Learning Styles Perform Based on Sex Perspective at Secondary School Islam Terpadu Nurul Hasan Kota Ternate, Indonesia

Adi F. Mahmud, Fauji Koda, Rahmania Sadek, Nursina Hamia

Abstract: The present study attempts to find out what learning styles perform by male and female students and investigate what learning styles dominantly perform by students at Secondary School Islam Terpadu Nurul Hasan Kota Ternate. The total subjects who participated in this study were 50 students. They consisted of 24 male and 26 female. The subjects divided based on sex category, one class is male, and one class is female. Purposive sampling technique used to select the subjects. This study applied the qualitative approach. Data were collected through a questionnaire, in-depth interview, and observations. Afterward, questionnaires data tabulated using Microsoft Excel 2010 and Analysis Factor Using SPSS 16 (to get percentages), while interview data presented descriptively (to obtain evidence and reasons), and finally continued to observation sheet with participant observation technique (to strengthen the pieces of evidence). All of the data calculations then presented via figures, description, and table. The questionnaire results described male and female students have a different percentage in visual style. Male students achieved 48.20% of visible and female gained 71.40%. In auditory form, male students got 74.80%, but females obtained 64.60%. This means male students were higher than female students in the auditory form performed. Meanwhile, in kinesthetic style, male students acquired 78.30% while female students were 82.90%. These findings can be presented that each learning style (visual, auditory, and kinesthetic) performed differently between male and female student although it is not a significant difference. However, there are many pieces of evidence which proved it. Moreover, the dominant learning styles performed by male students were Kinesthetic (78.30%) and auditory (74.80%), while female students dominantly performed kinesthetic (82.90%) then visual (71.40%). Questionnaire results also strengthened through interview and observation findings. The findings from the interview and observation showed that students selected learning styles in a questionnaire in line with interview results and students perform activities in teaching and learning took place in the classroom.

Index Terms: Learning styles, perform, sex perspective.

1 INTRODUCTION

Successful Teaching and learning English as Second Language (ESL) or Foreign Language EFL in the classroom can be intervened by many factors. Those factors can be internally or externally. The internal factors include students’ physical condition, emotion, and family background, and learning styles of each learner. Meanwhile, external factors are such as environment, school facilities, and teachers as a figure. On the other hands, some people can learn best individually, in bright light, hopeless light situation, and then some people learn best in groups or authoritarian figures such as parents or teachers. Some people need music in the background, while others cannot concentrate except in a quiet room. Some people need a regular and tidy work environment or a fun condition.

All the above factors have a contribution to students’ learning achievement, but this study just concerning learning styles used by learners. The researchers consider that this factor is one of the crucial parts which influence the students learning achievement in the classroom. Student learning styles are influenced by personality types, habits, and evolve with time and experience [1]. Learning style is a way for individuals have in absorbing, organizing, and processing the information received. An appropriate learning style is a key to student success in teaching [2]. Learning style of students can work more easily to understand the subject matter and students can develop learning potential with more optimal, which becomes the foundation to know the importance of learning style is, so that students can understand quickly and optimally in the subject matter [3]. Learning styles are a combination of how one absorbs, and organizes and processes information, seeing, hearing, writing, and saying but also the aspect of information processing. The aspect is when responding to something in the learning environment. Learning style also is a consistent way done by a student in capturing the stimulus or information is about how to remember, think and solve problems [4, 5]. From these pieces of evidence, it insists that learning styles of students give great contributions to students’ achievement in learning. Therefore, ESL or EFL teacher should consider learning styles of students to design teaching and learning activity in the classroom.

In many cases, most of ESL or EFL teachers’ assumption that all students have the same learning styles so that most of the teachers generally apply teaching models or method in the same situation in the classroom. This case also happens in secondary school Islam Terpadu Nurul Hasan Kota Ternate. Based on preliminary data of this research taken from the interview, teachers still have an assumption that student is capable of receiving learning materials delivered in the same way, whereas school separated students based on sex perspective to place each class. In other words, male and female cannot place the same class. Refer to that situation, and teachers should consider sex perspective in set up classroom activities and chose teaching model or method to apply in the classroom. It is because sex gives the biggest results in students'
learning achievement in the classroom. Deference sex will give
difference way of teaching. The way students learn of the variety
is known as learning style influenced by experience, gender,
etnicity [6]. Sex differences become one of the differences that
exist in the classroom. This distinction also symbolizes a
characteristic that male is different from the female on several
sides, such as biology, psychology, viewing problem, lifestyle, etc.
Therefore, it is not surprising that everyone has the most
preferred style that different from the others and it becomes their
characteristic. The difference can also be shared by male and
female, as people who have different developments. In the sexual
perspective, the difference is influenced by the biological factors
of physical and mental development. Sex difference can also affect
the magnitude of student motivation to achieve. This is because of
the assumption that male is superior in the field of science and
mathematics, while the female is superior to more delicate tasks
such as art and music. The next difference is the level of
aggressiveness; male tend to be more aggressive than female. So
this may result in differences in the development of abilities
between male and female.

A lot of research results in education in the last decade showed
that the different gender of learners contributes students’
academic achievement, interest and need (Collins, Mcleod, &
Kenway, 2000) [7]. Lakoff (1973) stated female perform
communication using high intonation, politeness, most emphatic,
and question. From those facts, it can be stated that understanding each student's learning style in sexual perspective
is one of crucial thing as ESL or EFL teachers to create the best
atmosphere and get high quality of teaching and learning in the classroom [8]. Start from each evidence before this study set up to
concern in private schools or Islamic foundations Nurul Hasan
Kota Ternate, it has a lot of glorious achievement. This
Islamic school looks like a pesantren. One of the prominent features is the class separation between male and female. The
class separation is applied from first until third grade. One of the
reasons is male and female students have different ways of
absorbing learning materials (learning style). Even so, this school
is not spread from the various problems that exist in the quality
improvement process, especially learning and teaching issues
faced by student and teachers in the classroom. The study focuses
on learning styles preference based on sex perspective. Learning
styles mean here are visual, auditory, and kinesthetic. These learning
styles produce by Dunn and Dunn [9, 10, 11]. They are call VAK
learning styles. It can be seen clearly in Table 1.

Table 1. Dunn and Dunn’s Learning Style Theory (VAK)

<table>
<thead>
<tr>
<th>Perception</th>
<th>Description/Characteristics</th>
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<tbody>
<tr>
<td>V: Visual-Seeing</td>
<td>The mind sometimes stays during verbal activities</td>
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<tr>
<td>A: Auditory-Hearing</td>
<td>Observes, rather than talks or act; may be quiet by nature</td>
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<tr>
<td>K: Kinaesthetic-Doing</td>
<td>Organized in approach to tasks</td>
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<td></td>
<td>Likes to read</td>
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<td>Usually a good thinker</td>
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<td>Memorizes by creating mental images</td>
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<td>Thinks in pictures</td>
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<td>Easily put off by visual distractions</td>
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<td>Find verbal instructions difficult</td>
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<td>Remember Faces</td>
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<td>Strong on first impressions</td>
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<td>Likes drawing and doodling, may have good handwriting</td>
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<td>Enjoys using color</td>
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<td>Notices details</td>
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<td>Often a quick thinker</td>
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<td>May focused on the 'big picture' and used advanced planning</td>
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<td></td>
<td>Talk to self aloud</td>
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<td>Outgoing by nature</td>
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<td>Whispers to self by reading, may hum or sing while working</td>
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<td>Likes to be read to</td>
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<td>Maybe particular about the exact choice of words</td>
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<td>Memorizes by steps in a sequence</td>
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<td>Very aware of rhythm</td>
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<td>Easily distracted by noises</td>
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<td>May have difficulty with written instructions</td>
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<td></td>
<td>Remembers names</td>
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<td>May assess people by the sounds of their voice</td>
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<td></td>
<td>Enjoys music and the sounds of words</td>
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<td></td>
<td>Enjoys talking and listening</td>
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<td></td>
<td>Can remember-and often mimic-speech by picking up the</td>
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<td></td>
<td>rhythm of the sentence</td>
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<td></td>
<td>May need time to think (i.e., discuss it with my self)</td>
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<td>May assess a situation on 'how it sounds' to them</td>
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</tbody>
</table>

Based on Table 1, Dunn and Dunn’s VAK learning style model
applied three main sensory receivers: Visual, Auditory, and
Kinesthetic to determine the dominant learning style. The model
is also sometimes known as VAKT (Visual, Auditory, Kinesthetic,
& Tactile) [12]. Learners use all three modalities to get and learn
new information and experiences. However, this theory is one or
two of these receiving styles usually is dominant. This style may
not always be the same for some tasks. The learner may prefer
one style of learning for one work, and a combination of others
for different work. An essential principle in the Dunn and Dunn’s
model is the idea that students' potential and achievement are
heavily influenced by relatively fixed traits and characteristics

Source: Authors; adapted from Coffield et al., 2004; Dunn & Griggs, 2003;
Dunn, 2001; Dunn, 2003.

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for different work. An essential principle in the Dunn and Dunn’s
model is the idea that students' potential and achievement are
heavily influenced by relatively fixed traits and characteristics
(Dunn, 2001; Dunn, 2003; Dunn & Griggs, 2003). Therefore, this study interest to conduct with the problems as follow:
1. What learning styles performed by male and female students in learning English at the Secondary School Islam Terpadu Nurul Hasan Kota Ternate?
2. What learning styles dominantly perform by male and female students in learning English at the Secondary School Islam Terpadu Nurul Hasan Kota Ternate?

This research is a series of 2018 lecturer to school assignment programs (PDS) of Indonesia Research Technology and Higher Education Ministry in Muhammadiyah University North Maluku with several previous studies [13, 14, 15].

2 RESEARCH METHODOLOGY

This research applied a qualitative approach to answer problem statements. This research used purposive sampling with inclusion criteria by choosing 50 students from two classes. This was done to support the three research instruments (questionnaire, recorder ‘interview,’ and observation sheet). Results of the instruments will compare and inform the differences or similarities sources that have been found to make data consistent and reliable. Interview and observation applied to strengthen data from the questionnaire. This research was held in the second-grade students of Luqman class and Syafa class at Secondary School Islam Terpadu Nurul Hasan Kota Ternate. Those classrooms have two times English subject in a week. Each meeting takes 2 x 40 minutes, so they spend 160 minutes to learn English in a week. The researcher spent two weeks to do the research. The first week was spent to give a questionnaire, an interview to students relate to the reasons for learning styles they have. The second week was spent to observe students’ activities when teaching and learning took place in the classroom.

The subject consisted of 50 students with 24 male from Luqman class and 26 female from Syafa class. Purposive sampling technique applied to determine subjects of study. In collecting data, it applied triangulation data collection namely; (1) Questionnaire. The researchers spread out the statement list to know the student’s suggestion for each item of the questionnaire. Every student got one questionnaire to fill out, and they forbade to copy their friends’ paper, (2) Recorder. The researchers used the recorder to interview orally to get answers or opinions from students. Then, the researcher asked students’ opinions about the preferred learning styles of the students, and (3) Observation sheet directly. The researchers observed the class to know the students’ activities by looking at the English learning process in the classroom. In the process of observation, the researchers wrote the students’ activities related to their learning styles for 60 minutes. To analyze the data, researchers followed three steps (1) this study were used Analysis Factor technique on the Statistical Package for Social Sciences (SPSS 16) to observe the differences percentage of each learning styles dimension. The data were tabulated using Microsoft Excel 2010 in which the calculations were presented via figures and table, (2) to analyze the interview result, ‘in-depth interview’ was used. This method was chosen as to provide new insights to the researchers on how the respondents think and reflect regarding their learning styles preference, (3) the result of observation sheet analyzed by ‘participant observation’ technique, where it has been planned before. The observations were noted systematically in accordance with learning style variables that have been set.

3 FINDINGS AND DISCUSSION

Findings

The research results presented sequence based on steps of data collecting applied namely; questionnaire results, interview results, and observation results. Interview and observation results were needed to strengthen questionnaire results regarding their learning style. Research findings classified into three parts as follows.

1. Questionnaire Result of Males’ Learning styles Percentage
Kinds of learning styles refer to Dunn and Dunn (2003) learning styles that we know Visual, Auditory, and Kinesthetic (VAK). The results presented based on sex category. The results of males’ learning styles taken by questionnaire described in Figure 1.

![Figure 1. Males’ Learning Styles Percentage](image1)

Based on Figure 1, there are three learning styles of male students have different percentages. Kinesthetic learning styles of male got 78.30%, auditory got 74.80%, and visual got 48.20%. The results indicated that Kinesthetic was given preference over auditory and visual. It means that visual learning styles were less attractive to male students.

2. Questionnaire Results of Females’ Learning Styles percentage
The results describe female students’ learning style perform based on Dunn and Dunn (2003) perceptual learning theory which is called VAK. The results were taken by questionnaire as seen in Figure 2.

![Figure 2. Females’ Learning Styles Percentage](image2)
Based on Figure 2, there is three learning styles preference from female students are the difference between male learning styles. Female students learning techniques showed Kinesthetic styles got 82.90%, Visual got 71.40%, and the auditory got 64.60%. It is clear that the auditory learning style is less desirable by female students than visual and Kinesthetic is the highest around them — moreover, male and female students learning styles preferences present in Figure 3.

![Students' Learning Styles Preference](image)

**Figure 3. Male and Female Students’ Learning Styles Percentage**

From Figure 3, it describes the overall learning styles performed by male and female students at Secondary School Islam Terpada Nurul Hasal. The learning styles presented for visual, male students prefer 48.20% and females are 71.40%, then the average percentage both male and female are 59.80%. In auditory, female students got 64.60% and males are 74.80%, and the average rate between male and female are 69.70%. Meanwhile, male students achieved kinesthetic learning style 78.30% and female students gained 82.90%. So, the average results between male and female students’ in kinesthetic is 80.60%.

3. Interview Section

In the section of the interview, respondents were grouped based on learning styles perform in the questionnaire. The interviewed used to determine the reason or response to the learning styles preference. This was done to strengthen the results of the questionnaire. Researchers have summarized the responses shown by the respondents of each type of learning style. Respondents were categorized based on learning styles preference namely eight responses are visual students, seven responses to auditory students, and ten responses are kinesthetic students. Below are the responses shown by students during the interview section.

Students’ Responses on visual learning style (statement 1-5);

**Respondent 1:**
"Writing and reading the story is my hobby. I and some classmates are making storybooks for our class. So, if you want me to choose music or writing, I choose to write".

**Respondent 2:**
"I love when the teacher tells us to draw something. I often draw something on my mind. Whatever that".

**Respondent 3:**
"I found it hard to study in a crowded place because it made me lose my concentration of learning".

**Respondent 4:**
"When the teacher asked us to observe, I am delighted, because I am a curious person”.

Students’ responses on auditory learning styles (statement 6-10);

**Respondent 1:**
"Reading alone is very boring”.

**Respondent 2:**
"When my English teacher teaches by using pictures or video I am delighted because it does not make me sleepy and bored”.

**Respondent 3:**
"I like listening to music. In my free time, I often listen to English music. I can memorize the music that I have heard”.

**Respondent 4:**
"In my class, there are Tahfidz subjects. If I was reading the Al-Qur’an, I am slow to memorize it, but if I listen through my friends pronounce or in handphone, it makes me more comfortable to learn it”.

**Respondent 5:**
"When my teacher or friend reads or explains something, it is the better way, because if something is not understood, I can ask them. But if I am reading by myself, sometimes often confused and make me lazy”.

**Respondent 6:**
"I cannot focus if we learn in outside because their so much thing can be seen and heard”.

**Respondent 7:**
"I find it hard to listen to an explanation without a teacher giving a picture or writing it on the board”.

**Respondent 8:**
"I find it hard to listen to an explanation without a teacher giving a picture or writing it on the board”.

From five obvious questions, it obtained eight responses from students who preferred the visual learning style. These responses represent all the students who preferred the visual learning style. The responses illustrate among them; the students enjoyed learning by reading, writing, watching, researching and unlike to study in a crowded place. This means that they believe when their learning styles were supported by the teacher, the better results will be achieved.
Respondent 6:
“I find it easier to remember lessons when the lessons are discussed”.

Respondent 7:
“I am slow to learn English from the teacher if I sit and read. I would prefer if it were made a group study to be done with friends”.

The responses contained answers from five auditory questions by male and female students who were participated in filling questionnaire section. These calls represent the number of responses given by the auditory student. All responses in this part illustrate that they are greatly energized when learning by listening to audio or discussing. They spoke that learning by using sound or discussion could get more relaxed, and that was what they like.

Students’ responses on kinesthetic learning styles (statement 11-15);

Respondent 1:
“When the teacher told us to made creativity, I was delighted, because I love to create new things”.

Respondent 2:
“I do not like to learn just in the classroom. I think it’s boring”.

Respondent 3:
“If I study outside the classroom the mind will be more open and fresh. It makes me eager to learn”.

Respondent 4:
“I am happy when the teacher took us out of the classroom like in the laboratory or the sultan’s museum because I know more directly what is there”.

Respondent 5:
“When the teacher explained me closely I felt he was caring and loving to me. It makes me comfortable on the lessons she teaches”.

Respondent 6:
“I always remember when the teacher told us to talk in front of the class because it is like an American”.

Respondent 7:
“I found it difficult to learn by reading, reading by others or listening to teacher theory in front of the class. I want it directly practiced”.

Respondent 8:
“I felt happy when the teacher tells me to share my experiences. I felt the time again”.

Respondent 9:
“I am delighted with the teacher who is gentle and relaxed when interacting with us. I am not afraid to ask questions that I do not understand”.

There are nine responses from five kinesthetic questions that have been summarized by the researchers. These responses were representative of some responses. Male and female students gave their reasons for choosing a kinesthetic learning style. They were pleased and feel more understanding a material if it was done with practice directly or it is always creative to create new things. It means that they believe their learning style preference can make them improve learning achievement.

4. Classroom Observation Section
The classroom observations were done at the English time and spent for 60 minutes. It was done by making a note of students’ learning activities related to the three learning styles. This action aimed to strengthen the findings from the questionnaire and interview. The results of observation have been summarized in 15 learning activities, consisting of five types of activities for visual, five auditory, and five kinesthetic. The five activities were formulated because of its tent to be done by students in the classroom. The students were categorized on the activities that were considered most active in performing these activities.

Based on Table 2, it is seen that each learning style has five activities that students do during the observation stage take place. Each learning activity indicates the percentage of students who were acting both male and female. Learning activities showed that a visual got seven students for male and nine students for the female with 100% quality of activeness. Learning activities of auditory learning style got nine students for male and seven students for the female with 100% quality of activeness. Learning activities of kinesthetic learning style amounted to 8 students of male and ten students for the female with 100% quality of activeness. The average activeness quality was set at 100% because the subject was considered most active in the learning activities.

<table>
<thead>
<tr>
<th>Table 2. Students’ Learning Activities</th>
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<tbody>
<tr>
<td>Learning Styles</td>
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<td>Visual</td>
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5 CONCLUSIONS

Regarding to findings and discussion in preview part, it can be concluded the results of Secondary School Students Islam Terpadu Nurul Hasan Ternate perform learning styles in learning English subject namely; (1) male and female perform learning styles differently, (2) male students dominantly perform kinesthetic style and auditory while female students were dominant kinesthetic style and visual, (3) kinesthetic learning style is similar learning style perform by male and female students, (4) interview and observation results strengthen each learning style performed by male and female students. It means male and female students performed three learning styles based on Dunn’s theory VAK and there are different learning styles dominantly perform between male and female.

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