

MALE AND FEMALE STUDENTS' LEARNING STYLES AND THEIR EFFECTS ON EFL ACHIEVEMENTS

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Abstarct: The research was to reveal (1) male and female students' preferences in learning style and (2) how male and female students' learning styles influence their English achievement. It employed Mixed-method and was conducted at Senior High School 8 Pinrang. The samples were chosen through purposive sampling technique, and the data were obtained through Oxford Learning Style Survey, English competence test and semi-structured interviews with students. The findings show that (1) the male and female students can be categorized into 5 groups based on their learning styles; visual, auditory, kinesthetic, visual-auditory and auditory-kinesthetic and (2) most of the students' learning styles positively influence their English achievement; visual, auditory, kinesthetic and auditory-kinesthetic give positive influence, while visual-auditory does not. The findings also reveal that auditory is the most effective learning style for male students, and visual is the most effective learning style for female. Thus, it can be inferred that to what extent the learning styles influence the students' English achievement is influenced by gender factor.

Keywords : *Male and Female Students, Learning Styles, English Achievement*

1. Introduction

Learning style has been defined as a consistent way of functioning that reflects the underlying causes of learning behavior (Keefe, 1987). It is both characteristic which indicates how students learn and like to learn. A number of findings have revealed that students' learning performance can be improved if proper learning style dimensions can be taken into consideration when developing any learning or

instructional process (Graf, Liu, & Kinshuk, 2010). Thus, the use of learning style within the education promotes more effective learning and enhances academic achievement.

Learning style has been a hot topic to discuss and explore for many years. Many researchers have tried to discover both male and female students' preferences in learning style. Sadeghi (2013), for instance, found that male students tend to be more visual

and kinesthetic in their learning, while female tend to have auditory and kinesthetic learning style. Meanwhile, other researchers tried to explore what makes students succeed in learning a language and why some students are more effective in learning than others.

Understanding the learning styles of students is also beneficial in other ways. It helps teachers to know their students, and helps them to understand how their students take in and interact with the information. If students are aware of their learning styles, they can also better communicate what they need in order to process the information. An awareness of learning styles can help teachers to be more flexible in the ways they present information and design courses and learning objects (Mestre, 2010).

Allcock and Hulme (2010) have highlighted two such positive influences of learning style; (1) learning style models enable the identification and addressing of individual learning needs and (2) learning style models create awareness among both students and teachers in the wide range of learning and teaching methods that are available for use. For this sense, information about learning styles is more meaningful if it is used as a source of strength for students

who can be an important input in the design of the curriculum and teaching strategy.

It seems that most of today's teachers and students do not really concern about learning style; even many of students never know which learning styles they have. Regarding to the explanation above, the research sought to explore:

1. Male and female students' preferences in learning styles.
2. How the male and female students' preferences in learning styles influence their English achievement.

2. Literature review

Studies of learning styles have been carried out by some researchers with varying degrees of success and context. A study carried out by Kopsovich (2001) on the relationship between learning style of students and their Mathematics score on the Texas assessment of academic skill test established that the learning style preferences of all students in the area of persistence significantly impacted their math achievement scores.

Mahmud (2010) explored the impact of gender differences in English language teaching. She collected the data in 2008 from 20 males and 20 females' English students of State University of Makassar and she found that male students were feeling

shy to speak to female students and tended to be passive in the class. In another gender, female tended to work with the same sex. She concluded that male and female are different in their learning style. These different styles were affected by notions of women's language.

A closely related study that investigated the impact of learning styles on the academic achievement of secondary school students in Iran JilardiDamavandi, A., Mahyuddin, R., Elias, H., Daud, S. M., & Shabani, J. (2011) had also contributed to the learning styles discourse. The Kolb Learning Style Inventory (1999) was administered in eight public schools in Tehran. The mean of test scores in five subjects, namely English, science, mathematics, history and geography, was calculated for each student and used as a measure of academic achievement. A total of 285 Grade 10 students were randomly selected as sample of the study. The results of the analyses of variance showed that there was a statistically significant difference in the academic achievement of the Iranian students that correspond to the four learning styles; in particular, the mean scores for the converging and assimilating groups was significantly higher than for the diverging and accommodating groups.

Gappi (2013) explored on the students' preference learning style and their academic achievements. The specific objectives of the study were to: describe the learning styles preferences of the students; to find out whether learning styles preferences of students difference with age, gender and academic program; and determine the relationship between the learning styles preferences and the students' academic performance. The results showed that there was no significant effect of gender, age and academic program on the learning style preferences of the students ($r = -0,056$). Based on the result, there was no significant statistical correlation between the academic achievement and the learning style preferences of the students. Thus this research had the opportunity to discover how students' learning styles and genders influence their English achievements. While none of the previous studies was conducted in Indonesia, this research undertaken at senior high school in Pinrang, South Sulawesi, Indonesia. Thus, this research had the opportunity to discover how students' learning styles and gender influence their English achievement in Indonesian context.

Learning Styles

Oxford (2003) stated that learning styles are the general approaches. For examples,

global or analytic, auditory or visual, that students use in acquiring a new language or in learning any other subject.

According to Kinsela (1993), people learn through different senses. The sense through which each person takes in and retains new and difficult information is called perceptual learning modalities; (1) Visual learning: viewing, examining, reading, (2) Auditory learning: listening, discussing, and (3) Kinesthetic learning: moving, doing, and experiencing. Firstly, students who prefer to visual learn best when they see something. The students like to read books and magazines for both information and pleasure, enjoy watching television documentaries and films in which both visual and verbal information are presented simultaneously, read a newspaper or magazine regularly as a source of news, prefer to read what an expert has written on a subject than listen to a lecture or discussion. Secondly, students who prefer to auditory learn best by hearing and speaking. They often talk more than average person, are very social, enjoy hearing stories and jokes, understand concepts by talking about them, and may excel in performing music and arts. Thirdly, students who prefer to kinesthetic learn best when the learning involve physical activity; moving, doing and

experiencing. The students tend to be skilled at repairing and assembling things, even without instruction, tend to be coordinated as sports, be late to explore their environment, focus well during “hand on” project activities, be frequently in motion: may fidget, get up regularly, doodle or tape, pencil, may get restless and distracted during lengthy class lectures, reports, or discussion, like variety in classroom activities and enjoy opportunities to work collaboratively with a partner or small group on a task.

Gender

The term of gender has been associated with education in the present study. Based on Oxford Advance Learner’s Dictionary, gender is the fact being male and or female: issues of class, race and gender; each of the classes (masculine, feminine, and sometimes neuter) into which nouns, pronouns, and adjectives are divided; the division of nouns, pronouns, and adjective into these different genders. Mahmud (2009) explored the distinction between sex and gender. She stated that sex and gender are different concept which is differentiated by different factors. Sex is the state of being male and female as biologically term. Meanwhile, gender refers to the attitude of being male and female which is formed by social and

cultural factors or opinion about the social and cultural of being male and female.

In the relation to the previous definition and theory stated, gender on this research is supposed to be male and female students. As define on Oxford Advance Learner's Dictionary (2005) the definition of male and female are "Male is belonging to the sex that does not give birth to babies (p.931) meanwhile female is being a woman or girl; a female students/employee/artist; of the sex that can lay eggs or give birth to babies (p.565).

Achievement

Achievement is something that has been accomplished successfully by means of exertion, skill and practice. Gay, Mills and Airasian (2006: 128) state that achievement test measures the current status of individual with respect to proficiency in given areas of knowledge or skill. Standardized achievement test is carefully developed to include measurement of objectives common to many school systems. They measure knowledge of facts, concept of principles, for his or her grade or age level. It typically covers a number of different curriculum areas, such as reading, vocabulary, language, and mathematics.

Besides an achievement test is related directly to classroom lesson, units or even a

total curriculum. Achievement test is limited to particular material covers in curriculum within a particular time frame and it is offered a course which has covered objectives in question. Achievement test can also serve as indicators of features that a student need to work in the future, but the primary role of an achievement test is to determine acquisition of course objectives at the end of period of instruction (Brown, 1994: 259; Brown: 391).

Considering to those definitions, it can be concluded that achievement refers to individual proficiency which is grade averages in given areas of knowledge and skill. Therefore, the English achievement refers to students' grade score from the test result in learning English.

3. Method

A mixed-method research design was implemented in this study. According to Gay, et all (2006), the aims of mixed method research design are to build on the synergy and strength that exist between qualitative and quantitative research method in order to understand a phenomenon more fully using either quantitative or qualitative method. The specific type of research design used in this study was a mixed method design which was sequential explanatory. The quantitative phase was also descriptive and the

qualitative phase, explanatory. This research was carried out at SMA Negeri 8 Pinrang South Sulawesi, Indonesia and followed by 44 students. Oxford's Learning Style Survey and individual interview was used to identify the preference learning style by the students, to obtain the students' score of achievement this study used questionnaire consist of 35 questions which were related to the four skills of English; reading, listening, writing and speaking.

4. Findings and discussion

This section presents the result of the study and discusses the findings. The first part deals with the findings about the overall learning style preference of male and female students. The second part deals with how male and female students' learning styles influence of their achievement.

1. *Male and female students' preferences in learning styles*

The results of the analysis on the students' answers in the questionnaire and interviews indicate that the three learning styles proposed by Oxford (2003) were pervasive in the EFL class. Even some of the students were identified to have more than one learning style. The table below presents the general description of the students' learning styles.

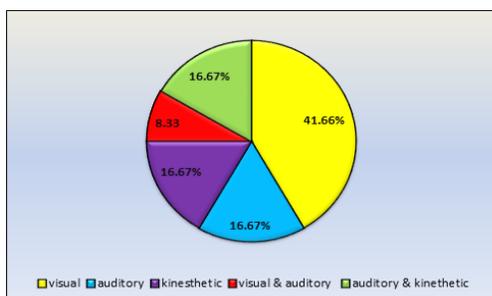
Table 4.1 Students' Learning Styles

Learning Styles	Male	Female	Number of Students (N = 44)
Visual	5	9	14
Auditory	2	10	12
Kinesthetic	2	7	9
Visual/Auditory	1	4	5
Auditory/kinesthetic	2	2	4
Total	12	32	44

The above table classifies the 44 students into 5 groups based on their learning styles; visual, auditory, kinesthetic, visual-auditory and auditory-kinesthetic. 14 students (31.82) are identified as visual learners; 5 male and 9 female. 12 (27.27%) are categorized as auditory learners; 2 male and 10 female. 9 (20.45%) are kinesthetic learners; 2 male and 7 female. 5 (11.36%) seem to be visual-auditory learners; 1 male and 4 female. 4 (9.09) are classified as auditory-kinesthetic learners; 2 male and 2 female. Based on the data presented in the above table, it can be inferred that the table is dominated by the visual, auditory and kinesthetic learners, and on the contrary, the visual-auditory and auditory-kinesthetic are the minority. The above table also implies that there are two learning styles which are not proposed by Kinsela (1993); visual-auditory and auditory-kinesthetic.

The figure below displays the quantitative description of the male students' learning styles.

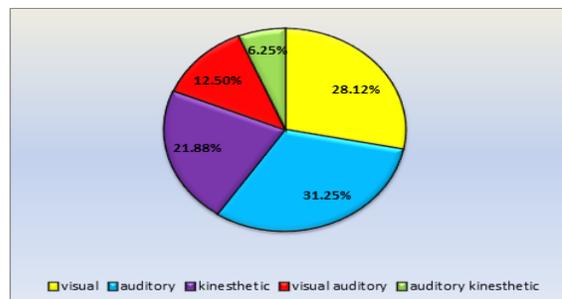
Figure 4.1 Male Students' Learning Styles



The above table signposts that of the 12 male students, 41.66% (5) are visual learners; 16.67% (2) are auditory; 16.67% (2) are kinesthetic; 16.67% (2) are auditory-kinesthetic; and only 8.33% (1) is visual-auditory. It means that most of the male students are visual learners, those who learn best when the teaching process involves visual media such picture, chart, table or movie.

The figure below displays the quantitative description of the female students' learning styles.

Figure 4.2 Female Students' Learning Styles



The above table indicates that 31.25% of the female students are auditory learners; 21.88% are kinesthetic; 28.12% are visual; 12.50% are visual-auditory; and only 6.25% are auditory-kinesthetic. It means that most of the female students are auditory learners, those who learn best by hearing, often talk more than average person, are very social, enjoy hearing stories and jokes, understand concepts by talking about them, and may excel in performing music and arts.

To back up the data obtained from the questionnaire, the researcher interviewed 10 of the students. The 10 interviewees (5 male and 5 female) were to represent the five learning styles provided in Table 4.1.

The extract below presents the statements of a male and female student identified as visual learner in the interview session.

Extract 1 (Male and female visual students)

Interviewer:	<i>Kalau belajar apakah</i>
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	<p><i>kamu lebih suka atau enjoy proses pembelajaran secara visual, dengan berdiskusi atau praktek melakukan percobaan?</i></p> <p>(Do you like or enjoy studying visually, discussion or doing practice?)</p>
Interviewee:	<p><i>Saya suka secara visual kak yang ada gambar-gambarnya. Saya juga senang membaca.</i></p> <p>(I like to study visually with a display picture, I also like reading)</p>
	<p><i>Interview with Male Visual Student, July 2, 2018</i></p>
Interviewer:	<p><i>Kalau belajar apakah kamu lebih suka atau enjoy proses pembelajaran secara visual, dengan berdiskusi atau praktek melakukan percobaan?</i></p> <p>(Do you like or enjoy studying visually, discussion or doing practice?)</p>
Interviewee:	<p><i>Saya melakukan semuanya. ya melakukan semuanya, tapi paling</i></p>

	<p><i>sering yang berhubungan dengan visual, seperti membaca buku dan melihat gambar</i></p> <p>(I do them all, but often with the visualization such as reading a book and seeing picture)</p>
	<p><i>Interview with Female Visual Student, July 2, 2018</i></p>

The two students, whose statements are extracted above, enjoy studying in the class when having something to see in front of them such as picture and book. This obviously indicates that they are naturally visual learners, those who love the learning process when it is equipped with visual media.

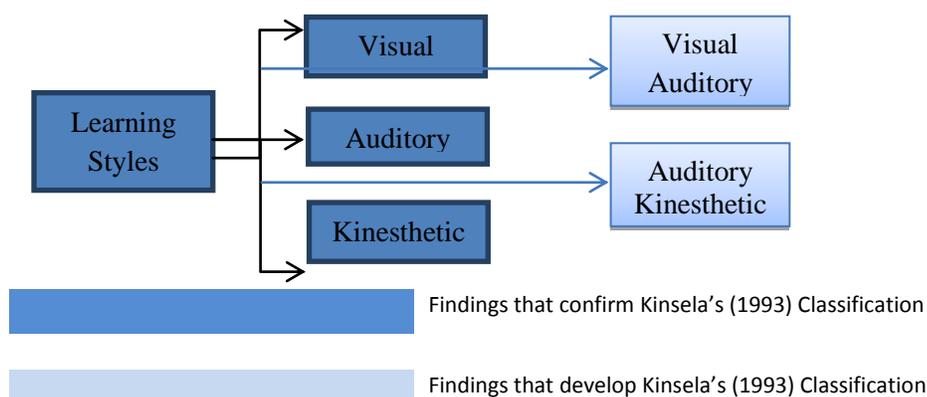
Overall, the data obtained from questionnaire are relevant to those gained from interviews with the students; the researcher did not find any gaps between the students' answers in the questionnaire and their statements in the interviews. In other words, either the data from the questionnaire or those from the interviews indicates that there are 5 learning styles in the class; visual, auditory, kinesthetic, visual-auditory and auditory kinesthetic.

A number of findings, such as those proposed by Husein (2011), Reid (2005), Oxford (2003) and Kinsela (1993), indicate that students throughout the world have different learning styles as their natural manners in the learning process. Kinsela (1993) has mentioned that there are three main learning styles; visual, auditory and kinesthetic. Students with visual learning style learn best when they see an object related to the material being learnt; those with auditory learning style prefer to process information through oral mode; and those with kinesthetic learning style prefer to learn

through activities that require total physical involvement.

The research findings show that the three main learning styles proposed by Kinsela (1993) were pervasive in the research site. Of the 44 students who participated in the study, 14 are visual learners; 12 are auditory; and 9 are kinesthetic. Here, it is important to highlight that 9 of the students have double learning styles; 5 of them seem to be visual-auditory learners, while 4 can be identified as auditory-kinesthetic. Thus, the research findings dealing with male and female students' preferences in learning style can be described as follows;

Figure 4.3 Male and Female Students' Preferences in Learning Style



2. How male and female students' learning style influence their English achievement.

Another concern of this study was to explore the influence of the male and female students' learning styles on their English achievement. To obtain the data responding

to this, the researcher gave the students a test to measure their English achievement. The test was divided into two sections; (1) listening, reading and writing section and (2) speaking section. The listening, reading and writing section consisted of 35 multiple choice questions which had to be completed

in 50 minutes. Meanwhile, in the speaking section, the students had to orally describe their ideas responding to 5 simple questions regarding English, English learning and their school. Further, after the test, the researcher interviewed some of the students through semi-structured interview technique to find

out whether their learning styles helped them get through the test in their perspectives.

The table below presents the mean score of both male and female students in the listening, reading and writing test.

Table 4.4 the Mean Score of Male and Female Student in The Listening, Reading and Writing Test.

	Number of Students	Minimum	Maximum	Mean Score
Male students	12	26	94	73.67
Female students	32	37	86	66.34

The above table elucidates that the male and female students have significantly different mean scores; the mean score of male is 73.67, while that of female is 66.34. From here, we can see that the male students have higher mean score than do the female. Accordingly, it can be deduced that the male students have better achievement in the listening, reading and writing test.

The table below presents the mean score of both male and female students in speaking test.

Table 4.7 The Mean Score of Male and Female in Speaking Test.

	Number of students	Minimum	Maximum	Mean Score
Male student	12	40	80	58.33
Female student	32	40	80	58.28

From the above table, we can apprehend that there is no big difference between the male students' mean score and the female students'. The male students' mean score is 58.33, while the female students' is 58.28. It signals that overall, the male are merely so slightly better than are the female in speaking. After presenting the result both

Table 4.16 Male and Female Students' Overall Mean Scores.

Gender	Mean Scores				
	Visual	Auditory	Kinesthetic	Visual-Auditory	Auditory-Kinesthetic
Male	67.06	68.75	59.00	52.05	63.05
Female	69.00	63.05	63.05	51.25	56.00

The numbers in the above table provide that for male students, auditory is the best learning style. Meanwhile, for the female, the best learning style is visual. Overall, for both male and female students, visual-auditory is the weakest learning style.

Finally, the ultimate points dealing with whether or not the learning styles influence on the students' achievements is related to

section 1 and section 2 of male and female score in the English achievement, the researcher then display the mean score of each learning style obtained by the students base on their learning styles.

The final table below describes whether or not the learning styles influence on the students' achievements is related to gender factor.

gender factor. The table 4.16 (see chapter 70) provides that for male students, auditory is the best learning style. Meanwhile, for the female, the best learning style is visual. Overall, for both male and female students, visual-auditory is the weakest learning style. Thus, the researcher has three main claims regarding the influence of students' learning styles on their English achievements in relation with gender; (1) the best learning

style for male students is auditory, (2) the best learning style for female students is visual and (3) the weakest learning style for both male and female students is visual-auditory.

Finally, based on the above assertions, we can now come to the grand claims dealing with how male and female students' learning styles influence their English achievement. Firstly, most of the students' learning styles positively influence their English achievement; visual, auditory, kinesthetic and auditory-kinesthetic give positive influence, while visual-auditory does not. This finding corresponds the study conducted by Vaishnav & Chirayu (2013), it was found that there was existed positive high correlation between kinesthetic learning style and academic achievement. Secondly, to what extent the learning styles influence the students' English achievement is influenced by gender factor; Auditory is the most influential learning style for male students, while for female; visual is the most effective learning style. These claims seem to go along with JilardiDamavandi et al. (2011) and Aliakabri & Qasemia (2012); they found that students' learning styles significantly influence their success in EFL learning.

5. Conclusion

The following are conclusions drawn based on the findings and discussions:

The students have the three learning styles proposed by Kinsela (1993); visual, auditory and kinesthetic. Of the 44 students, 14 (31.82%) are identified as visual learners. 12 (27.27%) are recognized as auditory learners and 9 (20.45%). Likewise, there are also students identified have double learning styles; visual-auditory and auditory-kinesthetic. It can be inferred that, there are 5 learning styles are found on this research; visual, auditory, kinesthetic, visual-auditory and auditory-kinesthetic. Each of the 5 groups consists of both male and female students.

Most of the students' learning styles positively influence their English achievement; visual, auditory, kinesthetic and auditory-kinesthetic give positive influence, while visual-auditory does not. Secondly, to what extent the learning styles influence the students' English achievement is influenced by gender factor; auditory is the most influential learning style for male students, while for female, visual is the most significant learning style. This implies that an EFL teacher should provide a specific teaching method to face the students' needs related to their learning styles.

References

- Aliakbari, M. & Qasemi, N. 2012. On The Relationship Between Iranian EFL Learners' Learning Style Preference and Their Gender, Proficiency Level and Achievement Score. *International Journal of Pedagogies and Learning*, 7(3):275–283
- Allcock, S.J. & Hulme, J.A. 2010. Learning Styles in The Classroom: Educational benefit or planning exercise? *Psychology Teaching Review*, 16(2):67-79.
- Brown, H.D. (2000). *Principles of Language Learning and Teaching*. New York: Pearson Education.
- Gappi, L. L. (2013). Relationships Between Learning Style Preference and Academic Performance of Students. *International Journal of Educational Research and Technology*, 4(2), 70-76.
- Gay, L.R. *et al.* 2006. *Educational Research*. (Eight Ed.). Ohio: Pearson Education Ltd.
- Graf, S., Liu, T.-C., & Kinshuk. (2010). Analysis of learners' navigational behaviour and their learning styles in an online course: Analysis of navigational behaviour. *Journal of Computer Assisted Learning*, 26(2), 116–131.
<https://doi.org/10.1111/j.1365-2729.2009.00336.x>
- Husain, D. (2011). *Fostering Autonomous Learning Inside and Outside the Classroom in Language Learning*. Makassar: Badan Penerbit UNM.
- JilardiDamavandi, A., Mahyuddin, R., Elias, H., Daud, S. M., & Shabani, J. (2011). Academic Achievement of Students with Different Learning Styles. *International Journal of Psychological Studies*, 3(2).
<https://doi.org/10.5539/ijps.v3n2p186>
- Keefe, J. W. (1987). *Learning Styles: Theory and Practice*. Reston, VA: National Association of Secondary School Principals.
- Kinsella, K. (1993). Understanding and Empowering Diverse Students in ESL Classroom. In J. M. Reid (Ed.), *Learning Styles in the ESL/EFL Classroom* (pp. 170-194). New York: Heinle & Heinle Publishers.
- Kopsovich, R. D. (2001). *A Study Of Correlations Between Learning Styles of Students and Their Mathematics Scores on the Texas Assessment of Academic Skills Test*. North Texas, US: Unpublished doctoral dissertation, University of North Texas.
- Lau, W.W. & Yuen, A.H. 2010. Gender Differences in Learning Styles: Nurturing a Gender and Style Sensitive Computer Science Classroom. *Australasian Journal of*

Educational Technology,
26(7):1090-1103.

Mahmud, M. (2010). Language and Gender in English Language Teaching. *TEFLIN Journal*, Vol. 21, p.172-185.

Mestre, L. S. (2010). Matching Up Learning Styles with Learning Objects: What's Effective? *Journal of Library Administration*, 50(7-8), 808-829.
<https://doi.org/10.1080/01930826.2010.488975>

Oxford, R. L. (1993). *Style Analysis Survey (SAS)*. Tuscaloosa, AL: University of Alabama.

Oxford, R.L. (2003). *Language Learning Styles and Strategies: An overview*. Learning Styles & Strategies/Oxford, GALA.

Reid, G. 2005. *Learning Styles and Inclusion*. London: Sage Publications.

Sadeghi, M. R. (2013). EFL male and female learning style and multiple intelligences: A case of Iranian EFL university students. *Iranian Journal of Research in English Language Teaching*, 1 (2), 33-46.

Vaishnav, R. S., & Chirayu, K. C. (2013). Learning Style and Academic Achievement of Secondary School Students. *Voice of Research*, 1(4), 1-4.