

Research Article

## The Relationship of Student Learning Styles and Achievement in History Subject

Norhayati binti Ishak<sup>1</sup>, Mohd Mahzan Awang<sup>2</sup>

<sup>1</sup>Faculty of Education, National University of Malaysia

<sup>2</sup>Faculty of Education, National University of Malaysia

**ABSTRACT:** Learning styles are essential elements for students' as learning styles have its strong influence on the achievement of a subject. The objective of the study is to investigate the relationship between learning styles and student's achievement in History subject. This study identifies six different Grasha learning styles by gender and relationship to student achievement in History subject. Suitability of students learning styles in the History subjects will be more effective and provide a positive impact on students' academic if the teaching process and learning tailored to students' learning styles. A total of 200 students were selected as respondents from two schools in the district of Kulim, Kedah. A set of questionnaire instrument was used to measure students' learning style preferences. Overall; the tendencies of students to use learning styles are at a higher level unless avoidance learning styles. The T-test showed no difference between learning styles based on gender. Pearson correlation analysis showed no significant relationship between learning styles and achievement of student in History subject. A study implication towards teachers is the need of diversification of skills and teaching methods in the classroom. This, in turn, will foster interest and improve learning habit among students. As a result, students can achieve better in History subject.

### INTRODUCTION

A learning style is very important for every student as it has a strong influence in contradiction of achievement. A learning style is a method in which individuals absorb and retain new information or skills, regardless of how it is described, but the process is different for each individual. A learning style is a balanced measurement of a person resulting a person to react to the environment, how to interact and viewing something in the learning process.

[8] States that in order to study the History, the suitability of learning styles is essential in attracting students to understand and appreciate the History subject. Therefore, the suitability of learning styles in the classroom will be more effective and gave a positive impact on students' academic if the process of teaching and learning tailored to the students' learning styles. After learning styles are identified, the teaching and learning process is easier to do.. Educators need to shift the approach to be more proactive and responsive to the target group which is the source and goal of the education world.

[13] The history subjects is one of the core subjects made compulsory for all students in secondary schools in Malaysia. In addition, learning History subjects aims to develop students' character in instilling the values of patriotism among the young generation now. In addition, learning history is very important for a country, especially in a pluralistic society like Malaysia. In a sophisticated and advanced world, especially in information technology, history is a subject that is increasingly marginalised [1]. This is true because each student has a different background, such as the origins of the family, culture, environment, and others. This has formed the personal characteristic of each student are also different and same goes to their learning style.

Next, the learning process for each individual is different to suit themselves, which involves observation and knowledge processing or information processing that occurs differently. There are some people with only reading able to understand a piece of information, but some people have to go through the practical experience in order to understand such information. The experts also agreed in stating that the learning process is different and different learning styles and can also affect their academic achievement.

[14] Learning styles should not be used to label the students. Instead, information about learning styles is more meaningful if it is used as a source of strength for the students who can be an important input in the design of the curriculum and teaching strategies.

The styles of each individual in learning methods are different from each other [2]. According to them again, learning styles can be indicators of how people learn and how to learn in their own comfortable ways. Therefore, teachers need to know and understand the individual learning styles as an effective learning style of a student may not be appropriate for other students [15]. Furthermore, the incompatibility between learning styles and teaching styles appear likely to cause students to become bored, not obtaining good grades in the examination, less interested in the subjects and to the extent there are students who decided to change learning majors (Felder & Silverman, 1995). Therefore, the researchers looked at by analysing students' learning styles and adapt their teaching approach in which teachers have the information to set appropriate strategies to help students who are different. To overcome the shortcomings and problems, a history teacher must be wise in applying the appropriate learning styles in the classroom.

Therefore, based on the problem, this study will focus on identifying learning styles practised by form four students in the History subjects. This study was also conducted to identify differences in learning styles by gender and to identify the relationship between learning styles and academic achievement in the History subjects

## LITERATURE REVIEW

This section discusses the definition of learning styles and discussion of previous studies by other researchers about learning styles and their relationship with student performance on achievement in History subject in which there are also studies that use various learning styles.

### A. Learning Style

[3] Learning styles is the motive and strategies of the students to learn in order to achieve their aspiration. Learning styles also involve planning and learning systems such as the timing of the study, making notes, compiling important learning materials, how to revise the lesson content, create and complete tasks and goals of the learning takes place either systematically or otherwise.

[7], Basically, a student will use all these learning styles in teaching and learning the process. However, a student will tend to use more than one style of learning to gain knowledge. Grasha has listed an ideal learning style, which is independent learning style, avoidance, collaborated, dependent, competitive and participant.

According to Grasha (1996), learning styles can be seen as a profile in every student. Usually, the quality of dominant learning style is most easily observed in the classroom. In addition, learning styles gave an impact on academic achievement. Furthermore, students exposed to learning styles are to obtain better achievement outcomes than those who are not exposed to the learning styles.

### B. Past Studies

Apart from managing the learning process, understanding of student learning and learning styles are also necessary (Nicholls, 2002). Studies show there is a positive relationship between students' learning styles are taken into account in the classroom achievement. Therefore, it is important to consider learning styles to plan to teach (Burke, 2002).

According to Sadiyah (2002), identifying learning styles practised by the students, especially in secondary schools is important because individuals are different from each other. A different learning style among students is one of the various categories of students' needs because it can provide important implications for teaching and learn (Felder & Brent, 2005).

In addition, awareness about learning style is very important for teachers to plan to teach structure due to a variety of strategies to promote learning [6]. Moreover [5], the effectiveness of student learning in the classroom is not only determined by the natural abilities of students and students

early preparation even the compatibility between learning styles and teaching styles.

Abdul Razak Habib and Rashidi Azizan (1997) in their study of the relationship between learning styles and achievement in Science and Mathematics learning styles emphasise three of Selmes Learning Styles model [16], the motivation of style, depth and surface. Their findings indicate that despite the positive relationship between the three learning styles, motivation, positive relationship style with deep style is more powerful in influencing the academic achievement of Science and Mathematics.

Abdul Razak Ahmad (1999) in his study of the relationship between students' learning styles and achievement in the History subjects evaluates the different learning styles of students in the subjects by gender, ethnicity and location in the History subject. According to him, these findings demonstrate the learning styles of students in the History subjects are flexible and diverse.

[4] In his study of learning styles and its relationship with academic achievement of trainee teachers semester three in Sarawak Teachers College, Miri's with comparison of the different learning styles by gender, race and main subject of study and the relationship between learning styles and academic achievement was found no significant relationship between learning styles and academic achievement of trainee teachers. This study used a Selmes Learning Style Inventory (1987), found the trainee's teacher practised a variety of learning styles and are not tied to only one learning style. They tend to adopt a boost learning styles, surface learning styles, depth learning styles and tenacious efforts learning styles against organised learning style.

[12] Conducted a study to examine the relationship between family environment and learning styles with achievement in Science subjects students have found a significant relationship between learning styles are independent, avoidance, collaborative, dependent, competitive and participant with Science students achievement. His research focuses on how students behave in the process of teaching and learning in the classroom and are measured using the Grasha-Riechmann Learning Style Inventory Scale (1996).

[10] In his study on the relationship between learning styles and academic achievement and achievement motivation among students of Teachers College Keningau Sabah, has conducted a survey among colleges students using Model Grasha (1996) to identify the learning style preference and the relationship between learning styles, academic achievement and motivation achievement. His study shows a significant relationship between learning styles are independent, avoidance, competitive and participant in student academic achievement.

The formula is based on studies that are presented, shows that students tend to use a combination of learning styles and not limiting learning styles. Learning styles were found to have a significant relationship with student achievement and also

affects student achievement. However, there are also findings that showed no significant relationship between learning styles and student achievement..

**RESEARCH METHODOLOGY**

The study was a descriptive quantitative study using survey research design (survey) to obtain feedback. The aim of the study was obtained through a questionnaire about learning styles used by students. The use of the questionnaire is a time-saving way to collect data. The data collected and the results of this study can provide information to achieve the assigned objectives

*A. Research Design*

The study will be conducted is a quantitative descriptive study using survey designs to get feedback. The aim of the study was obtained through a survey on the use of media learning practice by students. The use of the questionnaire is more practical because it involves the public and eases the researchers to analyse the data obtained. Tuckman (1978) believes the questionnaire is an effective way to use, therefore using random sample surveys is more practical.

*B. Population and Research Sample*

In this study, researchers used to form four students from two schools in Kulim, Kedah as respondent. All samples made is simple random sampling. [20] The use of simple random sampling increases the chances for researchers to obtain data representing the population and increase the accuracy of the results. Respondents involved in this study were 200 people. [11] Noted that the sample size should be selected based on the ability of energy, time and cost of a researcher and it is necessary for a researcher to use a sample size of more than 30 respondents.

*C. Research Instruments*

The search instruments used by researchers are using questionnaires. The instrument is based on Grasha Learning Styles instrument (1996) which has been translated. A total of 200 sets of questionnaires translated from Grasha Learning Style Scale and distributed to students. In the questionnaires, there are two parts, Part A and Part B. In Part A contains the items related to demographic factors such as gender and respondents attainment. Respondents need to mark (√) in the space provided. In part B, there are 36 items consist of six aspects based on Grasha-Riechmann Learning Style Scale namely independent, avoidance, collaborative, dependent, competitive and participant. In addition, Part B will be scored in Likert Scale which is divided into five stages scores namely, Strongly Disagree (SD) score of 1, Disagree (D) score of 2, Undecided (UD) score of 3, Agree (A ) score of 4 and Strongly Agree (SA) score of 5

*D. Data Analyzing Procedures*

In this study, descriptive statistics data elaborated in the form of a table showing the frequency distribution, mean percentage and standard deviation. Analysis using inferring, t-test, one-

way ANOVA and Pearson correlation was used to formulate and interpret the data in detail.

*E. Reliability Study*

Reliability study refers to the consistency of the instrument in measuring variables (Mohd Majid, 2005), by which the reliability value of Cronbach Alpha is between 0.00 to 1.00 (Aron, 2007). Items with a value of Cronbach Alpha at least 0.60 is commonly used as reliability index and Cronbach Alpha value exceeding 0.80 is considered very good. While the Cronbach Alpha value of less than 0.60 is not acceptable. Cronbach Alpha for the entire item and constructs is as Table 3.1 below:

Table 3.1: Cronbach Alpha Value

| Constructs    | Alpha Value |
|---------------|-------------|
| Independent   | 0.73        |
| Avoidance     | 0.79        |
| Collaborative | 0.77        |
| Dependent     | 0.64        |
| Competetive   | 0.88        |
| Participant   | 0.77        |

**RESEARCH FINDINGS**

*A. Learning Style Level of Use*

The level of use of learning styles by students in the History subjects is determined the mean score obtained. The results of analysis of the use of learning styles practised by the students is shown in Table 4.1

Table 4.1 Use of Learning Style Mean Score Analysis

| Aspect        | N   | Mean Score | Standard Deviation |
|---------------|-----|------------|--------------------|
| Independent   | 200 | 4.01       | 0.65               |
| Avoidance     | 200 | 3.64       | 0.73               |
| Collaborative | 200 | 3.75       | 0.65               |
| Dependent     | 200 | 4.07       | 0.55               |
| Competitive   | 200 | 3.97       | 0.66               |
| Participant   | 200 | 3.75       | 0.72               |

Overall, all learning styles showed high mean score, which is 3.86. It showed that overall, students practice all types of learning styles and are not tied to only one type of learning styles in learning the subjects of history in the classroom. Students have a bias towards dependent and independent.learning styles

*B. Comparison of Learning Styles by Gender Among Male and Female Students*

The results of a comparative analysis of all types of learning styles based on Grasha learning styles (1996) adopted by the students based on gender is as follows:

Table 4.2 Learning Style Comparison by Gender Among Male and Female

| Type of Learning Style | Gender | N   | Mean | Standard Deviation | T      | P    |
|------------------------|--------|-----|------|--------------------|--------|------|
| Independent            | Male   | 81  | 3.90 | 0.65               | -1.862 | 0.06 |
|                        | Female | 91  | 4.08 | 0.65               |        |      |
| Avoidance              | Male   | 81  | 3.55 | 0.82               | -1.473 | 0.14 |
|                        | Female | 119 | 3.70 | 0.65               |        |      |
| Collaborative          | Male   | 81  | 3.63 | 0.72               | -2.149 | 0.03 |
|                        | Female | 119 | 3.83 | 0.59               |        |      |
| Dependent              | Male   | 81  | 3.97 | 0.59               | -2.046 | 0.04 |
|                        | Female | 119 | 4.13 | 0.51               |        |      |
| Competitive            | Male   | 81  | 3.88 | 0.72               | -1.671 | 0.10 |
|                        | Female | 119 | 4.04 | 0.61               |        |      |
| Participant            | Male   | 81  | 3.75 | 0.73               | -0.037 | 0.97 |
|                        | Female | 119 | 3.75 | 0.72               |        |      |

\* probability levels is significant at 0.05

Based on Table 4.2, there is no significant difference between independent learning style, avoidance, competitive and participant ( $p > 0.05$ ) based on gender. This shows the use of independent learning style, avoidance, competitive and participant for male students has no difference with female students. As for the collaborative and dependent learning style showed significant differences based on gender ( $p < 0.05$ ). It indicates collaborative and dependent learning styles for male students is different with female students.

C. Relationship Between Learning Style and Students Achievements of History Subjects

The analysis results of the relationship between learning styles and achievement of student in History subject.

Table 4.3 Pearson Correlation Analysis Between Learning Style with Students Achievements

| Variables     | Achievements |       | r    | Relationship Level of Strength |
|---------------|--------------|-------|------|--------------------------------|
|               | n            | p     |      |                                |
| Independent   | 200          | 0.08  | 0.12 | Very weak                      |
| Avoidance     | 200          | 0.79  | 0.02 | Very weak                      |
| Collaborative | 200          | 0.66  | 0.03 | Very weak                      |
| Dependent     | 200          | *0.02 | 0.17 | Very weak                      |
| Competitive   | 200          | 0.59  | 0.04 | Very weak                      |
| Participant   | 200          | 0.70  | 0.03 | Very weak                      |

\*Probability is significant at 0.05

V. DISCUSSION AND IMPLICATIONS

Based on the findings, it is found that overall students tend to use all types of learning styles and independent, avoidance, collaborative, dependent, competitive and dependent learning styles have been studied. This study also showed that there was a significant mean difference between male and female students for the learning style of collaborative and dependent. Whereas for independent, avoidance, competitive and participant learning style showed no significant difference between male and female students.

From the mean score obtained, female students are more likely to practice dependent learning styles compared to male students. This shows female tend to accept directions and identify the authority for the guidelines on what should be done. However, most of them are bright student and excellence in academic, but their weakness is the lack of confidence to engage in an activity if teachers do not give advance directives because they think teachers and friends as a source of support in the classroom. However, the mean score indicates that learning style which involved female and male respectively are equally likely in practising participant learning styles. It shows male and female students each follow directions and focus on teaching and participate in group learning activities as much as possible.

This finding is similar to the findings of a study conducted by Cavanaugh (1981), Shareena (1995), Badariah (1997), Wan Zakri (2000) and Nik Mohd Rahimi et. al (2000) which found no significant difference between learning styles by gender. This study is also almost similar with Chua (2002), which found no significant differences in mean scores types of learning styles between trainee male teachers and trainee female teachers expect for planned learning style.

Pearson correlation analysis found that there was no significant relationship between independent, avoidance, collaborative, competitive and participant learning styles with students achievement in the History subject of with a very weak relationship. Furthermore, dependent learning styles showed only a significant relationship with the achievement of student in History subject. However, the strength of the relationship is very weak which can be ignored. This means that overall showed no significant relationship between learning styles and achievement of student in History subject.

In addition, these findings were in line with findings such as Abdul Razak (1999), Mohd Zailani (2001) and Chua (2002). These studies each found no correlation between learning styles and student achievement. However, these findings contradict the findings by Mckee (1993), Abdul Talib (1998), Mohd Rasid (2004) and Kundayis (2005) study in which they found a significant relationship between learning styles and student achievement.

Although there is a conflict with the findings of other studies, the most important is the meaning behind the findings. This study shows that there is a relationship between independent, avoidance, collaborative, competitive and participant learning

styles with the achievement of history subjects shows that the tendency of the students skills need to be nurtured in learning based on the learning style they prefer and fits their skills and abilities of their own in order to assist them in improving their performance. However, this study shows that learning style is not certain to cause low or high student achievement for the analysis of this relationship is not to make inferences about cause and effect between the two variables related [9].

#### A. Implication

In summary, low achievement or lack of interest in the History subjects might be considered as disabled or lack of knowledge in the field. In fact, it may be due to students are having difficulty with learning styles. Therefore, teachers with an understanding of learning styles will be easier to adapt to a more effective teaching methods when facing with situations to teach very subjective subjects like History.

In addition, teachers whom often uses learning styles in the classroom will be more sensitive to the student's various individual characteristics. Therefore, they will diversify how to teach history in the classroom so that the subject is not boring and can also stimulate the nature of learning in students. This situation will reduce the conflicts that arise as a result of a conflict of teaching styles and students learning styles.

Consequently, the students that are aware of their learning styles will be more effective and obtain better results and master the skills to apply knowledge in other fields.

Based on the source of this information will also be able to help parents to understand their children studying. This will create a more comfortable learning environment for students. In fact, these findings are also important in providing information on learning styles for the Ministry of Education, Research and Planning Division which act as planning, building and determine the direction of national education.

#### IV. SUMMARY

This study affirmed that students' learning styles do not have a relationship with student performance, and there is a difference between learning styles based on gender in the History subjects. However, this study proves that dependent learning styles are often used by students in the History subjects. It is due to History education in the 21st century has undergone many changes both in terms of curriculum, education and teacher training, attitude and students interest in the History subject. The diversity of students in a classroom is also one of the aspects taken into account by History teachers nowadays. History teachers not only serves as a conduit of knowledge and information to students, teachers become even more challenging role with a multifunctional and multidisciplinary.

In conclusion, the student diversity factors should be taken into account and fulfilled by History teachers teachings. Learning styles is one of the diversity of the student. Concerned History teachers towards students' learning styles

will become more sensitive to the various nature of each individual students. Therefore, they will try to diversify the approaches to the teaching of history which often considered boring and less important by some students. When a History teacher cares about the diversity of their students' learning styles, indirectly it will foster interest and improve learning practices among students. As a result, students can achieve better in History subjects

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