.01 was pre-tested on a number of respondents who are not included in the study. It is used under the assumption that multiple items were measuring the same underlying construct. A Cronbach's alpha of > 0.70 signifies that the VARK questionnaire was reliable. It measures four perceptual preferences, including visual (V), aural (A), read/write (R), and kinesthetic (K). Respondents can select multiple items within a question.

To collect data, students are assigned to answer a questionnaire given in the form of a Google form, after which the questionnaire is checked and analyzed. In analyzing it is divided into four categories, namely visual, auditory, reading/writing, and kinesthetic in tabular form. The collected data is grouped into each part of the four components and then totaled. Then find the mean score of the total data obtained.

Table 1. Questionnaires Item Number

No.	Types of Learning Style	Number of Items (N)	Total Items
1.	Visual	1,2,3,4	4
2.	Auditory	5,6,7,8	4
3.	Reading/writing	9,10,11,12	4
4.	Kinesthetic	13,14,15,16	4

Bloom's taxonomy has grouped it into three aspects, namely cognitive (knowledge), affective (attitude), and psychomotor (skill) aspects. Cognitive is assessed based on students' academic abilities, which can be seen from daily assessments or during the learning process. As students are asked about the material discussed at that time, sometimes tested at the end of learning, and also from daily assessments. In the affective assessment, it is assessed in terms of attitude towards the subject being taught, sometimes some students seem not enthusiastic about learning, the way students are asked what the reason is, sometimes there are students who do not understand the material being discussed. The teacher teaches students to understand the material or students do peer tutoring. Psychomotor assessment focuses on students' ability to practice the material they have learned or is called practical assessment. For example, students dialogue using certain expressions, create simple dramas, sing. It can be said that students' psychomotor skills are able to transfer academic abilities to the tongue or pronunciation.

Assessment rubric is an assessment tool used by teachers to evaluate student performance based on the criteria and description of certain results they want to achieve. Carrying out assessments is very helpful in measuring student abilities and seeing the different potential in each student. This research used assessment rubric used by the teacher which covers writing, reading,

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listening, speaking, grammar and vocabulary in one semester. This category is used to indicate the level of student academic achievement. Does it include very high, high, medium, low, very low. And the presentation of the data used is in the form of a table.

Table 2. Rubric of Students' Academic Achievement

No.	Score Classification	Category of Students' Achievement
	81-100	Very high
	61-80	High
	41-60	Medium
	21-40	Low
	0-20	Very low

Student academic achievement in English subjects is categorized in the assessment rubric used by Sugiono. This category is used to indicate the level of student academic achievement.

Pertaining to whether there is any relationship between students' learning preference and academic achievement the data was analyzed using SPSS Person Product Moment. The mean score is used to find out the average of the data results on learning preferences and students' achievement, then entered into the Pearson correlation formula to see whether there is a significant correlation between the two variables in the final results. Pertaining to whether there is any relationship between students' learning preference and academic achievement the data analyzed using SPSS Person Product Moment.

Table 3. Interpretation of correlation

No.	Correlation coefficient	Interpretation
1.	0.00-0.199	Very low correlation
2.	0.20-0.399	Low correlation
3.	0.40-0.599	Moderate correlation
4.	0.60-0.799	High correlation
5.	0.80-1.000	Very high correlation

#### FINDINGS AND DISCUSSION

## **Students' Learning Preference**

The learning preferences of students are very diverse, there are several components, namely visual, auditory, read/write, and kinesthetic. Each type of student is also different and also has a tendency towards one type of preference. Each student must have a different learning preference, therefore the researcher divides each component that exists, and each part has a different score according to each student's choice. The total number of students' learning preferences according to their class and learning interests is summarized in the following table:

Table 4. Scores of questionnaire items number

No.	Types of Learning Style	Number of Items (N)	Total	Mean Score
1.	Visual	8, 7, 7, 8, 9, 8, 9	7	8
2.	Auditory	7, 8, 10, 9	4	8.5
3.	Read/write	5, 8, 9, 8, 8	5	7.6
4.	Kinesthetic	7, 7, 10, 6, 7, 8, 5, 8, 8, 7	10	7.3

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After collecting data from students who had filled out the questionnaire, the researcher regrouped the answers from each student and then determined the learning preference used based on the number of categories selected from each option in each number.

Based on data analysis, visual learning style shows an average value of 8, and has a moderate positive correlation, with a value of 0.607. In line with previous research by Sapira et al. (2022) which said that the findings stated that the correlation between visual and learning achievement was in the "enough category" with an average of 95.13 which indicates that the students rarely use the indicators of learning style. While auditory, and read/write learning preferences show a moderate negative correlation, that is the learning style move in opposite directions, but the relationship is not perfectly strong between students' achievement, different from the results obtained in previous studies stated that auditory is included in the good category with an average value of 104, which means that the students often use the indicators of learning style, in this study auditory and read/write are included in the category of moderate negative correlation with a value of -0.316 in auditory learning preference and -0.720 in read/write learning preference. Last, kinesthetic learning preference shows a weak positive correlation meaning as if the learning preference increases, the the achievement tends to increase as well, but the relationship is not very strong, not in line with the results of previous studies that stated that kinesthetic learning preference is in the sufficient category with an average value is 81, but in this study, researchers found that the correlation level in kinesthetic learning preference is 0.238 with a weak positive correlation type and the average value is 7.3.

## **Students' Learning Achievement**

Student learning preference will certainly affect student achievement, learning achievement are the final result of student learning achievement after doing learning routinely. Learning preference, or style, significantly impacts student achievement by influencing how readily and effectively they grasp and retain information. When teaching methods align with a student's preferred learning style (e.g., visual, auditory, kinesthetic), engagement and understanding increase, leading to better academic outcomes. Researchers obtain data on student learning achievement by taking assessment rubrics held directly by the teacher concerned.

Table 5. Mean of students' achievement in visual learning

Variable	Mean score	Category
Visual	80.7	High

The data were obtained by grouping the names, classes, and interests of students who were the research samples to find out each learning outcome according to the learning preference that tends to be used by the students, in the visual learning preference there were 7 people.

Table 6. Mean of students' achievement in auditory learning

Variable	Mean score	Category
Auditory	80	High

The data was obtained by grouping the names, classes, and interests of students who were the research samples to find out each learning outcome according to the learning preference that tends to be used by the students, in the auditory learning preference there were 4 people.

Table 7. Mean of students' achievement in read/write learning

Variable	Mean score	Category
Read/write	81.8	Very high

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The data was obtained by grouping the names, classes, and interests of students who were the research samples to find out each learning outcome according to the learning preference that tends to be used by the students, in the read/write learning preference there were 5 people.

Table 8. Mean of students' achievement in kinesthetic learning

Variable	Mean score	Category
Kinesthetic	83.5	Very high

Data were obtained by grouping the names, classes, and interests of students who were the research samples to find out each learning outcome according to the learning preference that tends to be used by the students, in the kinesthetic learning preference there were 10 people.

In this study, researchers obtained data from the results of adding up student scores to measure the average student score and then categorized it. The category results obtained in this study were included in the very high and high category grouped based on students who have the same learning preference and then combined into a value for each component. Students with visual learning preference have an average value of 80.7 (high category) with a total of 7 students from the existing sample. Then for auditory learning preference has an average value of 80 (high category) with a total of 4 students. Read / write learning preference has an average of 81.8 (very high category) with a total of 5 students, and kinesthetic learning preference has an average value of 83.5 (very high category) with a total of 10 students.

#### Correlation between Students' Learning preference and Learning Achievement

After finding data from learning preference and also students' achievement, the researcher then processed the data to find the correlation between the two variables. To determine the correlation between the two variables, the researcher used SPSS. The following is data regarding the correlation of each component of learning preference:

## Visual

Table 9. Statistic and correlation of visual learning preference

	Correlations		
		Visual	Learning Achievement
Visual	Pearson Correlation	1	.607
	Sig. (2-tailed)		.148
	N	7	7
Learning Achievement	Pearson Correlation	.607	1
	Sig. (2-tailed)	.148	
	N	7	7

Ovrall, this table shows a moderate positive relationship between auditory variables and learning achievement, but this relationship is not statistically significant because the p-value is > 0.05, namely 0.148.

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## Auditory

Table 10. Statistic and correlation of auditory learning preference

	Correlations		
		Auditory	Learning Achievement
Auditory	Pearson Correlation	1	316
	Sig. (2-tailed)		.684
	N	4	4
Learning Achievement	Pearson Correlation	316	1
	Sig. (2-tailed)	.684	
	N	4	4

Overall, this table shows a weak negative relationship between auditory variables and learning achievement, but this relationship is not statistically significant because the p-value is > 0.05, namely 0.684.

## Read/write

Table 11. Statistic and correlation of read/write learning preference

	Correlations		
		Read/write	Learning Achievement
Read/write	Pearson Correlation	1	720
	Sig. (2-tailed)		.170
	N	5	5
Learning Achievement	Pearson Correlation	720	1
	Sig. (2-tailed)	.170	
	N	5	5

Overall, this table shows a fairly strong negative relationship between the read/write variable and learning achievement, but this relationship is not statistically significant because the p-value is > 0.05, namely 0.170.

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#### Kinesthetic

Table 12. Statistic and correlation of kinesthetic learning preference

	Correlations		
		Kinesthetic	Learning Achievement
Kinesthetic	Pearson Correlation	1	.227
	Sig. (2-tailed)		.527
	N	10	10
Learning Achievement	Pearson Correlation	.227	1
	Sig. (2-tailed)	.527	
	N	10	10

Overall, this table shows a very weak positive correlation between kinesthetic and academic achievement, but this relationship is not statistically significant because the p-value is > 0.05, namely 0.527.

The correlation revealed in this study was determined based on each component in the learning style, the correlation results shown were very diverse but the highest level of correlation produced was in the kinesthetic learning style with a weak positive correlation type. This is different from previous studies that mostly combined learning preferences into one part. As in previous studies by Prasetyo (2021) which showed the relationship between students' learning preferences and their learning achievements was linear with a Sig-0.05 value. The coefficient is positive, which means that the correlation between the two variables X and Y is positive.

The correlation produced by the data on the two variables is first visual with a Pearson correlation value of 0.607 with p = 0.148, then auditory with a Pearson correlation value of -0.316 with p = 0.684, read/write with a Pearson correlation value of -0.720 with a p-value = 0.170. The last is kinesthetic with a Pearson correlation value of 0.227 with a p-value = 0.527. Different from several previous studies that state:

Hidayah et al. (2022) analyzed the relationship between learning styles and learning achievement in the form of correlation research, there were two types of instruments used, namely questionnaires about learning styles and student transcripts, and the data obtained was analyzed using Pearson product moment. The results of the analysis show that there is a positive correlation between learning styles and student achievement but with a moderate level of correlation. This means learning style is not the main factor in student academic achievement. Visual learning style is a learning style that has a dominant influence on learning achievement.

In previous studies, it was found that most students apply auditory learning preference in obtaining learning with good category in average value 104. In line with this research, auditory learning preference which is included in the high correlation category with a Pearson correlation value of 0.607. Based on the results of several previous studies, the researcher concluded that learning preference is not the main factor in achieving academic achievement, but as a student, learning preference is an important part to pay attention to in receiving lessons, as evidenced by the existence of negative and weak correlations, as well as strong correlations. positive, also in the fair and good categories. This proves that by knowing the type of learning preference students can improve their academic achievement by knowing the appropriate actions in taking the material

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being taught. This is also a consideration for teachers to present material based on students' interests in learning or adapting to their students' learning preferences.

#### CONCLUSION AND SUGGESTION

#### Conclusion

Based on the explanation in the previous section, the conclusion can be drawn is the level of correlation between students' learning preferences and their achievements according to the data that has been processed by researchers found different levels in each existing component, but it can be ascertained that none of the components achieved a significant correlation based on statistics. The correlation values obtained for each component are: visual (0.607) with the high category, auditory (-0.316) with the negative low correlation category, read/write (-0.720) with the negative high correlation category, and kinesthetic (0.227) with the very low correlation category. The highest level of correlation in this study related to the two variables was in visual learning style with a Pearson correlation score of 0.607.

## **Suggestion**

Based on these findings, it is suggested that students know each type of learning preference that is comfortable for them in receiving learning so that they can achieve more in processing learning. By knowing the right type of learning preference, it will be easy for them to formulate learning materials. The results given by knowing learning preferences in learning will have a good impact on learning achievement for the students themselves. Besides, teachers need to pay attention in providing materials to students by considering the type of learning preference that each student has. This will have a good impact on student learning achievement and can increase students' desire to learn in the right way for them personally.

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