

THE RELATIONSHIP BETWEEN LEARNER AUTONOMY AND ACADEMIC SELF-EFFICACY AMONG ENGLISH MAJOR STUDENTS IN HUBEI PROVINCE

¹Zhihao Dong, ²Siti Maziha Mustapha

ABSTRACT--*The objective of this paper is to explore the current level of learner autonomy and academic self-efficacy and relationship between learner autonomy and academic self-efficacy amongst English major students. A total number of 443 English majors students from eight universities in Hubei Province were chosen as respondents through two steps, stratified sampling and simple random sampling. In this study, two questionnaires were adopted to gather data from the 443 chosen respondents. After the data collection, SPSS 24.0 was used to process the data set to generate descriptive statistics and then Pearson product moment correlation analysis was utilized to find out the correlation between learner autonomy and academic self-efficacy. The outcomes of this research show that: firstly, the overall levels of English major students' learner autonomy and academic self-efficacy are both moderate; secondly, there is a significant and positive correlation between English major students' learner autonomy and academic self-efficacy, with the correlation coefficient value being 0.462; thirdly, there is a significant and positive correlation between the five dimensions of English major students' learner autonomy and academic self-efficacy, with the correlation coefficient value being 0.421, 0.450, 0.279, 0.334 and 0.477 respectively; fourthly, there is a significant and positive correlation between the dimensions of English major students' academic self-efficacy and learner autonomy with the correlation coefficient value being 0.423, 0.342 respectively. On the basis of the results of the investigation, this study further puts forward some strategies concerning the improving of English major students' academic self-efficacy and learner autonomy. In addition, some recommendations for future research are also put forward.*

Keywords-- *Learner autonomy, academic self-efficacy, English major student*

I. INTRODUCTION

1.1 LEARNER AUTONOMY

The notion of learner autonomy originated from the discussion of lifelong learning proficiency development and independent learning ability in 1960s. learner autonomy states that learners can accomplish their own learning

¹College of Foreign Studies, Hubei Normal University, Huangshi, Hubei, 435000, China; Faculty of Business, Information and Human Sciences, Infrastructure University Kuala Lumpur, Kajang, Selangor, 43000, Malaysia, 120911990@qq.com

²Faculty of Business, Information and Human Sciences, Infrastructure University Kuala Lumpur, Kajang, Selangor, 43000, Malaysia, maziha@iukl.edu.my

performance, establish learning goals, make learning strategies, select appropriate learning techniques, monitor the learning procedure, the application of learning plans and the treatment and advancement of learning abilities, self-assessment and calculation, and gradual progress (Xu, 2014).

Holec (1981), who first presented the conception of learner autonomy into language teaching, defined it as the capability to manage and be accountable for one's own learning. He also pointed out that the ability of learner autonomy is not innate for everyone, but can only be acquired through some way or through formal learning in a special system. Specifically speaking, learner autonomy is learners' own leading and managing learning methods, that is to say, learners should first determine learning objectives according to their own actual needs, then be able to make learning plans according to the corresponding learning content, then select the correct learning methods and adjust learning strategies in time, and monitor and manage the learning process, and finally the learning effect Results (Xu, 2014). From the parallel perspective, learner autonomy is specified comprehensively from all aspects of learners. If students can consciously make choices and control on all aspects of learning, that is to say, students' learning motivation is driven by internal motivation, and the learning strategy is self regulated (Pang, 2003). All activities related to learning are dominant and self arranged, and the learning time is self managed, so that the learning effect can be self evaluated finally, then this kind of learning is completely autonomous. From the vertical point of view, learner autonomy refers to the whole learning process to elaborate the essence of learning, that is, students can determine their learning objectives and make learning plans before learning activities, and carry out self-monitoring, self-management, reflection and summary in the learning process (Chen, 2019).

Generally speaking, learner autonomy is a modern way of learning, which is different from the traditional way of learning in that it emphasizes the initiative and self-consciousness of students in learning activities (Yi, 2019). It also pays more attention to the main position of students in teaching activities, and achieves the learning objectives through the independent analysis, exploration, practice, innovation and other methods of learners. Simultaneously, learner autonomy also advocates students to actively participate, be good at finding problems, be diligent in using practice to analyze and solve problems, and nurture students' ability to gather and process material, obtain new information and exchange and cooperation (Kong, 2019). According to Cui (2019) learner autonomy emphasizes student-centered learning, which has the following four characteristics: first, initiative. Learner autonomy embodies learners' enthusiasm, initiative and consciousness in learning activities, that is, learners do not need to passively carry out learning activities under external management or pressure, but consciously and actively self-discipline and regulate their own learning. In the procedure of learner autonomy, instructors should take learners as the center, guide students to think, find problems and actively solve them. Second is independence. Every student is an independent individual, and learning is the subject of their own which requires students to get rid of the dependence on teachers or others, and independently carry out learning activities, monitor and evaluate their learning behavior. This kind of independence does not mean complete independence. It is a relative independence. It means that students independently carry out learning activities under the guidance and assistance of teachers. Third is anticipating. The advance of learner autonomy is reflected in the process of students' self-construction of knowledge, students' assimilation of the original knowledge structure in their mind and their adaptation to new knowledge. Only through the processing and transformation of the original cognitive structure of students' minds can new knowledge be truly recognized and mastered by students. Last is . The main body of students has different personality characteristics, different cognitive styles, so asynchrony is to respect the

individual differences of students. According to their actual learning ability and foundation, students make corresponding learning plans and learning objectives, and complete corresponding learning tasks.

1.2 ACADEMIC SELF-EFFIACY

Self-efficacy was first put forward by Albert Bandura. It is an extremely important concept in his social cognitive theory. It describes the subjective evaluation of the person's possibility of success in a certain behavior. Albert Bandura published "self-efficacy: the exercise of control" in 1997, which explains self-efficacy systematically. According to Albert Bandura (1977), self-efficacy means people's subjective evaluation of their success in achieving a certain job or a certain kind of assignment, and it is the expression of individual's belief in their ability in the activities they are engaged in.

There are four key factors influencing the development of self-efficacy: (1) Enactive mastery experience. It is based on personal experience, so it has the biggest impact on self-efficacy. Many successes in the past will improve self-efficacy, and continual failures will lessen self-efficacy. (2) Vicarious event. By observing the success of others whose abilities are similar to their own, individuals can improve their self-efficacy; on the antithesis, they can lessen their self-efficacy. (3) Verbal persuasion. Speech persuasion can also improve self-efficacy. (4) Physical and emotional states. The individual's emotional state and physical discomfort will also affect the formation of self-efficacy (Bandura, 1977)

In addition, Albert Bandura (1977) believes that SE regulates human activities through four main processes: (1) cognitive process. SE can enhance or weaken the thinking mode of behavior performance. The higher the sense of SE, the greater the goal they decided for themselves. (2) Motivation process. People with a high intelligence of SE have strong motivation in activities, so they will pay more energies until the goal is achieved; people with a low impression of SE have a relatively weak motivation, if they encounter setbacks in the process of engaging in a certain behavior or activity, they will doubt their ability, so that they give up halfway, and finally stop at mediocrity. (3) Emotional process. SE also performs an important part in the control of emotional state. (4) Select the process. SE influences person's choice of behavior and activity. Individuals with high SE are more likely to select challenging activities and stick to their choices in difficulties, while people with low SE are the opposite.

II. LITERATURE REVIEW

2.1 ACADEMIC SELF-EFFICACY

The research on SE at home and abroad is mainly reflected in the following characteristics:

The first aspect is on the cultivation of self-efficacy. According to Li (2017), there are four basic ways to cultivate and improve students' self-efficacy are to set educational goals reasonably, to give full play to the role of model and demonstration, to strengthen timely feedback and to create learning atmosphere. Therefore, it is very helpful for teachers to help students set up appropriate learning objectives, make them study in groups according to students' learning ability, give more encouragement to students' academic achievement feedback, and create a relaxed learning atmosphere to improve students' self-efficacy. In his research, Zheng (2019) put forward several suggestions for cultivating self-efficacy: cultivating students' good learning strategies, making positive attribution to students' learning, and paying attention to the process of teaching evaluation. Therefore, in teaching, teachers

should consciously help students form their own learning strategies, guide students to correctly attribute their academic achievements, and evaluate students' attitudes and emotions to improve their self-efficacy.

The second aspect is on the combination of self-efficacy and other theories. The research of Gu (2018) shows that people with high SE are easy to choose more difficult behaviors or activities, set higher goals, and have high-intensity internal motivation; while people with low SE are more likely to choose tasks that are easy to complete, and have relatively weak internal motivation. Therefore, students' self-efficacy level will affect students' learning motivation and further affect their learning behavior (Xiong, 2016).

The third aspect is on the factors affecting academic SE. According to Yao (2019), in order to enhance the academic SE of students, it is necessary to set appropriate learning objectives, help them form healthy and upward personality, form a active interaction between students and their tutors, provide them with good learning, working environment and living conditions, and guide them to form good learning habits and living habits.

Based on the above literature examination, it can be seen that there are few explorations on the combination of SE and self-learning ability, so we can combine them to discuss their relationship.

2.2 LEARNER AUTONOMY

The studies of learner autonomy are mainly on the following aspects: first aspect is on the theory of learner autonomy, the introduction of foreign LA research results and the cultural suitability of learner autonomy (Hua Weifen 2001, Hao Qinhai 2005). Second aspect is the cultivation of students' English learner autonomy (Gin, 2017; Meng, 2017; Wang, 2018). Third aspect is detailed research on learner autonomy in different aspects of English learning (Liu, 2017; Ren, 2018; Guo, 2019). Besides, with the swift development of information technology, the research on multimedia, computer, digital network, corpus and learner autonomy is on the rise (Liu, 2017; Wang, He & Hou, 2019; Huang, 2019; Yan, 2019). The fifth aspect is the role of teachers in students' learner autonomy (Lin, 2016; Tao, 2015; Xu, Cheng & Ma, 2016; Liu & Xu, 2018; Huang & Bond, 2018). In addition, since learner autonomy is influenced by many factors, scholars have also carried out relevant research on the influencing factors of learner autonomy (Li, 2016; Zou, 2016; Hua & Leng, 2017; Zhang & Deng, 2018; Sun, 2019). Among them, the research on the relationship between SE, learning motivation and LA mostly takes SE and learning motivation as variables that affect learner autonomy, and explores the correlation between SE, learning motivation and learner autonomy (Hua & Leng, 2017; Zhang & Deng, 2018; Sun, 2019). Among the these research, the study of Hua and Leng (2017) found that there was a significant positive correlation between SE and learner autonomy. According to Zhang and Deng (2018), improving SE should be regarded as an important goal to improve students' level of learner autonomy. Sun (2019) carried out an empirical research and found that English learning motivation is highly positively correlated with learner autonomy, and the correlation between instrumental motivation and learner autonomy is higher than that between human motivation and learner autonomy.

The above research on the correlation between SE, learning motivation and LA does not involve the mechanism of self-efficacy and learning motivation on LA. The research on their mechanism can make the relationship and influence path between them more clearly, and provide teachers in universities with suggestions on teaching practice.

2.3 THE RELATIONSHIP BETWEEN ACADEMIC SELF-EFFICACY AND LEARNER AUTONOMY

At present, some scholars at home and abroad have discussed the relationship between academic SE and LA.

Gong and Wu (2016) took SE as the starting point to explore the experimental research on the cultivation of English LA. The results show that SE can help to cultivate and improve students' LA.

Li (2019) carried out a study on the interaction of learner factors on university students' English LA. The results show that SE has a direct or indirect impact on the cultivation of university students' LA.

The empirical study of Li (2016) is on university students' LA and SE. The results show that SE is positively correlated with self-learning ability and its dimensions.

According to Schunk (2000) research results show that SE has a positive effect on the use of students' LA Strategies: SE has a positive impact on students' LA plans, LA behavior and self reflection.

Bandura (2003) found that SE can predict the degree of successful application of various LA strategies in the learning process.

To sm up, most of the studies focus on the review of SE and self-learning theory, or only on the relationship between SE and academic achievement, self-learning. There are some empirical studies, but they regard self-learning ability as a one-dimensional variable in the analysis. In fact, LA includes objective ability and subjective consciousness. Generally speaking, it is not accurate to consider LA as a single variable. At present, there is a lack of in-depth multi-dimensional analysis on SE and LA. LA is reflected in different levels and dimensions of learning ability and learning awareness. Questions like which dimensions of LA SE affects and whether academic SE has significant impact on or predicting effect of different dimensions of LA need further research and discussion. The characteristics of university English language teaching determine that students' subjective initiative and academic SE play an important role in their active participation in LA. However, the traditional classroom lacks the attention paid to the differences of individual psychological factors and the cultivation of LA. Therefore, the study of academic SE, a controllable psychological factor, has a certain practical significance to improve the ability of LA. Taking SE as an important variable, this paper makes an empirical study of the relationship between SE and self-learning ability and its dimensions, and makes a multi-level in-depth analysis of how SE affects self-learning and different dimensions of LA, in order to find the way to provide reference for the cultivation of university students' LA.

III. METHODOLOGY

Through questionnaire survey and data analysis, the study analyzes the current level of academic SE and English LA among students and tries to determine the relationship between SE and LA, and verifies whether there is a causal relationship between the two variables.

1.3 RESEARCH DESIGN

According to Creswell(2002), research design are the steps in the research, including data collection, data analysis and reporting. For this research, it analyzes the data collected through questionnaires, so it belongs to correlational design which, according to Creswell (2002), associates or relates variables in a predictable pattern

for one group of individuals. Based on the correlational research design, this study first collect data by using two questionnaires, and then analyze the data collected to gather facts between academic SE and LA.

3.2 RESEARCH QUESTIONS

RQ 1: What is the overall level of SE and LA of English majors?

RQ 2: Is there a significant relationship between learner autonomy and academic SE?

RQ 3: Is there a significant relationship between different dimensions of learner autonomy and academic SE?

RQ 4: Is there a significant relationship between different dimensions of academic SE and learner autonomy?

3.3 POPULATION AND SAMPLING

The subjects of this study are junior English majors from Hubei public university. According to the figures of Hubei Provincial Department of Education, there are 4320 junior students in public universities in Hubei Province. In order to make the selected samples representative, this study divides public universities into three types: Comprehensive University, Polytechnic University and Normal University, and uses the combination of stratified sampling and random sampling. Firstly, using the formula of Krejcie and Morgia (1970) and the proportion of each type of University, and considering the recovery ratio, the number of samples needed is 443.

3.4 INSTRUMENTS

There are two instruments utilized in this study. The first one is Academic SE Scale which is made by Liang (2000). Altogether there are 22 items in the scale. There are two dimensions in this scale. The first dimension includes the item one to eleven and aims to measure academic SE ability while the second dimension includes items twelve to twenty-two with the purpose to measure academic SE behavior.

SE of learning ability refers to the estimation of whether an individual is able to complete his or her studies, to achieve good results and avoid academic failure; SE of learning behavior refers to the estimation of whether a student can achieve his or her learning objectives. The Cronbach's alpha coefficients of the two dimensions are 0.520 and 0.752 respectively, and the Cronbach's alpha coefficient of the total scale is 0.817 (Liang, 2000).

The second instrument is LA Scale adopted from Xu, Peng and Wang (2004). Altogether, there are 32 questions with 5 dimensions: the awareness of teaching objectives and requirements (ATOR), establishing learning objectives and plans (ELOP), the effective use of learning strategies (EULS), monitoring of strategy use (MSU) and the monitoring and evaluation of learning process (MELP). This scale is a 5-point Likert scale, and the corresponding scores are 1, 2, 3, 4 and 5 respectively. The higher the score is, the better the performance is.

3.5 DATA COLLECTION

With the help of the relevant teachers, the questionnaires were distributed to the students selected. In order to make sure that the study was properly carried out and the questionnaires were carefully filled in, the respondents were told that this was anonymous and they had the rights to withdraw from the study. The respondents were given enough time to complete this survey. In this study, 443 questionnaires were distributed, and the collected questionnaires were classified according to demographic variables. After sorting out the invalid questionnaires such as incomplete and obviously untrue answers, 440 valid questionnaires were obtained.

3.6 DATA SCREENING AND CLEANING

Before the normality test, exploratory data analysis (EDA) was applied to check the data and the aim was to find out outliers, missing values, errors in data input and ultimately to see if the data are normally distributed to proceed with parametric tests.

The descriptive statistics generated by the SPSS 24.0 software showed that there was no missing values.

As for the outliers, both univariate outliers and multivariate outliers were assessed. The univariate outliers were assessed by observing the boxplots. In the boxplots, there are two kinds of outliers. The extreme outliers are represented by asterisks in the boxplots and the mild outliers are represented by open dots in the boxplots. In this study, no univariate outliers are found.

For the multivariate outliers, the Mahalanobis Distance was calculated by using SPSS 24.0 and the results showed that in this data set there was no multivariate outliers.

In the present study, no case was eliminated to achieve normality. Normality test is especially pertinent in a study that employs multivariate analysis.

One of the methods to assess normality of data is by using two components of normality which are skewness and kurtosis. The measure of skewness between -1.0 to 1.0 indicates that the data do not depart from normality thus are feasible for parametric tests.

As shown in Table 1, the measures for the skewness and kurtosis are between the range of -1.0 to 1.0, thus the data are normally distributed.

Table 1: Normality Test Based on Skewness and Kurtosis

Variable	Mean	SD	Skewness	Kurtosis
IV1: LA	3.69	.761	-.375	.418
IV2: Academic SE	3.28	.818	-.484	.248

3.7 DATA ANALYSIS

The data set collected in the study was analyzed by spss24.0. The main procedures were: descriptive analysis of the data set was carried out to find out the current level of LA and academic SE; Pearson product moment correlation analysis was utilized to find out the relationship between SE and self-learning ability; multiple regression analysis was used to determine the predicating effects of different dimensions of LA towards academic SE and the predicating effects of different dimensions of academic SE towards LA

IV. RESULTS AD DISCUSSION

1.4 CURRENT LEVEL OF ACADEMIC SE

SPSS24.0 was used to generate descriptive statistics on the level of students' English SE and its two dimensions (namely, English learning ability efficacy and learning behavior efficacy). The results were shown in Table 4-1.

Table 2: Descriptive Statistics Results of Academic SE

Item	Range	Mean	Std. Deviation	Level	Percentage (%)	Frequency
Overall	5	3.28	0.527	Low	6.3	
				Moderate	68.8	
				High	25.0	
SEA	5	3.42	0.645	Low	6.9	
				Moderate	59.4	
				High	33.8	
SEB	5	2.86	0.792	Low	25.7	
				Moderate	58.3	
				High	16.0	

(Mean 1 to 2.33 as Low; 2.34 to 3.67 as Moderate; 3.68 to 5 as High)

Table 2 showed that the average value of academic SE of respondents is 3.28, the overall level of academic SE is of the moderate level, and the standard deviation is 0.527, which indicates that there are significant differences in the level of SE of respondents, and the proportion of high, medium and low SE is 6.3%, 68.8% and 25%, respectively. The average value of English academic SE ability is 3.42, and the standard deviation is 0.645, which shows that the respondents' academic SE ability is of moderate level. The proportion of high, medium and low SE in English learning ability is 6.9%, 59.4% and 33.8% respectively. In general, the score of academic SE ability is slightly higher than that of academic SE behavior. It shows that respondents are confident in their learning ability as a whole, so they can effectively use SE to overcome academic anxiety and self motivation to improve their academic performance when they encounter specific learning difficulties. The mean value of academic SE behavioral is 2.86, with the standard deviation being 0.792, which shows that the level of respondents' academic SE behavior is of moderate level. The proportion of high, medium and low SE in English learning behavior is 25.7%, 58.3% and 16%, respectively.

1.5 CURRENT LEVEL OF LA

Spss24.0 is used to analyze the overall level of respondents' LA and its five dimensions, the awareness of teaching objectives and requirements (ATOR), establishing learning objectives and plans (ELOP), the effective use of learning strategies (EULS), monitoring of strategy use (MSU) and the monitoring and evaluation of learning process (MELP). The results are shown in table 3.

Table 3: Descriptive Statistics Results of LA

	Level	Frequency	Percentage (%)	Mean	SD
Full	L	0	0	3.40	0.50

sample	M	234	53.1
(n=440)	H	206	46.9

From Table 3, it can be seen that the average value of English LA is 2.47, and the standard deviation is 0.50. It can be seen that the overall LA is at a medium level, which shows that most respondents realize the importance of learning, are willing to be involved in learning, can choose appropriate learning objectives and make corresponding learning plans, and are able to monitor and evaluate the learning process. The respondents who have high level of LA consists 46.9 of the total sample in this study while the percentage of respondents who have moderate level of LA is 53.1%.

Table 4: Descriptive Statistics of Different Dimensions of LA

Item	Range	Mean	Std. Deviation	Level	Percentage (%)	Frequency
ATOR	5	3.457	1.978	Low	2.5	
				Moderate	51.3	
				High	46.3	
ELOP	5	3.37	1.879	Low	1.9	
				Moderate	56.3	
				High	41.9	
EULS	5	3.319	1.782	Low	3.1	
				Moderate	55.6	
				High	41.3	
MSU	5	3.317	1.786	Low	2.5	
				Moderate	61.3	
				High	36.2	
MELP	5	3.499	1.608	Low	1.9	
				Moderate	54.4	
				High	43.8	

From Table 4, it can be noticed that the development of respondents' LA is balanced, with an average value of 3.317-3.499. For the first dimension, the awareness of teaching objectives and requirements, the mean is 3.457, with the percentage of respondents of low, moderate and high level being 2.5%, 51.3% and 46.3% respectively. With the mean being of moderate level, it indicates that most of the respondents have a relatively clear understanding of the teaching objectives and requirements.

For the second dimension, establishing learning objectives and plans, it is of moderate level with the mean being 3.37. The percentage of respondents of low, moderate and high level are 1.9%, 56.3% and 41.9% respectively, which shows that most respondents are able to set up learning objectives and plans and act according to them.

The third dimension, the effective use of learning strategies, is also of moderate level, with respondents of low, moderate and high level being 3.1%, 55.6% and 41.3% respectively. It shows that respondents could find the right learning strategies to improve their learning.

The fourth dimension is monitoring of strategy use which is of moderate level since the mean is 3.317 and respondents of low, moderate and high level consists of 2.5%, 61.3% and 36.2% of the total sample in this study. The result indicates that most of the respondents are capable of observe on the strategies chosen and make adjustment when necessary.

The last dimension is the monitoring and evaluation of learning process which is of moderate level with the mean being 3.499. The percentage of respondents of low, moderate and high level are 1.9%, 54.4% and 43.8% respectively. This result indicates that most of the respondents reflect and summarize their learning.

1.6 CORRELATION BETWEEN ACADEMIC SE AND LA

1.6.1 THE Correlation BETWEEN ACADEMIC SE AND LA

In this study, Pearson correlation analysis was used to find out the relationship between the two variables. According to Cohen (1988), the value of correlation coefficient r is between - 1.00 and + 1.00. The greater the absolute value of correlation coefficient r is, the higher the correlation is. When $r \geq 0.5$, it is highly correlated. When $0.3 \leq r < 0.5$, the correlation is of moderate level. When $r < 0.3$, the correlation is of low level. The sign of correlation coefficient indicates positive and negative correlation respectively. The results of the analysis is shown in Table 5.

Table 5: The Correlation Coefficient and the Strength of Correlation

Dimension and Sub dimensions		Academic SE
LA	Pearson Correlation	.462**
	Sig. (2-tailed)	.000

** . Correlation is significant at the 0.01 level (2-tailed).

It can be seen from the results that the correlation coefficient of the two variable is 0.462**, and the significance coefficient is 0.000, which is less than the significance level of 0.01, indicating that the two variables are significantly, positively correlated. At the same time, the r value is greater than 0.3 and less than 0.5 ($r = 0.462^{**}$), so it indicates that there is a moderately positive correlation between LA and academic SE. The higher the academic SE of respondents, the stronger their LA. This is consistent with the research results of many scholars. The research of Liu (2017) shows that learning motivation, SE and LA behavior have significant positive correlation; the research of Kong (2019) also points out that SE and LA are positively correlated.

1.6.2 THE CORRELATION BETWEEN ACADEMIC SE AND DIMENSIONS OF LA

Pearson product moment correlation analysis is utilized to find out the relationship between academic SE and five dimensions of LA. The results are shown in Table 6.

Table 6: The Correlation Coefficient and the Strength of Correlation

Dimension and Sub dimensions		Academic SE
ATOR	Pearson Correlation	.421**
	Sig. (2-tailed)	.000
ELOP	Pearson Correlation	.450**
	Sig. (2-tailed)	.000
EULS	Pearson Correlation	.279**
	Sig. (2-tailed)	.000
MSU	Pearson Correlation	.334**
	Sig. (2-tailed)	.000
MELP	Pearson Correlation	.477**
	Sig. (2-tailed)	.000

**. Correlation is significant at the 0.01 level (2-tailed).

It can be seen from Table 6 that the correlation coefficients between academic SE and the five dimensions of LA of respondents are $r = 0.421^{**}$, $r = 0.450^{**}$, $r = 0.279^{**}$, $r = 0.334^{**}$, $r = 0.477^{**}$ respectively. The value of r is between +1 and -1, which shows that academic SE and the five dimensions of LA are positively correlated. At the same time, the significance coefficient is 0.00, less than the significance level of 0.01, showing a significant correlation, so academic SE is positively correlated with the five dimensions of English LA.

The correlation between monitoring and evaluation of English learning process and SE is high, the correlation coefficient is 0.477^{**} , and the correlation coefficient is significant moderate positive correlation. Secondly, the correlation coefficient between monitoring and evaluation of English learning process and SE is 0.477^{**} 0.450^{**} , followed by understanding teaching objectives and classroom requirements, with a correlation coefficient of 0.421^{**} , followed by monitoring the use of learning strategies, with a correlation coefficient of 0.334^{**} . According to Cohen (1988), these correlations are all positive and moderate. Effective use of learning strategies is also positively correlated with SE, but it is low correlated ($r = 0.279$). This is consistent with the research results of Zou (2016), that is, there is a significant positive correlation between respondents' SE level and English LA, that is to say, the higher the level of respondents' SE, the more effective learning strategies they will use. Generally speaking, the stronger the sense of SE of respondents is, the more reasonable the use of certain learning strategies, the monitoring of their learning process, and the improvement of learning effect.

1.6.3 CORRELATION BETWEEN LA AND DIMENSIONS OF ACADEMIC SE

In order to answer the research question whether there is a significant relationship between the overall levels of LA and the two dimensions of academic SE, Pearson product moment correlation analysis is conducted and the results are shown in Table 7.

Table 7 : The Correlation Coefficient and the Strength of Correlation

Dimension and Sub dimensions		SEA	SEB
LA	Pearson Correlation	.423**	.342**
	Sig. (2-tailed)	.000	.000

**. Correlation is significant at the 0.01 level (2-tailed).

It can also be seen from table 4-10 that the correlation coefficients of the two dimensions of respondents' self-learning ability and SE, namely, ability efficacy and behavior efficacy, are 0.423 * * and 0.342 * *, that is to say, self-learning ability and English learning ability efficacy are moderately significantly positively correlated, and they are moderately significantly positively correlated.

V. CONCLUSION

Based on the findings of this study, in order to change the current situation of university students' English language learning and achieve ideal learning results, teacher should guide them to establish a good sense of academic SE and improve their level of LA, and then mobilize their initiative.

Teachers should guide the students reasonably, improve the teaching mode and content, pay attention to process evaluation, and improve the academic SE of English language learning. In the process of university English language teaching, the students' academic SE can be improved through the following ways: first, the content of university English language teaching can be improved so that the students are able to apply their professional background knowledge to the study of university English language. In this way, they can continuously obtain a sense of achievement, and gradually cultivate their sense of trust in the course. Secondly, with the help of modern teaching platform and technology, the teaching mode can be improved and the form of homework can be enriched, for example, their interest in English language learning can be stimulated through group discussion, film dubbing, reciting lines, etc. Thirdly, formative assessment should be adopted to pay attention to students' English language learning process and give them dynamic assessment feedback. Teachers should help students internalize the acquired language, vocabulary and expression, deepen their understanding, and then bring them a sense of academic SE. At the same time, teacher should guide the students to view the test results reasonably, and transfer the focus to the learning process and evaluation methods. Teachers should find every students' progress in time, and give positive evaluation to improve students' academic SE.

Help should be given to students to establish reasonable learning objectives, improve learning methods, and LA in English language learning. The unbalanced development of all dimensions of LA shows that students' autonomous learning ability is closely related to learning strategies, learning self-regulation ability and learning motivation. To a large extent, the lack of motivation comes from the lack of confidence in English language learning ability, which affects the autonomy of English language learning. In order to improve the LA of university students, teachers should focus on: first of all, it is essential to have a thorough understanding of the psychological characteristics and individual differences of university students and help them to make a reasonable assessment of their own learning situation, set up their own learning goals, and stimulate students' learning motivation through the realization of a goal. Secondly, while setting up personalized learning goals, the students should be guided to

choose effective learning methods and means according to their own reality in the learning process. Teachers should also help them to regulate their learning behavior reasonably through speech motivation and feedback analysis of learning situation, so that they can find the fun and sense of achievement of active exploration and knowledge acquisition, and improve their LA in English language learning.

REFERENCES

1. Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191.
2. Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88(1), 87.
3. Chen Shaoying. (2019). A study on the correlation between university Students' vocabulary learning strategies and vocabulary in the perspective of autonomous learning. *Heilongjiang Higher Education Research*, 37 (11): 142-146.
4. Cui, Z., & Yang, Y. (2019). A survey on the influence of classroom teaching mode on English learners' learner autonomy. *Chinese Journal of Education*, (1): 72-78.
5. Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative* (pp. 146-166). Upper Saddle River, NJ: Prentice Hall.
6. DeCarvalho, R. J. (1991). The humanistic paradigm in education. *The Humanistic Psychologist*, 19(1), 88-104.
7. Gong, X., & Wu, L. (2016). The influence of the relationship between mobile autonomous learning and self-efficacy on English achievement. *China Foreign Language Research*, 3 (01): 59-65 + 151.
8. Gu, S., & Li, L. (2018). A study on the correlation between English writing strategies and writing self-efficacy -- An empirical study based on data analysis. *Foreign Language Audio Visual Teaching*, (02): 25-31 + 90.
9. Guo, Y. (2019). The role of reading in the cultivation of students' learner autonomy. *Education Modernization*, 6 (41): 237-243.
10. Holec H. (1981). *Autonomy and Foreign Language Learning*, Oxford: Pergamum Press.
11. Hua, W., & Leng, N. (2017). Autonomous learning and motivation regulation strategies. *Foreign Language Research*, 34 (04): 49-55.
12. Huang, L. (2019). Research on improving students' learner autonomy by using online learning space. *Basic Education Research*, (21): 50-57.
13. Huang, M., & Bond, F. (2018). university English autonomous learning: the perspective of teachers' beliefs and behaviors. *Foreign Language Teaching Theory and Practice*, (02): 57-64.
14. Jin, R. (2017). Research on the cultivation of university Students' learner autonomy in the era of Internet plus education. *China Higher Education*, (22): 18-23.
15. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
16. Kong, S. (2019). An analysis of the effect of self-efficacy on the improvement of university Students'

- learner autonomy. *Education Modernization*, 6 (43): 115-116 + 128.
17. Li, B., & Xu, J. (2014). The influence of achievement goal orientation on English learner autonomy and the mediating effect of self-efficacy. *Chinese Foreign Language*, 11 (03): 59-68.
18. Li, H. (2016). An Empirical Study on university Students' learner autonomy and self-efficacy. *Modern Foreign Language*, 39 (02): 235-245 + 292-293.
19. Li, H. (2017). Research on the influence of self-efficacy in English writing on the writing performance of Non-English Majors. *Foreign Language Teaching Theory and Practice*, (03): 57-63 + 79.
20. Liang, Y (2000). Research on achievement goal, attribution style and academic self-efficacy of university students. Wuhan: Central China Normal University.
21. Lin, L. (2015). Action research report on the development of students' learner autonomy based on teachers' intermediary. *Foreign Language Teaching Theory and Practice*, (02): 52-59 + 96.
22. Liu, Q., & He, L. (2017). The construction of corpus based English writing autonomous learning model. *Foreign Language Audio Visual Teaching*, (06): 44-49 + 77.
23. Liu, Y., & Xu, H. (2018). A study of university English teachers' beliefs in autonomous learning. *Foreign Language and Foreign Language Teaching*, (01): 92-100 + 149.
24. Liu, W. (2017). Research on self-efficacy and learner autonomy of adult students. Shanghai: Shanghai Foreign Studies University.
25. Meng, X. (2017). The cultivation mode of university students' learner autonomy from the perspective of adult learning theory. *China Higher Education*, (21): 13-18.
26. Ren, Y. (2018). On the cultivation of learner autonomy in English Writing Teaching. A Comparative Study of Cultural Innovation, 2 (23): 185- 191.
27. Schunk, D. H., & Ertmer, P. A. (2000). Self-regulation and academic learning: Self-efficacy enhancing interventions. In *Handbook of self-regulation* (pp. 631-649). Academic Press.
28. Sun, W. (2019). A study on adult learner autonomy based on learner motivation: a case study of the factor analysis of future learning process. *Higher Education*, 39 (02): 1-6.
29. Tao, Y. (2015). Research on teachers' motivation under the teaching mode of autonomous learning in universities. *Education and Occupation*, (34): 63-68.
30. Wang, W. (2018). An empirical Study on the cultivation of learner autonomy of Higher Vocational students under the mixed teaching mode. *China Vocational and Technical Education*, (35): 10-15.
31. Wang, X., He, W., & Hou, D. (2019). The construction of autonomous learning mode for university students under the environment of network and new media. *Education Modernization*, 6 (94): 184-189.
32. Xiong, W., & Shen, H. (2016). The relationship between motivation failure and academic performance: the mediating effect of self-efficacy -- a case study of English Majors in Open Education. *Modern Distance Education*, (05): 24-30.
33. Xu, H., Chen, G., & Ma, H. (2016). An empirical study on the relationship between teachers' support for students' learner autonomy and students' chemical learning. *Curriculum, Textbook, Teaching Method*, 36 (02): 100-106.
34. Xu, J., Peng, R. & Wang, W. (2004). Investigation and analysis of autonomous English language learning ability of non-English major students. Beijing: Foreign Language Teaching and Research.

35. Yao, X. (2019). A study on graduate students' learning self-efficacy and its influencing factors. *Cultural and Educational Materials*, (29): 187-191.
36. Yan, K. (2019). Research on the teaching mode of network course based on self-learning -- Taking the course of database application technology as an example. *Computer Knowledge and Technology*, 15 (31): 170-178.
37. Yi, B. (2019). The construction of English information narrative teaching strategy based on the cultivation of learner autonomy. *Heilongjiang Higher Education Research*, (06): 148-151.
38. Zhang, M., & Deng, L. (2018). A study on the decline of university students' English learning motivation in the context of autonomous Learning Center: Based on the perspective of Ubiquitous Learning. *Modern Educational Technology*, 28 (02): 68-74.
39. Zheng, X., & Yao, Y. (2019). Thesis writing for English undergraduates: the evolution and development of self-efficacy under the guidance of tutors: a case study of minority students. *Foreign Language and Foreign Language Teaching*, (06): 57-68 + 146-147.
40. Zou, Q. (2016). Research on the development of self-learning ability based on self-efficacy. *China Higher Education*, (07): 14-19.