

Self-efficacy and Anxiety in Second Language Acquisition: The Mediating Role of Proactive Personality

Yujie Wu

Foreign language school, Yunnan University, Kunming, China

Abstract

Based on the questionnaire analysis of 330 middle school students' second language learning, this paper explores the influence of general self-efficacy on second language acquisition anxiety and its mechanism. It is found that L2 learning anxiety is significantly negatively correlated with self-efficacy and proactive personality, that is, second language learners with strong active personality have weaker second language learning anxiety and higher self-efficacy; active personality plays a mediating role in the relationship between second language learning self-efficacy and second language acquisition anxiety, and second language learning self-efficacy can be achieved through active personality. A mediating variable affects the level of second language learning anxiety.

Keywords

Language acquisition anxiety; Self-efficacy; Proactive personality; Middle school students.

1. Introduction

With the development of economic globalization and the enhancement of China's international communication capacity in recent years, the study of second language acquisition theories has been deepened continuously and different countries have also intensified cultural exchanges, contributing to the substantial development of the studies on the second language acquisition. The research focus of second language teaching or foreign language teaching has been transformed from teachers to learners. This phenomenon above has triggered domestic researchers' in-depth thinking and discussion on the influence of students' personal factors on second language acquisition.

After searching the relevant researches at home and abroad, I discovered that the cognition of second language acquisition has always been the academia's research focus since 1970s. By contrast, there are few researches on the field of learners' emotional feelings. Anxiety, as one of the emotional factors, has received little attention due to China's late start in its research and the incomplete development of research tools. Since 1970s when the research focus of second language acquisition and foreign language teaching were transformed from teaching methods to the learning process, learners' personal emotional factors have attracted researchers' more attentions than ever. In particular, foreign language anxiety, as one of the key variables, has been highlighted by researchers. According to Dai Manchun, anxiety may be the emotional factor that hinders the learning process the most [1].

Researchers have studied the second language acquisition anxiety substantially under different contexts using different research methods. In 1986, Horwitz & Cope proposed the following concept [2]: "Learners generate a kind of complex that combines self-perception, belief, emotion and action related to foreign language learning in class because of the uniqueness of foreign language learning." This concept generally defines the second language acquisition anxiety.

MacIntyre & Gardner (1994) [3] divided second language acquisition anxiety into three stages using trichotomy, including input anxiety, processing anxiety and output anxiety, of which, input anxiety plays a key role in influencing the self-efficacy of second language learners.

In this paper, efforts were made to explore the relationship between anxiety and English learning through analyzing 3 questionnaires. In particular, experimental research was made on the relationship between anxiety level and the oral English expression abilities. By spot checking 330 middle school students from Grade 7 to Grade 12 nationwide, it was found that: 1) middle school second language learners have faced different kinds of evident language anxiety factors; 2) the oral English expression ability is negatively correlated with language anxiety; 3) oral expression, i.e., language output, accounts for a large proportion among all anxiety factors.

The negative effects of second language acquisition anxiety to second language learning have been illustrated in many existing researches. Some researchers have made analysis on learners' personal characters; for example, factors including self-efficacy, self-control and self-esteem have been studied extensively by researchers engaged in the study of second language acquisition anxiety. [4] Self-efficacy, which serves as a critical concept in studying the learning behavior, means checking if people can use their skills to complete one specific work and actually refers to the level of confidence under which people could make self-judgment on their behavior abilities under certain circumstances. Here "ability" cognition reflects learners' activity and proactivity in the specific learning process so as to relieve and avoid second language acquisition anxiety effectively. Relevant researches show that students' self-efficacy is significantly negatively correlated with second language acquisition anxiety. It is worth further discussing how self-efficacy is applied to the process of relieving acquisition anxiety and whether the level of learning proactivity can take effect between the two factor as a kind of stable tendency so as to lower the output anxiety, which accounts for the largest proportion in anxiety source.

On the basis of interactionism, Bateman et al. called the stable tendency of individuals who take actions initiatively to influence the surrounding environment instead of being confined by the specific circumstances the proactive personality. [5] People differ in the tendency of taking actions proactively. According to the researches, students' proactive personality is significantly positively correlated with their self-efficacy. However, the issue on whether students with high self-efficacy have less output anxiety because of their higher proactivity will be further analyzed and demonstrated in this research in the new research scope [6].

The discussion on the work mechanism of action of second language learners' proactive personality on their self-efficacy and academic procrastination could further enrich the relevant empirical researches on improving student's second language output anxiety.

2. Subjects and Methods

2.1. Research Subjects

The research covered a total of 330 middle school students in Grade 7 – 12 who were provided with the corresponding questionnaire. Besides considering the reality of the education development level, the respondents were mainly dominated by the students from Guizhou Province which has a middle education level to ensure the randomness and representativeness of the samples and all the respondents covered other provinces, cities and municipals based on the population ratio evenly. The questionnaires were distributed and collected through the "Sojump". See Chart 3 for the distribution of the regions where these schools were located: 200 from Guizhou, 11 from Hunan, 5 from Jiangsu, 3 from Jiangxi, 4 from Zhejiang, 5 from Beijing, 7 from Fujian, 3 from Guangxi, 10 from Anhui, 2 from Hebei, 2 from Henan, 5 from Jilin, 3 from Liaoning, 3 from Inner Mongolia, 8 from Shandong, 10 from Shanxi, 5 from Shaanxi, 12 from

Shanghai, 10 from Sichuan, 1 from Tianjin, 5 from Wuhan, 11 from Yunnan and 5 from Chongqing. Questionnaires in Guizhou were distributed and collected by the researchers their local schools while those in other regions were distributed and collected by the main regional responsible experimenters at the local sites. A total of 312 valid questionnaires were received after deleting 18 invalid ones through collection and sorting, with an effective collection rate of 94.5%. See Chart 1 and 2 for the respondents' basic information.

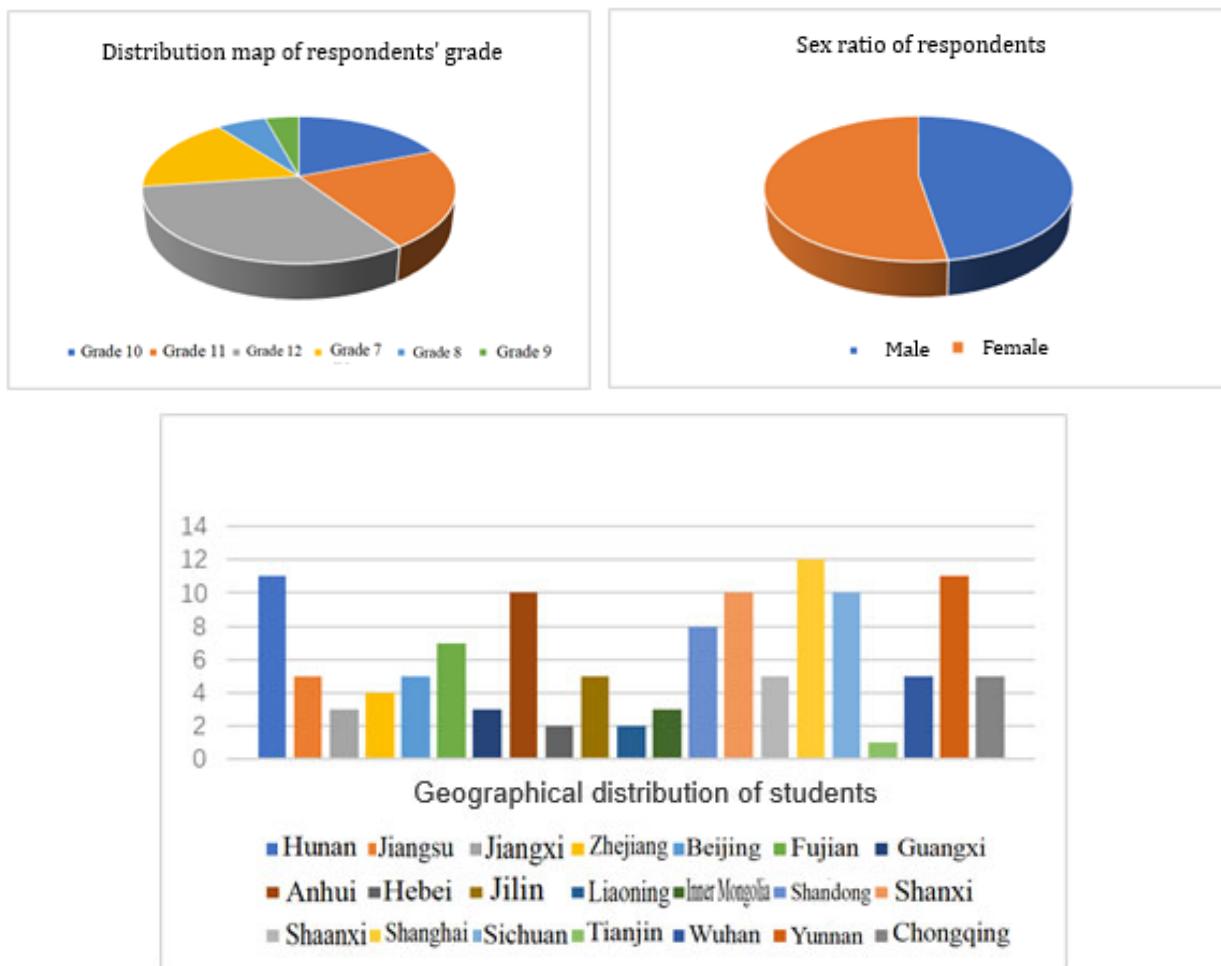


Figure 1. Distribution map of respondents' grade; Sex ratio of respondents

2.2. Research Tools

2.2.1. CSES of Second Language Acquisition

Measurement was made using CSES of second language acquisition formulated by Zhang Shufen. With a total of 22 closed questions, the CSES measures the middle school students' second language learning self-efficacy from four aspects: The ability of accomplishing targets in English learning process, the confidence in achieving the goal of English learning, the ability of coping with setbacks in English learning and the efforts to overcome difficulties in English learning. This scale above, which complies with this research, is much targeted and has already been used in many researches which prove its effectiveness. Likert Scale (5 points) was also used for giving the specific points (1-5 points), which are from "strongly disagree" to "strongly agree" and finally the average of 22 items was calculated. The higher the score, the stronger the second language acquisition self-efficacy. In this research, the Cronbach α coefficient of the scale is 0.936.

2.2.2. Scale of Second Language Acquisition Anxiety

The scale of second language acquisition anxiety formulated by Horwitz & Cope was also used. This scale includes a total of 33 items (for instance, "I'm not nervous when talking with foreigners", "I always feel that my classmates can speak English better than me"). Likert Scale was also used to record points (1-5 points), which are from "strongly disagree" to "strongly agree" and finally the average of the 33 items was calculated. The higher the score, the stronger the anxiety. In this research, the Cronbach α coefficient of the scale is 0.964, which means a good reliability.

2.2.3. Scale of Proactive Personality

The scale of proactive personality formulated by Chen Meijun and Ling Wenquan was used for measurement. The scale includes a total of 13 items, which are divided into three dimensions: Positive, transformational and tough types. Likert Scale was used to record points (1-6 points). The higher the score, the more typical the proactive personality. The average score of the 13 items was calculated from "strongly disagree" to "strong agree". The higher the score, the more typical the proactive personality. The internal consistency coefficient of the scale is 0.85, which means a good reliability and validity. In this research, the Cronbach α coefficient of the scale is 0.94.

2.2.4. Statistical Analysis

SPSS24.0 was used for the descriptive statistical analysis and correlation analysis of variables in the research, where Mplus7.4 was also used for confirmatory factor analysis (CFA), mediating effect test and moderating effect test.

2.3. Research Hypothesis

Hypothesis 1: Second language acquisition anxiety is negatively correlated to second language learning self-efficacy.

Hypothesis 2: Second language acquisition anxiety is negatively correlated to proactive personality.

Hypothesis 3: Proactive personality is positively correlated to English learning self-efficacy.

Hypothesis 4: Proactive personality is the mediating variable between English learning anxiety and self-efficacy.

3. Results

3.1. Analysis of Second Language Learning Self-efficacy, Learning Anxiety and Current Features of Proactive Personality

To know the respondents' scores on the scale of second language learning self-efficacy, learning anxiety and proactive personality, the descriptive statistics was made, the results of which are as below:

Likert Scale was used for the scale of second language learning of junior and senior middle school students. To be specific, the highest point is 5, the medium-level point is 3 and the lowest point is 1. Therefore, the respondents' score of second language learning self-efficacy and proactive personality are in medium level or above (>3). They have relatively strong second language learning self-efficacy and proactive personality while their English learning anxiety was below general level (<3), which means a high anxiety level.

Table 1. Descriptive Statistics

	Average (E)	Standard Deviation SD	Max. Value(X)	Min. Value(M)
Second language learning self-efficacy	3.64	.81	4.91	1.23
Learning ability	3.67	1.19	5.00	1.00
Confidence	3.74	.94	5.00	1.00
Setbacks	3.33	1.21	5.00	1.00
Efforts of overcoming difficulties	3.66	.99	5.00	1.00
Scale of second language acquisition anxiety	2.70	.82	4.58	1.03
Scale of proactive personality	3.69	.91	5.00	1.31
Proactivity	3.57	1.29	5.00	1.00
Toughness	3.73	.98	5.00	1.00
Transformation	3.80	1.18	5.00	1.00

3.2. The Correlation Analysis Between Second Language Learning Self-efficacy, Learning Anxiety and Proactive Personality

To confirm if there is any correlation among the second language learning self-efficacy, learning anxiety and proactive personality, simple correlation analysis was made, the result of which is as below:

Table 2. Correlation

		Second language learning self-efficacy	Scale of second language acquisition anxiety	Scale of proactive personality
Second language learning self-efficacy	Pearson Correlation	1	-.307**	.121*
	Significance (both ends)		.000	.033
	N	312	312	312
Scale of second language acquisition anxiety	Pearson Correlation	-.307**	1	-.295**
	Significance (both ends)	.000		.000
	N	312	312	312
Scale of proactive personality	Pearson Correlation	.121*	-.295**	1
	Significance (both ends)	.033	.000	
	N	312	312	312

**. Correlation is significant when confidence is 0.01(two-measurement).

*. Correlation is significant when confidence is 0.05(two-measurement).

It can be found from the tables above that when other conditions remain unchanged, the correlation among second language learning self-efficacy, proactive personality and second language acquisition anxiety are significantly correlated and the relevant coefficients are all below 0 at 5% significance level. The second language learning self-efficacy is significantly correlated with proactive personality, and the correlation coefficients are beyond 0.

Second language learning self-efficacy is negatively correlated with second language acquisition anxiety. Therefore, Hypothesis 1 is established.

Proactive personality is negatively correlated with second language acquisition anxiety. Therefore, Hypothesis 2 is established.

Second language learning self-efficacy is positively correlated with proactive personality. Therefore, Hypothesis 3 is established.

Therefore, the factor of proactive personality meets the requirement for mediating effect. By taking proactive personality as mediating variable, the second language learning self-efficacy as independent variable and second language acquisition anxiety as dependent variable, their relations were further discussed in the research.

3.3. Proactive Personality Is the Mediating Variable Between English Learning Anxiety and Self-efficacy

In this research, the mediating effect was tested in the research using the following procedure:

Step 1: Test the regression coefficient c of independent variable - second language learning self-efficacy (X) to dependent variable - second language acquisition anxiety (Y). The results are shown in Table 3 below.

Table 3. Coefficient^a

Model	Unstandardized Coefficient		Standard Coefficient Beta	t	Significance
	B	Standard error			
(Constant)	3.839	.206		18.681	.000
1 Second language learning self-efficacy	-.313	.055	-.307	-5.683	.000

a. Dependent variable: Scale of second language acquisition anxiety

Step 2: Test the regression coefficient a of second language learning self-efficacy(X) to proactive personality (M). The results are shown in Table 4 below.

Table 4. Coefficient^a

Model	Unstandardized Coefficient		Standard Coefficient Beta	t	Significance
	B	Standard error			
(Constant)	3.197	.237		13.512	.000
1 Second language learning self-efficacy	.136	.063	.121	2.140	.033

a. Dependent variable: Scale of proactive personality

Step 3: After controlling the mediating variable - proactive personality (M), test the regression of independent variable - second language learning self-efficacy (X) to dependent variable-second language acquisition anxiety (Y) and the regression of independent variable - second language learning self-efficacy (X) and proactive personality (M) to second language learning anxiety (Y). The results are shown in Table 5 below.

Table 5. Coefficient^a

Model	Unstandardized Coefficient			t	Significance
	B	Standard error	Beta		
	(Constant)	3.839	.206	18.681	.000
1	Second language learning self-efficacy	-.313	.055	-.307	-.5683 .000
	(Constant)	4.599	.250	18.424	.000
2	Second language learning self-efficacy	-.281	.053	-.276	-.5253 .000
	Scale of proactive personality	-.237	.048	-.262	-.4996 .000

a. Dependent variable: Scale of second language acquisition anxiety

As indicated by the analysis results of t mediating effect test:

Firstly, as shown in Table 3, second language learning self-efficacy has significant negative predictive function to second language acquisition anxiety. The regression coefficient is -0.313 ($p<0.05$).

Secondly, as shown in Table 4, second language learning self-efficacy has significant positive predictive function to proactive personality. The regression coefficient is 0.136 ($p<0.001$).

Thirdly, as shown in Table 5, proactive personality leads to partial mediating effect between English learning anxiety and self-efficacy. The mediating effect (ab) is: $0.136 \times (-0.237) = -0.0322$ and the total effect (ab+c'): $0.136 \times (-0.237) + (-0.281) = -0.3132$. The proportion that mediating effect occupies in the total effect: $-0.0322 / (-0.3132) \times 100\% = 10.28\%$.

Based on the research results above, a model which takes proactive personality as mediating variable was proposed. Therefore, Hypothesis 4 is established.

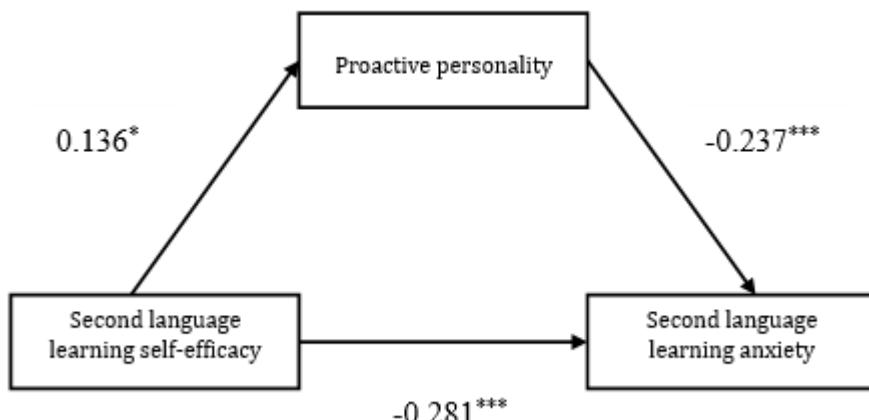


Figure 2. Model of the Mediating Role of Proactive Personality in English Learning Anxiety and Self-efficacy

4. Discussion

4.1. The Relationship between Second Language Acquisition Efficacy and Second Language Acquisition Anxiety

A majority of empirical researches indicate that self-efficacy is closely related with proactive personality, which was studied in this research through spot checking the students in Grade 7 – 12. As indicated by the results, second language learners' self-efficacy under the special condition of second language output learning exerts certain influence on the realization of the

goal ultimately via proactivity, the personal characteristic and finally influence anxiety generated in the learning process. Second language acquisition learners with stronger proactive personality could adjust and adapt to the output of their own second language learning better, who could integrate in the oral communication and have lower anxiety level.

The mediating effect of proactive personality is significant between second language acquisition efficacy and second language acquisition anxiety, which implies that the second language acquisition efficacy can influence the anxiety level by proactive personality, the intermediate variable. A majority of second language learners have second language acquisition anxiety which does not depend on the influence of self-efficacy totally but is also subject to the influence of learners' proactive personalities. The stable personality tendency plays a key role in reducing second language acquisition anxiety.

4.2. The Mediating Role of Proactive Personality

In conclusion, among middle school students of second language learning, second language acquisition anxiety is negatively correlated with second language learning self-efficacy. Proactive personality plays a mediating role in the relationship between second language acquisition anxiety and second language learning self-efficacy. By considering the realities of the language learners at present, the primary tasks in foreign language teaching lie in cultivating students' proactive personality and lowering the negative influence of anxiety on students' learning. Therefore, the foreign language teachers should guide learners patiently and encourage them to practice oral communication more actively. Meanwhile, the researchers should study the effect and influential factors of proactive personality deeper based on the features of China's foreign language classes and foreign language learners so as to help foreign language teachers and foreign language learner's characteristics and use the advantageous features of proactive personality to improve second language learning standards.

References

- [1] Manchun Dai. Emotional Factors and Definition——J. Arnold(ed.) 《Affect in Language Learning》 [J]. Foreign Language Teaching and Research, 2000, (06): 470-474.
- [2] Horwitz, E.K. Preliminary evidence for the reliability and validity of a foreign language anxiety scale[J]. TESOL Quarterly, 1986, 20:559-564.
- [3] P. D. MacIntyre,R. C. Gardner. Anxiety and Second-Language Learning: Toward a Theoretical Clarification*[J]. Language Learning, 1989, 39(2).251-275.
- [4] Arnold, J. & H. J. Brown. Introduction. In J. Arnold (ed.). Affect in Language Learning[M]. Cambridge: Cambridge University Press, 1999.
- [5] Bateman TS, Crant JM. The proactive component of organizational behavior; a measure and correlates[J]. J Organ Behav, 2010, 14(2): 103-118.
- [6] WANG Wei,LEI Li,WANG Xingchao.The Relationship of College Students'Proactive Personality and Academic Performance: The Mediating Roles of Academic Self-efficacy and Academic Adjustment[J]. Psychological Development and Education, 2016, 32(5): 579-586.