The Effect of Contextual Factor on Learning Styles Preferences of English Majors in Lao Public Universities

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Abstract

This research is a quantitative correlational design, which investigates the English learning styles preferences of English major in Laotian public universities in Lao PDR and tests the effect of contextual factors on the participants' learning styles preferences. The sample of this research involved 542 university-level students who major in English at a bachelor-degree program in four public universities in Lao PDR. The instrument of the study was Reid's (1987) Perceptual Learning Style Preference Questionnaire (PLSPQ), which includes six different learning styles (Audio, Visual, Kinesthetic, Tactile, Individual, and Group learning styles). Participants were invited to rate their learning style preference towards the scale. The analysis was conducted based on Reid's (1995) guide of categorizing preference levels, such as Major, Minor Learning Style Preference, and Negligible. The results indicated that the participants had three major preferences towards Kinesthetic learning (M=41.20), Audio learning (M=39.18), and Tactile learning styles (M=38.14), respectively. The study also found that there are significant differences in English learning styles preferences among students from different institutional contexts. Further research on testing the effect of contextual factors on learners' learning choice is strongly recommended.

Keywords: contextual factor, English Majors, learning styles

1. INTRODUCTION

A learning style refers to a learner's personal choice of learning tactics in the learning process. Learning style preference has become of great interest in studies of English language teaching and learning. Several educators, linguists, and researchers confirm the

significance of investigating students' learning styles preferences. Understanding how students learn is somehow connected to improving the learning effectiveness (eg., Montgomery & Groat, 1998). Instructors can accommodate teaching techniques and styles that match with the learners' actual learning habits.

Previous literature (eg., Donkoh et al., 2015; and Ghada et al., 2011) pointed out that students in universities, who are considered as adult learners, possess multi-learning modes. It is crucial that instructors analyze students' learning styles preferences and consider applying different teaching methods. Recent works showed that English learning styles preference is influenced by different factors, such as age, gender, proficiency, and context, and etc. For instance, Abante et al. (2014) investigated preferred learning styles and factors affecting their learning choices among General Engineering students. The study pointed out that the main factors found to be affecting participants' learning styles include physical (health readiness) and educational environment. This further adds a notion proposed by scholars (Prasonexay, 2006; Reid, 1987) that individuals do not learn the same way and why such learning differences occur is concerned with personal and non-personal matters.

The teacher is one of the influential factors that cause the difference because the teacher has a great influence on students' learning process (Guvenc, 2015; Reys, et al., 2012; Zepke, et al., 2010). The teacher can make students engaged or not engaged in their learning (Reys et al., 2012). Alkhatnai's (2011) found several factors that shape students' learning styles preferences, one of which involved teachers' teaching styles. Accordingly, Dreyer and Walt (1996) noted that teachers teach in the same way as to how they learned in the past. Khmakhien (2012) mentioned that students' preferred learning styles can be changeable due to teachers' teaching performances.

Seemingly, Murray-Harvey (1993) agreed that the teaching process has a direct effect on students' learning progress. From this evidence, it could be claimed that students may absorb new learning styles because of the teacher's teaching styles. That means learners adapt their learning styles gradually in order to learn things. Apart from this, structure, systems, and management of educational institutions where learners enroll also have an impact on their learning situations, such as classroom (eg. Abante et al., 2014), teaching-learning aids (eg. Parvin & Salam, 2015), etc. literature review points out that learners may be claimed to have different learning styles due to environments and/or contexts where they are in. However, little attention has been paid to the effect of context factors on students' learning styles preference.

Several authors (eg., Hu et al., 2021) recommended further research in this concerned area to validate the existing knowledge. In the context of Lao PDR, the curriculum system is solely controlled by the Ministry of Education and Sports, but teacher professional development and educational management are dependent on educational institutions themselves. Therefore, the authors of the present paper would like to find out whether students who are from different schools/institutions have different learning styles preferences. This study looks into the effect of context factors on language learning styles preference of English majors in Laotian public universities.

2. LITERATURE REVIEW

According to Wintergerst and DeCapua (2001), learning styles refer to the ways a learner learns in which they feel like or happy. Kinsella (1995, p. 171) described learning style as "an individual's natural, habitual, and preferred ways of absorbing, processing, and retaining new information and skills which persist regardless of teaching methods or content area". Similarly, Oxford (2003) defines learning styles as "the general approaches –for example, global or analytic, auditory or visual that students use in acquiring a new language or in learning any other subject" (p. 2). According to Reid (1987), learners basically learn through four different learning channels as she listed as follows: Visual learning (learning through reading, charts, pictures, etc.); Auditory learning (learning by listening to lectures, audiotapes, and other audio materials); Kinesthetic learning (learning by physical involvement); Tactile learning ("hands-on" learning, such as building models or doing laboratory experiments); Individual learning (self-study or learning alone); and Group learning (learning through discussing or working with classmates). To conclude, a learning style refers to a learner's personal choice of learning tactics in the learning process.

Learning style has been of interest by several educational researchers due to its influence on educational dimensions. Learning style serves as an influential role towards learning settings (Alkhatanai, 2011). Similarly, learning style indicates what students prefer to learn and how they learn something comfortably (Zhou, 2011). It is also claimed that learning style determines success in learning among language learners (Razawi et al., 2011; Vaseghi et al., 2012). Researchers, educators, and instructors have considered identifying how students learn very critical. For Reid (1995), understanding in depth how students learn "will enable students to take control of their learning and to maximize their potential for learning, p.14" (Jhaish, 2010). According to Montgomery and Groat (1998), recognizing learners' diverse learning styles is critical to the development of teaching effectiveness. Amir, Jelas, and Rahman (2011) agreed that understanding students' learning styles preference is crucial for the process of improving the students' learning effectiveness. While, many others contend that by knowing students' preferred learning styles teachers are able to help students learn better and achieve the educational purposes (Gilakjani, 2012; Grasha, 1996; Mulalic et al., 2009; Razawi, et al., 2011; Tai, 2013), for instance, it can make teachers understand strength and weaknesses of students. Also, being knowledgeable of students makes teachers visualize their students' learning nature or their diverse learning patterns, which is supportive to teachers' teaching practice and planning. In contrast, if teachers fail to analyze or not to recognize students' diversity in learning styles mismatch in teaching and learning styles is most likely to occur.

There have been several previous studies working on factors influencing language learners' learning styles preferences. A study by Dunn and Burke (2005) showed that an environmental factor strongly affects the learning styles of learners; learners would express diverse preferences of classroom environments, for instance, one would prefer to study in a bright classroom, the others would not. It seems that some other researchers agree with this perspective, classroom conditions matter (Abante et al., 2014; Hassan et al., 2012; Tuyet, 2013). For instance, an investigation on Vietnamese students' learning situations revealed that classroom settings and classroom facilities have an impact on the participants' choice of learning styles. More other influential characteristics of the classroom include classrooms

with teaching aids and materials and modern educational technology (Abante et al., 2014; Ramayah et al., 2011), and class size (Hassan et al., 2012). Tai (2013) explored EFL learners' preferred learning styles, and the study showed that most participants expressed their preference for the computer-assisted learning style over the others. Furthermore, Tai views that computer-assisted learning is the learning mode adults would prefer for their conduct of learning English alone. More correspondingly, with the use of technology in teaching and learning, the class will be more interactive, especially in language classes. Simply put, students will have fun in class activities (Parvin & Salam, 2015; Tabatabaei & Gui, 2011).

Besides, the cultural background has been widely known to be a great indicator of students' preferred learning styles. Fundi (2015) synthesized a number of past studies (Charlesworht, 2008; DeVita, 2010; Joy & Dunn, 2008; Song & Oh, 2011), concerning factors predicting students' learning style choices. It was found that culture was greatly correlated. This tendency is well consistent with other researchers (Ababneh, 2015; Khanum, 2014; Inal et al., 2015; Ramayah et al., 2011), who found that culture correlates with preferred learning styles. For instance, Ababneh explains, Jordanian females are naturally quiet, shy, and conservative; they speak with a low voice. For this reason, Jordanian female students are more likely to prefer learning individually, not keen on group learning and discussions. As scholars pointed out, people learn in different ways such as through seeing, hearing, doing, or being told (Prasonxay, 2006; Reid, 1987, 1984). Based on this view, it is assumed that learners who are from different contexts may have different modes or styles of learning. Some past works have proved this tendency. Amir, Jelas, and Rahman (2011) conducted a study on university students' learning styles, the sample of 545 students was from different courses and the results showed that there was the difference in learning styles preferences among them. According to the analysis, the students of natural sciences are more dependent learners; the ones of professional courses are less dependent learners, and the students from social sciences are more participative learners. Furthermore, the results pointed out that male students are different from female counterparts in their preferred learning styles, males favor independent learning, whilst females favored participative learning. Hu, Peng, Chen, and Yu (2021) noted that individuals' learning styles are changeable as the learner is able to adapt him/herself to learning situations, and learning styles, consequently, can vary among students who are from different contexts. However, Hu and colleagues see that there is little attention on testing the effect of context factors on students' learning styles. Shah, Ahmed, Shenoy, and Srikant (2013) conducted a study on students' learning styles in two different colleges in India. The total sample of 200 participants answered a questionnaire. The results revealed that the students are not different from each other in learning styles preferences even they are from different contexts and with geographical differences. The study demonstrated that the sample preferred a kinesthetic learning style.

2.1 Research Question

Regarding the statements in the introduction section and literaturereview, the researchers formulate the research question as follow:

1. What are English majors' language learning styles preferences in Laotian public universities?
2. Are there any differences in language learning styles preferences of students who come from different contexts?

3. RESEARCH METHODS
3.1 Research Design

This research was a quantitative correlational design in nature and it aimed to investigate students' language learning styles preference in Laotian public universities and to test the effect of context factor on their learning styles. Creswell (2012) wrote that correlational research is considered a type of quantitative design. As the characteristics of correlational research itself, the investigator has an opportunity to predict and describe the relationship among the studied variables (Creswell, 2012).

3.2 Participants

The participants of the present study were 542 students who major in English programs at a BA-degree level in four public universities in Laos. A purposive sampling technique was employed to select the sampled English majors from different class-year/grades from the target universities/institutions.

3.3 Instruments

This research employed a Perceptual Learning Style Preferences Questionnaire (PLSPQ), developed by Reid (1995), as a key instrument for collecting data. Reid's PLSPQ has six dimensions of perceptual learning styles such as Visual (a typical item "*I learn better by reading what the teacher writes on the board*"), Audio (a typical item "*When the teacher tells me the instructions, I understand better*"), Kinesthetic (a typical item "*I prefer to learn by doing something in class*"), Tactile (a typical item "*I learn more when I can make a model of something*"), Individual (a typical item "*When I study alone, I remember things better*"), and Group learning style preferences (a typical item "*I get more work done when I work with others*"). This instrument has 30 items across the six dimensions (5 statements in each style), asking participants to do a self-reporting on their preferred styles. In this questionnaire, Reid classified the six learning styles into three types such as Major, Minor, and Negligible. Major is meant by the most preferred style, learners learn well through it; Minor refers to one that learners can still learn, but not that well, and Negligible is a style in which learners have difficulty to learn.

In the present study, the comparison of the reliability index with other works was also conducted, two subscales of visual and audio styles held the lowest reliability values of all (.61, .64), while the others were (.79, .82, .84, and .86). This tendency was found to be similar to that of past studies, indicating that visual and audio subscales were likely to hold lower reliability values, as same in Naserieh's (2009), Nosratinia et. al. (2014), and Balci's (2017). More consistently, Naserieh (2009) also mentioned that the reliability values for visual and auditory subscales in most studies did not even reach .60.

Table 1: Reliability values of PLSPQ in previous works and the present study

Studies	Learning styles domains of Reid's (1995)					
	Visual	Audio	Kinesthetic	Tactile	Group	Individual
Naserieh (2009)	.50	.62	.64	.67	.79	.82
Jhaish (2010)	.88	.73	.62	.86	.73	.83
Nosratinia et. al. (2014)	.32	.36	.56	.52	.75	.71
Balci (2017)	.70	.67	.69	-	-	-
Present study	**.61**	**.64**	**.79**	**.82**	**.84**	**.86**

3.4 Data Analysis

The data collected were analyzed for frequency, percentage, mean, standard deviation, and One-way ANOVA. The data collection process of the participants' learning styles preference was based on the participants' rating on a 5-point rating scale. Regarding the interpretation method, the description of the results on student participants' English learning style preferences was based on Reid's (1995) guide, that the student participants' rating of their agreement level was converted into numbers. Then the numbers are added up, the total value was then multiplied by 2. The result numbers were used to compare each type of learning style such as Major Learning Style Preference, the values are between (38-50); Minor Learning Style Preference (25-37); and Negligible (0-24), see the figure below for score ranges and the concerned interpretation.

4. FINDINGS

4.1 Participants' Preferred English Learning Styles

According to the table *1* below, it is indicated that the participants had three major preferences towards learning styles, which include Kinesthetic learning (M=41.20), Audio learning (M=39.18), and Tactile learning (M=38.14), respectively. That means the participants expressed that they learned well and felt most comfortable to learn English through such three learning styles. On the other hand, the participants rated the other three learning styles as their minor English learning style preferences, which include Group learning (M=37.46), Visual learning (M=33.98), and Individual learning (M=31.48), respectively. That means they were likely to feel little comfortable to learn English through these three learning styles. The earlier-mentioned description would be well-confirmed with the rating on single items of each learning style. According to the data, participants agree that they enjoy learning by doing in class, they learn best in class when they can participate in related activities. Moreover, they understand things better when the teacher gives a project as an assignment; they accept that they learn more in class when their teachers give instructions and when they listen to someone.

Table 2: Summary of participants' preferred learning styles

Learning Styles	N of Items	Mean	Type
Visual learning	5	33.98	*Minor*
Audio learning	5	39.18	*Major*
Kinesthetic learning	5	41.20	*Major*
Tactile learning	5	38.14	*Major*
Individual learning	5	31.48	*Minor*
Group learning	5	37.46	*Minor*

Notes: *Major Learning Style Preference (38-50); Minor Learning Style Preference (25-37); Negligible (0-24)*

4.2 The Effect of Context Factor on Learning Styles Preferences

The results from the One-way ANOVA analysis (*Table 2*) revealed that there is statistically significant difference in these five learning styles among all university groups: Visual, with F (3,541)= 11.800, p= .000; Audio, with F (3,541)= 4.009, p= .008; Kinesthetic, with F (3,541)= 8.274, p= .000; Tactile, with F (3,541)= 10.056, p= .000; and Individual styles, with F (3,541)= 11.408, p= .000). However, another one style was found to be no statistical significance, that is Group style, with F (3,541)= 1.637, p= .180).

Table 3: One-way ANOVA Results on the Effect of Context Factor on Six Learning Styles

Variables	ANOVA				F (3,541)	Sig.
	NUOL	SU	SKU	CU		
Visual	3.36	3.68	3.28	3.34	11.800	**.000****
Audio	4.04	3.92	3.87	3.83	4.009	**.008****
Kinesthetic	4.15	4.32	4.11	3.93	8.274	**.000****
Tactile	3.74	4.05	3.85	3.64	10.056	**.000****
Individual	3.00	3.50	3.01	3.20	11.408	**.000****
Group	3.75	3.86	3.72	3.69	1.637	**ns.**

Notes: **=p< .01 ns. (No Significance)

Furthermore, the results by a Tukey Post-Hoc test (*Table 3*) demonstrated the overview of multiple comparisons among the four universities, as follows:

- (NUOL vs SU): Student participants from SU expressed greater preferences towards Visual (M= 3.68>M= 3.36), Tactile (M= 4.05>M= 3.74) and Individual learning styles (M= 3.50>M= 3.00) than their counterparts from NUOL, at p= .000; p= .000; p= .000, respectively.
- (NUOL vs SKU): According to the data, it was found that NUOL students had more preference towards Audio style than SKU group (M= 4.04>M= 3.87), at p= .030.
- (NUOL vs CU): Moreover, NUOL students also preferred Audio (M= 4.04>M= 3.083), and Kinesthetic (M= 4.15>M= 3.93) than CU counterparts, at p= .008; p= .018, respectively.
- (SU vs SKU): In this pair, SU group had more preference towards Visual (M= 3.68>M= 3.28), Kinesthetic (M= 4.32>M= 4.11), Tactile (M= 4.05>M= 3.85), and Individual styles (M= 3.50>M= 3.01) than SKU group, at p= .000; p= .025; p= .037; p= .000, respectively.
- (SU vs CU): In addition, SU also showed greater preferences towards these four styles: Visual (M= 3.68>M= 3.34), Kinesthetic (M= 4.32>M= 3.93), Tactile (M= 4.05>M= 3.64), Individual styles (M= 3.50>M= 3.20) than CU, at p= .000; p= .000; p= .000; p= .018, respectively.
- (SKU vs CU): In this pair, SKU expressed greater favor of Tactile style than CU (M= 3.50>M= 3.20, at p= .018).

Table 4: Tukey Post-Hoc results on multiple comparisons across six styles

Multiple Comparisons	*p*-value (Sig.)					
	Visual	Audio	Kinesthetic	Tactile	Individual	Group
NUOL vs SU	.000**	ns.	ns.	.000**	.000**	ns.
NUOL vs SKU	ns.	.030*	ns.	ns.	ns.	ns.
NUOL vs CU	ns.	.008**	.018*	ns.	ns.	ns.
SU vs SKU	.000**	ns.	.025*	.037*	.000**	ns.
SU vs CU	.000**	ns.	.000**	.000**	.018*	ns.
SKU vs CU	ns.	ns.	ns.	.018*	ns.	ns.

Notes: **=*p*< .01; *=*p*< .05
ns. (No Significance)

In summary, the results from One-way ANOVA revealed that there are statistical significances among all groups in five learning styles preferences, except Group. However, a Tukey Post-Hoc test shows that there were significances in all pairs (when the sampled universities are paired-up), but for some styles. That means student participants from different contexts (university) demonstrate different preferences for language learning styles.

5 DISCUSSION

The present study examined English majors' Language learning styles preference and the effect of context factors on the sample's learning styles preferences in four public universities in Laos. The findings were obtained and brought to a discussion with existing literature as follows: the participants, who are Laotian English majors, were likely to prefer more than one learning style in English learning. According to the analysis, they rated major preferences towards these three learning styles: Kinesthetic, Audio, and Tactile learning styles. This tendency seems to be well consistent with what Dreyer and Walt (1996) proposed, stating that adult learners in university-level classrooms have a variety of learning styles. Moreover, several past researches found the same findings, indicating that the participants in their investigations favored multiple learning styles (Ababneh, 2015; Donkoh et al., 2015; and Ghada et al., 2011). English majors at Bachelor-degree level were likely to learning English with Kinesthetic, Audio, and Tactile learning styles. This tendency seems to be similar to that of past authors' works. Kinesthetic was found as a major learning style preference in works of Ghada, Rima, Nola, and Mona (2011), and khmakhien (2012), who studied with university-level students. Similarly, Wintergerst and DeCapua (2001) examined learning styles preferred by college and university students of English who speak native Russian. The study showed that the participants preferred kinesthetic learning the most, followed by the auditory learning style. More consistently, Peacock (2001) found that the student participants expressed their preference towards Kinesthetic and Audio learning styles. Furthermore, the present study seems to contribute to that of Rossi-Le's (1989) research, who explored the English learning style choices among 147 students from different countries such as China, Laos, Vietnam, Spain, and others. Rossi-Le pointed that Laotian was one among other groups who were in favor of kinesthetic learning style.

The finding of the present study pointed out that student participants from different contexts (university) demonstrate different preferences for language learning styles. This tendency is consistent with past studies, such as a piece of research by Amir, Jelas, and Rahman (2011) found the same result. Consistently, Hu, Peng, Chen, and Yu (2021) proposed that learning styles can vary among students who are from different contexts. On the contrary, Shah, Ahmed, Shenoy, and Srikant (2013) conducted a study on students' learning styles in two different colleges in India. The results revealed that the students are not different from each other in learning styles preferences even they are from different contexts and with geographical differences. The present study demonstrated that student participants from different institutional contexts have different learning styles preferences. These findings seem to contribute to a view of Oxford's (1999), who noted that the use of language learning tactics by learners is linked to learning environments, that refer to the context where the target language is learnt. To this point, the authors of the present study support the idea that participants who are from different institutions learn differently because they live in different societies. Nambiar (2009) found the same tendency, that the learning environment influences the learner's choice of learning strategies. Nambiar also refers to past researches (Castro, 1994; Mah, 1999), the surroundings of the study place (school) such as inside and outside of school, including a level of motivation of learners do affect how they learn. Moreover, it would be claimed that such differences in learning styles of student participants from diverse contexts are affected by the education system and/or elements in the concerned contexts, which include management practices, infrastructure, classrooms, learning materials, as well as the expertise, knowledge and experiences of teaching faculty members. For instance, Alkhatnai's (2011) noted that teachers' teaching styles serve as an important determiner to learners' choices of learning styles. It seems to be really consistent with what Dreyer and Walt (1996) found, students' learning styles are greatly influenced by teachers' teaching styles or methods because teachers teach in the same way of how they learned in the past. Tuyet's (2013) supported the view, arguing that educational systems, such as evaluation methods, class settings, and classroom facilities affect students' learning.

6   CONCLUSION

According to the findings of this study, the present researchers have outlined some conclusions that adult learners or learners at the university level are diverse in learning styles. It is very necessary for an instructor to consider having a survey on his/her students' learning conditions and learning style preferences. It is very true according to the past literature, learners do not use the same pathway and styles of learning. Teachers, therefore, are prohibited to use a single teaching method in a classroom. Moreover, teachers need to learn from their students while teaching them and/or put great attention to students' backgrounds. This study also proves that students from different universities have different learning styles. This is clear to say that this difference occurs due to several factors, especially, the environment or so-called the context factor. This context factor may include management, structure, curricula, facilities, and teachers.

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