An Investigation into the Association between Learning Autonomy, Language Anxiety and Thinking Style: University Students in Focus

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Abstract—The purpose of this study was to investigate the association between learning autonomy, language anxiety and thinking style. Thus, the study deals with the basis of autonomous learning along with the importance and different related concepts. To attain this objective, a survey research design was employed. The participants of the study were 598 undergraduate students (287 males and 311 females) enrolled in the department of English language at Debre Tabor University, Bahir Dar University, and Gondar University. To gather the information Horwitz and Cope's, Foreign Language Classroom Anxiety Scale, Sternberg's Thinking Styles Inventory, and Learner Autonomy Questionnaire developed by Zhang and Li were used. The findings indicated that non-parametric test was liable to be used in order to study the research hypotheses. Using Spearman correlation coefficient, the association was found between autonomy and language anxiety among Ethiopian university students. The other research question was an attempt to determine if there was the association between learner autonomy and thinking style which was confirmed through the use of Spearman correlation coefficient. Ultimately, the affinity between language anxiety and thinking style was addressed through the use of Spearman test which confirmed this association. Finally, it was recommended that pedagogical implications are needed to account for second or foreign language teaching and learning as well as textbook writers and curriculum designers.

Index Terms—association, language anxiety, learning autonomy, thinking style

I. INTRODUCTION

The amalgamation of autonomous learning with respect to different thinking styles and varied levels of anxiety yields a huge burden on the language learners' burdens seeing that such an integration triggers their responsibility and taking charge of their own learning process (Ashenafi, 2017). One of the important learning abilities of students is to monitor their own learning process and take charge of their development (Paw, 2014). Despite the fact that the area of autonomous learning has been addressed by different researchers, little attention has been paid to this field, particularly when considering this variable in relation to other psychological barriers. It is almost evident that becoming proficient, or sometimes independent of learning context, requires incorporation of techniques (Suminar, 2019; Dochy, 2017). Students make use of variety of techniques which highlight the varied use of their thinking styles while putting these styles into action is not free of stress, anxiety, and learning-impeding elements (Zhou, 2016). Also, the perspectives of students, who play a major role in debilitating learning abilities, toward their own experiences has not been elicited so far to the best knowledge of the researchers.

Thus, it seems comfortable to accommodate studies of this kind to make use of students' attitudes toward their autonomy, thinking styles, and anxiety when it comes to learn a foreign language. Hence, the current study endeavors to tackle all these concerns and provides useful suggestions for both teachers and students to exclude the probable problems in this regard. Consequently, implications of this study would be of great importance to English-related administrators to draw their attention towards the issue of autonomous learning and problems embedded in this domain which is the overall purpose of the current examination.

It seems necessary to open up opportunities for both teachers and students to get the knowledge of their roles with respect to their active engagement in conditions such as the ones occurring in anxious-based circumstances despite the fact that most of the students prefer to fully involve in teacher-assigned tasks to fulfill their educational needs. Also, reviewing these roles and importance of autonomy as well as influential conditions are presumed to be necessary. Accordingly, this study gave an account association between learning autonomy, language anxiety, and thinking style. It identifies the basis of autonomous learning along with the importance and different related concepts. It is hoped that the findings of this study fulfill the gap of those areas which have remained contentious and intact.

II. STATEMENT OF THE PROBLEM

The study of foreign language learning has made new opportunities for researchers to draw their attention towards new concepts which change the language learning behaviors. One of the most important explanation in the field of

language learning is learner autonomy which has changed its direction from traditional teacher-based learning approach to modern learner-based learning. Such a shift in terms of responsibility of teachers to language learners is called "learner autonomy." Miller (2014) assumed that the "major goal of the promotion of self- access learning is the fostering of autonomous learning" (p. 78). Another explanation of autonomy is put forth by Benson (2015) as the extent to which one is able to control the learning aspect. In the same vein, Dang (2012) explains autonomy as "a capacity for detachment, critical reflection, decision making, and independent action" (p. 16).

In the process of teaching and learning academic context where new developments have been discovered, a lot of researchers have concentrated on the issue of superiority among language learners from the perspective that some learners excel others, and such a difference of learning capabilities can be attributed to a number of factors such as the level of autonomy, the stress, language anxiety, and so on (Daniel, 2018 as cited in Davey, 2007). Such a belief is taking by students, they will opt for taking new responsibilities which were neglected previously. Students should be aware of the fact that teachers are not reachable anytime and this coerces them to choose the ways based on their own attitudes and thoughts. In addition, recent developments of foreign language learning studies have emphasized the role of teachers in assisting students how and what to choose learning items. Students should be given guidelines and instructions of how to take their own responsibilities and monitor their progressions through making a stress-free environment (Little, 1991).

Today, studies have highlighted the need for scrutinizing the factors which deal with learning barriers which affect the overall independence and decision-making procedure of students including the gender, anxiety, stress, and so on. Language anxiety is believed to be a major component in language learning (Quote, 2017). The three major aspects should be taken into consideration so as to reduce the learner anxiety, namely; relatedness, perceived completeness, and a sense of learner autonomy (Zhou, 2009). In addition, autonomy is a teacher-and-student link where the teacher guides, gives the instructions, enlightens the vague ways, and directs the students based on which students can set their goals and attain their progression (Killen, 2013). Knowing that gaining success in this long process of monitoring, developing, and evaluating oneself for learning requires extended psychological pressure, students differ from one another in terms of their learning level.

Similarly, one of the purposes of the current study is to elicit students' perspectives towards their experiences of autonomy in classrooms and their reactions based on their level of anxiety and those elements which might enhance their autonomy in language learning. The role of teachers is not ignorable within the autonomous learning condition as teachers are the essence of providing an atmosphere through relying on which students can offer new decisions. Relying on self which is referred to as autonomy is achieved through employing different strategies. Students vary in the way they think of their own and their learning potentials, and decisions they make are different. Therefore, thinking style is another feasible notion to be investigated in relation to autonomy. Another objective of the current study is to find out the possible association between autonomy and thinking style among the participants.

On the whole, developments in the field of foreign language learning has led to a renewed interest in enhancing an idea of how independent and autonomous learning can influence learners' performance with respect to the related factors. There has been a consensus over the benefits of autonomous learning as it makes the learners for individual decision-making. On the contrary, there is insufficient number of studies on the possible association between learning autonomy, language anxiety, and thinking style even at the tertiary level. In case, the importance of the topic and paucity of available evidence regarding learner autonomy, language anxiety, and thinking style in the Ethiopian context, the current study reveals to focus on this neglected area of research through eliciting the perspectives of Ethiopian English as a foreign language students.

Research Questions: To explore the association between learning autonomy, language anxiety, and thinking style among the Ethiopian university students, the following research questions were taken into consideration:

➢   Is there any significant association between learning autonomy and language anxiety among university students?

➢   Is there any significant association between learning autonomy and thinking style among university students?

➢   Is there any significant association between language anxiety and thinking style among university students?

To address the above-mentioned research questions, the following null hypotheses were formulated:

➢   There is no significant association between learning autonomy and language anxiety among university students.

➢   There is no significant association between learning autonomy and thinking style among university students.

➢   There is no significant association between language anxiety and thinking style among university students.

III. METHODOLOGY

A. Participants

Research participants are the units of analysis as they are the sources from which research data are being collected (Higson Smith, 2000). Therefore, data analysis should reflect an accurate picture of the research participants. In light of this, the analysis and the general discussion of this study revolved around at the government university students. Hence, the subjects of the study were 2019 university undergraduate students.

B. Design of the Study

In this study, survey research design which applies quantitative method of data collection (quantitative approach) was employed. Here, correlation is a measure of the extent to which two variables are related. If an increase in one variable tends to be associated with an increase in the other, then this is known as a positive correlation. If an increase in one variable, tends to be associated with a decrease in the other, then this is known as a negative correlation. When there is no association between two variables, this is known as a zero correlation. This study was an ex-post-fact to design because there was no treatment at all.

In addition, the current study sought to explore whether there was affinity between autonomy, anxiety, and thinking styles among university students. Since such a relation is liable to be investigated through running the correlational tests, one can demonstrate that the study follows a correlational design which concentrates on studying the variables in relation to one another. And the rationally why the quantitative approach was employed is that it enabled the researcher to see the issue under study from quantitative perspective. And the nature of the problem and the research objectives invited the researcher to use this research method.

C. Population and Sampling Techniques

In Ethiopia, particularly in the Amhara National regional state, there are ten government universities. From those, Debre Tabor University, Bahir Dar University, and Gondar University were selected purposively for its ease of accessibility of information for the researcher. And the other reason why purposive sampling was employed is that to make the study more manageable and complete within the available time. There were 430 male and 484 female students in the selected universities in fifteen sections in this year. The total number of undergraduate university students' population in the area of the study (selected universities) were 914.

The rationally why the students were included as target population is that to see the association between learning autonomy, language anxiety and thinking style in their own academic context. Depending on the 'Rule of 100' by Gorsuch (1983), & Kline (1979), which recommends that no sample should be less than 100, and the sample population of this research consisted of 598 undergraduate students. The researcher made use of the stratified random sampling method in which each university was considered as one separate strata.

Richard Schmidt (2002), noted that Stratified sampling is a probability sampling technique where the researcher divides the entire population into subgroups or strata, then randomly selects the final subjects which are proportionally from the different strata. The questionnaires were distributed randomly among these participants. Thus, this sample size was sufficient to obtain accurate and reliable results. The participants consisted of male and female students enrolled in the department of English language at Debre Tabor University, Bahir Dar University, and Gondar University in Ethiopia.

D. Instruments

Different research instruments and materials were employed to gather the necessary data. These instruments were selected because of their suitability for gathering important data for the study. Each of these instruments is briefly described below.

1. Foreign Language Classroom Anxiety Scale

So as to check the participants' level of foreign language anxiety, the foreign language class room anxiety developed by Horwitz and Cope's (1986) was employed in this research project. The scale consisted of 33 items which were developed on five-point likert scale (strongly agree; agree; neither agree nor disagree; disagree; strongly disagree). The validity of the scale was confirmed by the research supervisor. As for the reliability of the test, it was piloted with 20 students who had the similar characteristics as the participants of this study. Cronbach's alpha reliability coefficient was calculated to be 0.71 for this test. This value indicated that the foreign language classroom anxiety scale was reliable.

2. Sternberg's thinking Styles Inventory

Similarly, Sternberg's thinking styles inventory (1997) was employed to check the students' thinking styles. This test consisted of 104 items and was developed on likert seven-item type ranging not at all well to extremely well. This scale went under the same validation and piloting procedure as the previous tests. Cronbach's alpha reliability coefficient was calculated to be 0.87 for this test which showed a good level of reliability.

3. Questionnaire

To get additional information to the data obtained from the students through the FLCAS, and STSI, questionnaires were used as data collection instruments and were designed to collect relevant data from the sample university students. To account for the participants' autonomy in foreign language learning context, the researcher used the 'Learner Autonomy Questionnaire. This scale was developed by Zhang (2004) and it consisted of two parts involving eleven items organized on rating scale five-item scale ranging from never to always and ten multiple choice questions. As with the validity of the previous test, this scale was confirmed to enjoy validity by two researchers in Gondar University. Cronbach's alpha reliability coefficient was calculated to be 0.8 for this test. Since the reliability index of 0.8 proved to be acceptable, the researcher utilized it in his study.

E. Procedures

The current study aimed at finding out the association between three variables; learner autonomy, classroom anxiety, and thinking styles of EFL learners. To accomplish the purposes of this study, the following procedures were followed:

1. Data Collection

The study was carried out among EFL students of Debre Tabor University, Bahir Dar University, and Gondar University. Here, the researcher asked permission from the concerned bodies of these universities and explained the purpose of the study before conducting those instruments. In the next step, the three questionnaires administered in the pilot study were distributed among the participants of the main study. They were asked to complete the questionnaires at the given time according to the instructions provided.

After the results of the questionnaires were collected, non-normality of the relevant data was confirmed through running One-Sample Kolmogorov-Smirnov Test; thus, Spearman correlation coefficient was applied to test the research hypotheses. Finally, the analysis of the data was reported in descriptive and inferential levels.

2. Pilot Study

To assess the feasibility of the study and measure the internal validity of the aforementioned questionnaires, a pilot study was conducted on 20 university students who met all required conditions. At the first stage of this study, the pilot subjects were asked to fill out the three questionnaires regarding the classroom anxiety, thinking styles, and learner autonomy at the given time. Then, the subjects were asked for feedback to identify ambiguities and difficulties. The analysis of the data gathered from the pilot study revealed that the questionnaires are internally valid and the study is feasible.

F. Data Analysis

For the current study, the researcher employed quantitative method (data was analyzed through quantitative method) to see the issue under study from quantitative perspective. The responses obtained from the questionnaires were analyzed, and described quantitatively through descriptive and inferential statistics using SPSS version 17. Percentage, and frequency were run to determine the learners' autonomy. Also, having collected the data through distributing the questionnaires, the data were analyzed using pertinent tests. At the first stage, Kolmogorov-Smirnov test was used to determine normal or non-normal status of the variables distribution. Later on, Spearman correlation coefficient was employed to study each research question. Results in this regard were reported in the following section.

IV. RESULTS AND DISCUSSION

This section deals with the analysis and discussions of the data collected from subjects to seek answers for the basic research questions raised in the statement of the problem. The primary purpose of this study was to investigate the relationship between learning autonomy, language anxiety and thinking style.

Accordingly, 210 EFL undergraduate university students responded to the questionnaires as a sample were assumed to be adequate for the analysis. The analysis was made in terms of the basic research questions raised in the first chapter of the study. The data collected from all the subjects of the study were analyzed through using descriptive statistics, inferential statistics, and correlation coefficient.

A. Descriptive Statistics

1. Statistical Population Considering Gender Variable

The following table and its relevant descriptions reveal the gender variable status in studied statistical sample.

TABLE 1:
DESCRIPTIVE STATISTICS OF PARTICIPANTS' GENDER VARIABLE DIFFERENTIATED BY MALE AND FEMALE

		F	%	VP	CP
Valid	Male	287	47.99	47.99	47.99
	Female	311	52.01	52.01	52.01
	Total	598	100	100	100

N.B. (F= Frequency, %= Percent, VP= Valid Percent, CP= Cumulative Percent)

As it can be indicated from the above table (Table 1), participants' gender distribution was different by male and female. The statistical sample comprises 287 males and 311 females that revealed 47.99 percent and 52.01 percent respectively. From here, it is possible to conclude that more participants were female. That means when we compare the male distribution to the female ones, the male distribution is less than that of the female distribution regarding to this study.

2. Statistical Sample Considering Marital Status Variable

The following table (Table 2) reveals the descriptive study of statistical sample regarding Marital Status Variable.

TABLE 2:
PARTICIPANTS' MATERIAL STATUS

		F	%	VP	CP
Valid	single	510	85.3	85.3	85.3
	married	88	14.7	14.7	14.7
	Total	598	100	100	100

N.B. (F= Frequency, %= Percent, VP= Valid Percent, CP= Cumulative Percent)

In the above table (Table 2), the distribution of the sample by marital status is shown. Concerning to the data indicated from the forgoing table (Table 2), one can concluded that most of the participants were single. Accordingly, among 598 people, 510 (85.3%) were single and the rest were 88 (14.7%) married. From here, we can understand that 14.7 percent showed that few of the participants were married.

3. Statistical Sample Considering Age Variable

The following table and the related descriptions indicate the age variable status in assumed statistical sample.

TABLE 3:
RESPONDENTS' AGE VARIABLE DIFFERENTIATED BY LEVEL OF AGE

	F	%	VP	CP
V < 18	66	11.04	11.04	11.04
18-30	532	88.96	88.96	88.96
Total	598	100	100	100

N.B. (F= Frequency, %= Percent, VP= Valid Percent, CP= Cumulative Percent, V= Valid)

The above table shows the frequency distribution of the sample based on the age group. As it can be displayed, out of 598 people, 66 (11.04%) were under 18 years of age, and the rest were 532 (88.96%) between 18 and 30 years old.

B. Inferential Statistics

To determine the normality of data, 'Kolmogorov –Smirnov' test was used. As it can be seen from the table below (Table 4), the Sig value for all three variables is less than 0.03 and the result is that the assumption of normalization of the samples is not accepted at the 3% error level. In other words, samples do not follow the normal distribution, and the result is that non-parametric methods were used to test the research hypotheses.

TABLE 4:
ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST FOR RESEARCH VARIABLE

		LA1	LA2	TS
N		598	598	598
Normal Parameters	M	1.64	2.171	3.01
	SD	0.17	0.408	0.24
Most Extreme Differences	Absolute	0.23	0.27	0.18
	Positive	0.21	0.17	0.15
	Negative	-0.25	-0.13	-0.16
Test Statistic		0.18	0.29	0.17
Sig. (2-tailed)		0.0c	0.0c	0.0c

N.B. (LA1= Learning Autonomy, LA2= Language Anxiety, TS= Thinking Style, M= Mean, SD= Standard Deviation, N= Number)

As a result, Spearman correlation coefficient was used to examine the association between variables.

1. Hypothesis One

Null hypothesis: There is no significant association between learning autonomy and language anxiety among university students.

Alternative hypothesis: There is a significant association between learning autonomy and language anxiety among university students. Statistical hypothesis: $\{H_0: r = 0, H_1: r \neq 0$

TABLE 5:
CORRELATIONS BETWEEN LEARNING AUTONOMY AND LANGUAGE ANXIETY

			LA1	LA2
Spearman's rho	Language Anxiety	Correlation Coefficient	1.0	0.35
		Sig.(2-tailed)	-	0.0
		N	598	598
	Learning Autonomy	Correlation Coefficient	0.35	1.0
		Sig. (2-tailed)	0.0	-
		N	598	598

N.B. (LA1= Language Anxiety, LA2= Learning Autonomy, N= Number)
Correlation is significant at the 0.01 level (2-tailed).

As the data is shown from the above table, the correlation coefficient between two variables (language anxiety and learning autonomy) is 0.35. The Sig value is less than 0.03. From here, it is possible to say that there is a significant direct relation between the two variables. In other words, the hypothesis of the research is accepted at the 3% error level. There is a significant association between learning autonomy and language anxiety among Ethiopian university students.

2. Hypothesis Two

Null hypothesis: There is no significant association between learning autonomy and thinking style among university students.

Alternative hypothesis: There is a significant association between autonomy and thinking style among university students.

Statistical hypothesis
$\{H_0: r = 0, H_1: r \neq 0$

TABLE 6:
CORRELATIONS BETWEEN AUTONOMY AND THINKING STYLE AMONG ETHIOPIAN UNIVERSITY STUDENTS

		LA	TS
Learning Autonomy	Pearson Correlation	2	0.28
	Sig. (2-tailed)	-	0.01
	N	598	598
Thinking Style	Pearson Correlation	0.28	2
	Sig. (2-tailed)	0.01	-
	N	598	598
Correlation is significant at the 0.01 level (2-tailed).			

N.B. (LA= Learning Autonomy, TS= Thinking Style, N= Number)

According to the data which were indicated from the above table (Table 6), the correlation coefficient between the two variables (thinking style and learning autonomy) is 0.28.   The direct association between these two variables is owing to the Sig value less than 0.03. That means, the research hypothesis is accepted at the 3% error level, here, it is possible to deduce that there is a significant relation between learning autonomy and thinking style among university students.

3. Hypothesis Three

Null hypothesis: There is no significant association between language anxiety and thinking style among university students.

Alternative hypothesis: There is a significant association between language anxiety and thinking style among university students.

Statistical hypothesis:

$$\{H_0: r =0, H_1: r \neq 0$$

TABLE 7:
CORRELATIONS BETWEEN LANGUAGE ANXIETY AND THINKING STYLE

			TS	LA
Spearman's rho	Thinking Style	Correlation Coefficient	2.0	0.21
		Sig. (2-tailed)	-	0.01
		N	598	598
	Language Anxiety	Correlation Coefficient	0.21	2.0
		Sig. (2-tailed)	0.01	-
		N	598	598
Correlation is significant at the 0.05 level (2-tailed).				

N.B. (TS= Thinking Style, LA= Language Anxiety, N= Number)

As it can be seen in the above table, the correlation coefficient between thinking style and language anxiety is 0. 21. The direct association between these two variables is due to the Sig value less than 0.03. As the findings of the study revealed, the direct affinity between the two variables is significant, in other words, the research hypothesis is accepted at the 3% error level; that is to say, there is a significant association between language anxiety and thinking style among university students here in Ethiopia.

V. DISCUSSION

The main purpose of this study was to investigate the association between learning autonomy, language anxiety and thinking style. The results from the analysis of data from questionnaires are discussed in line with some empirical findings. As it was stated earlier, three research hypotheses were developed to address the feasible nexus between learner autonomy, thinking style, and language anxiety. Followings are demonstrations in this regard.

1. The first research question determined the association between autonomy and language anxiety among Ethiopian university students. The level of significance was obtained as 0.0. Since (p<0.03) or sig was less than 0.03, the null hypothesis was rejected and the alternative hypothesis was accepted. Here, one can conclude that there is a relation between autonomy and language anxiety among university students. From the study, participants claimed that they feel anxious doing such tasks and the positive relation between autonomy and anxiety was confirmed. The finding of this study tends to agree with the one reported by Killen (2013).

The results of Chan (2001) support the outcome of this research question positing that guidance should be provided to learners to reduce the amount of stress or anxiety-exerting factors within the learning context. Another idea which can be stated is that teachers' awareness of learners' autonomous learning plays a key role in reducing or increasing the anxiety among them. From here, it is possible deduce that anxiety is viewed as an important factor which debilitates the extent to which students tend to experience and develop their sense of autonomy in language learning setting (Ngan, 2014). Moreover, Habtom's (2015) investigation revealed that foreign language classroom anxiety significantly mediated the association between autonomy and English language achievement; so, classroom anxiety and learners' autonomy are correlated with one another.

Concerning this, the results of the study overlap what have been discovered earlier by Young (1998). "Severe performance anxiety mitigates against autonomy and motivation, though mild anxiety may sometimes enhance them" (Young, 1998 as cited in Oxford, 2003, p. 83). Nevertheless, a study seeking to discover the relation between anxiety and language learner autonomy was conducted by Shingle (2005) where no significant relation was found between anxiety and autonomy levels of EFL learners. Similarly Sarris (2015) conducted an experiment on high school students and concluded that a very small negative correlation existed between levels of anxiety and participants' willingness to take charge of their learning which was not statistically significant.

The findings of the study was not consistent with what Kabiri (2018) he confirmed affinity between learners' anxiety and autonomy levels, the correlation was reported as being negative and high levels of anxiety were associated with low levels of autonomy. However, this is consistent with Liu (2012) found that learners' anxiety has a significant but negative relation with their autonomy. Hence, teachers need to help students achieve the level of fluency through assigning a variety of tasks which accelerate their learning pace simultaneously. This is confirmed by the idea that anxiety might impede the language learning from fully engaging in activities, resulting in poor performance and weakened achievement.

2. The second research question was proposed to explore if there was association between learner autonomy and thinking style. Here, Spearman correlation coefficient test which was obtained as 0.28, it was found that there is a positive relation between learning autonomy and thinking style among university students. This maintained that autonomous language learners are more capable of making associating, placing new words into a context, structured reviewing, using mechanical techniques who are also talented in practicing, reviewing, and analyzing the target language. These findings are consistent with the view of Little (2012) who emphasized that the link between thinking styles and learner autonomy is very close so that one can judge how autonomous learners are from the styles they employ in learning.

Similarly, the results of the study are consistent with the views of Zhang and Sternberg (2006) who suggest that problem solving and decision making abilities which are also the characteristics of autonomous learning are correlated with learners' thinking styles. In the same context, Negari (2013) research revealed that there were significant correlations between self-attitude to autonomous language learning and most of the subcategories of thinking styles. When it comes to the context of language learning, it seems very crucial to take into consideration different thinking and learning styles which students use to learn the inputs. The affinity between language anxiety and thinking style was addressed through the use of Spearman test which confirmed this positive relation.

3. In line with the third research question, Zhang (2009) found out that there was a positive relation between conservative style and anxiety, but creativity generating styles, and the external style (a preference for working with others as opposed to working alone) were negatively related to anxiety. The results obtained from different studies (Seif, 2003; Razavi & Shiri, 2005) were in line with this finding emphasizing that various forms of thinking styles adopted and incorporated by foreign language learners , regardless of their gender and level of education, are in direct association with the level of their anxiety. As opposed to what have been found in the study, Heidari, and Mohammad's (2017) study showed that though there was a correlation between thinking styles subcategories and test anxiety, the association was determined as being significantly negative. It also indicated that the males and females' performance on thinking style questionnaire and test anxiety was significantly different. On the whole, the way students attempt to choose their learning depends to a large extent on the level of their anxiety.

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on the results and discussions of the findings of the study, it is possible to conclude that the results showed that non-parametric test was liable to be used to study the research hypotheses. Using Spearman correlation coefficient, a relation was found between learning autonomy and language anxiety among university students. The purpose of the study was so as to examine the affinity between learner autonomy, language anxiety, and thinking styles among EFL students. The first major finding drawn was the positive affinity between learning autonomy and language anxiety among university students. The second conclusion drawn was the positive relation between learner autonomy and thinking style. Also, the third finding suggested the association between language anxiety and thinking style.

Notwithstanding the numerous studies conducted in the field of autonomy, little attention has been drawn toward the links among these variables. This study could fill this gap through considering two other variables, namely, language anxiety and thinking style which suggested that both teachers and students need to account for the psychological issues such as the anxiety while trying to learn a foreign language. In addition, findings of the study could compensate for previous similar studies in that the role of students' use of strategy in language learning, namely, their thinking styles was identified to be the important factor for autonomous learning. The researchers believe that further investigations and experiments into such association are required to broaden the understanding of autonomous learning. Finally, it is recommended that pedagogical implications are needed to account for second or foreign language teaching and learning as well as textbook writers and curriculum designers.

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