

Exploring the Relationships Between Motivation and Anxiety of College Students' English Language Learning

Junhong Pei^{1,a,*}

¹Department of Foreign Language, Chengdu, Sichuan Normal University, 610066, China
a. peijunhong@stu.sicnu.edu.cn

*corresponding author

Abstract: Several earlier investigations addressed the connection between motivation and anxiety, but there are scant studies focusing on their relationship in English learning. This study examines how anxiety interacts with motivation in Chinese students' learning English. Participants were 51 college students in Sichuan province in China. In this study, a questionnaire including an anxiety scale and a motivation scale was used to collect data, which was analyzed by SPSS. This research used descriptive statistic and correlation analysis. The three links between motivation, anxiety, and extrinsic and intrinsic motivation are the key conclusions of this study. The findings indicate a strong inverse relationship between motivation and anxiety. Anxiety and intrinsic motivation significantly correlated negatively, according to additional studies, while anxiety showed no correlation with extrinsic motivation. What's more, the results indicate that among college students, only the extrinsic motivation-social is at a low level, while the levels of other motivations are relatively high. The findings can provide college teachers and students with a deeper understanding about anxiety and motivation in English learning to improve the effectiveness of learning English and assist them in managing the connection between anxiety and motivation.

Keywords: motivation, anxiety, English language learning, college students

1. Introduction

Rachman characterized anxiety as a state of uneasy suspense, which was one of the most prevailing emotions [1]. Numerous studies have looked into how anxiety affects learning English. From the previous studies, there is no unified conclusion on how anxiety affects foreign language learning, but it is undeniable that almost all scholars believe that anxiety has a great impact on foreign language learning. Besides, we cannot ignore another psychological phenomenon, motivation, which plays a crucial part in the study of foreign languages. Motivation is the combination of attempt, desire of language learning and expecting attitude in language learning [2]. Although both motivation and anxiety are crucial to the success of English learning, there have been few research on how these two affective components interact directly [3]. This study focuses on how motivation and anxiety interact while Chinese students are learning English.

Two sorts of motivation are also noted in this study: intrinsic motivation and extrinsic motivation. The widespread consensus is that intrinsic motivation is more dependable and durable when it is compared to extrinsic motivation [4]. However, there have been few studies researching on the

correlation between these two motivation and anxiety separately. This study also researches separately on the effect of intrinsic motivation and extrinsic motivation on anxiety.

Data were gathered using a questionnaire that included asked for personal information and measures of motivation and anxiety. The Statistical Package for Social Sciences (SPSS), which includes descriptive statistics and correlation analysis, was used to examine the data. These methods of study were employed to determine the how anxiety interact with motivation.

The results from this study can provide teachers with a correct direction to deal with the connection between student motivation and anxiety in the classroom to improve students' learning efficiency and take care of their mental health. Besides, it also gives English learners a learning reference to help themselves mentally and study efficiently.

2. Literature Review

The study about anxiety and motivation by linguists and psychologists has been around for a long time. For a long time, researchers, especially educational researchers, have been intrigued by the connection between anxiety and motivation in learning, particularly English language learning.

Rachman described anxiety as a state of unpleasant suspense [1], which is linked with autonomous nervous system awakening including tension, apprehension, and nervousness [5]. Many scholars have researched the relationship between anxiety in education, especially language learning. As early as 1978, Scovel began to study foreign language learning from the perspective of anxiety [6]. In 1986, it's helpful to classify anxiety into three categories, communication apprehension, test anxiety, and fear of negative evaluation, related to performance as the anxiety of foreign language learning affects performance evaluation in academic and social context [5]. The research of Liu M, Huang W have shown that foreign language anxiety, while occasionally helpful, is primarily crippling in learning [7].

As an important factor in learning English, motivation is the combination of attempt, desire of language learning and expecting attitude in language learning, defined by Alizadeh[2]. Different reasons or goals lead to different actions, so the motivation can be classified basically into two categories, intrinsic motivation and extrinsic motivation. Extrinsic motivation relates to doing something for a distinct outcome, whereas intrinsic motivation refers to doing something that is naturally engaging or delightful [8].

Although motivation is acknowledged to be a crucial element in relation to anxiety, their correlation is scarce and inconsistent [9]. From the exploration of Liu M, Huang W, anxiety and motivation in English language learning were strongly inversely associated with each other [7]. Strong anxiety will prevent students from taking in information, which lowers performance and, in turn, decreases motivation [9]. However, there are also results completely opposite to that [10]. Students who enjoy learning English, even if they feel confused and anxious, if it is at a level that can be handled, those feelings may motivate them to learn more challenging and thus show higher motivation [11]. Besides, the study indicating intrinsic motivation is significantly positively correlated with anxiety can be found [9]. However, according to Noels et al., anxiety connected to language acquisition is considerably inversely correlated with intrinsic motivation [11].

In a conclusion, numerous studies have examined how motivation interacts with anxiety in learning English, but the results are inconsistent. Although the results vary on how anxiety and motivation interact with each other, one thing we can confirm from previous study is that most scholars hold the view that there is indeed a correlation between them.

3. Research Questions

The goal of the present study was to ascertain how anxiety interact with motivation in Chinese students' learning English. Following questions will be answered in this study:

1. What is the overall state of motivation and anxiety among Chinese college students learning English?
2. Is there a relationship between motivation and anxiety in Chinese college students' learning English?
3. Do intrinsic and extrinsic motivations have the same correlation with anxiety?

4. Research Method

4.1. Participants

51 college students participated in this questionnaire study, 27 of them were men and 24 of whom were women. And all participants were from key universities in China. There were 35(68.63%) participants coming from universities in Sichuan, while the rest of 16(31.37%) participants were from universities in ten other regions of China.

Among the participants, 19(37.25%) were English major students, and 32(62.75%) were non-English major students. All students experienced the traditional college entrance examination, and all non-English major students have taken credit-bearing, mandated courses in English at their universities for at least a year.

4.2. Measures

The analysis of the motivation and anxiety for learning the English language using a 55-item questionnaire was conducted. including 33 items for measuring anxiety, 19 items for motivation and 3 items for personal background information: gender, English major or not. All 33 items of anxiety scale in present study were from the Foreign Language Classroom Scale [5]. And all 19 items of motivation were adapted from the Academic Motivation Scale for Learning Biology (AMSLB) [12]. The scale of motivation used in present study simply replaced the biology subjects with English learning from AMSLB.

4.3. Data Analysis

Data is encoded using the Likert scale, which has five possible responses ranging from "strongly disagree" to "strongly agree," with corresponding scores of 1 to 5, with "Strongly Agree" being the most strongly agreed-upon option from 51 questionnaires that were collected. The data was analyzed using SPSS. To guarantee the accuracy of the data, the questionnaire's reverse questions were recoded.

Using the mean value and standard deviation from the anxiety scale and motivation scale to describe the degree of anxiety and motivation of Chinese students in English language learning. Besides, correlation analysis was used to analyze three correlations: anxiety and motivation, anxiety and intrinsic motivation and anxiety and extrinsic motivation. Using p values to define whether there is a correlation between them: a p value less than 0.05 indicates a correlation. The correlation coefficient was employed to describe the correlation's strength; a correlation is considered weak if its absolute value is between 0.2 and 0.6.

5. Results and Discussion

5.1. Results

5.1.1. Descriptive Statistic

To examine the connection between motivation and anxiety, a 52-item questionnaire was used. According to the results, the minimum mean value among 33 items for measuring anxiety is 2.588

(Q5) and the maximum is 3.725 (Q9). As for motivation, the minimum mean value is 2.627 (Q49 Q51) and the maximum is 4.118 (Q42). From the results, the participants' level of anxiety in learning English is generally at a high level. Among 19 items for motivation, there are 4 items (Q49-Q52) for measuring Extrinsic Motivation-Social should be noticed as the average of the remaining items is greater than 3.

Table 1: Descriptive statistical results of the anxiety and motivation.

Name	Sample Capacity	Minimum	Maximum	Mean	Standard Deviation	Median
Anxiety	51	1.024	5.024	3.399	0.788	3.339
Motivation	51	1.211	4.605	3.029	0.771	3.029

According to the table1, the mean value for both anxiety (3.399) and motivation (3.029) is higher than 3 and their standard deviations (0.788, 0.771) are relatively small, which indicates Chinese college students' anxiety and motivation of the participants are on the middle to relatively high level in learning English.

5.1.2. Correlation Analysis

Table 2: Correlation analysis between anxiety and motivation.

		Anxiety
Motivation	correlation coefficient	-0.533**
	<i>P</i>	0.000
	sample capacity	51

** p<0.01

The correlation between anxiety and motivation was investigated using the correlation analysis. and the P (0.000) shows the obvious correlation between them, which is at the 0.01 level of significance. Anxiety and motivation have a weakly negative link, as indicated by the correlation's value (-0.533), which was used to gauge the strength of the relationship. The results show that there is an obvious but weak negative correlation between anxiety and motivation.

Table 3: Correlation analysis between anxiety and intrinsic motivation.

		Anxiety
Intrinsic Motivation	correlation coefficient	-0.439**
	<i>P</i>	0.001
	sample capacity	51

** p<0.01

To explore deeper into the connection between worry and motivation, this study further analyzed the relationship between Chinese college students' anxiety and both intrinsic motivation and extrinsic motivation. Table 3 displays the results of the correlation analysis between anxiety and intrinsic motivation. The P value (0.001) demonstrates the correlation between anxiety and intrinsic motivation, which exhibits significance at the 0.01 level. Weak negative correlation can be seen between these two items as the correlation coefficient is -0.439.

Table 4: Correlation analysis between anxiety and extrinsic motivation.

		Anxiety
Extrinsic Motivation	correlation coefficient	0.097
	<i>P</i>	0.497
	sample capacity	51

* $p < 0.05$

This study also looked into how anxiety and extrinsic motivation relate to one another. Anxiety and extrinsic motivation are closely correlated, with a 0.097 connection coefficient between the two. The P value (0.888) is as well higher than 0.05, which suggests that extrinsic incentive and anxiety not significantly interact.

5.2. Discussion

From the above descriptive data, it can be observed that the level of anxiety and motivation of college students in English learning are both above 3. This indicates that college students exhibit high levels of anxiety and motivation in English learning, particularly in terms of intrinsic motivation. However, the mean values of the four items regarding Extrinsic Motivation-Society are all less than 3. Here are two possible reasons. The first one is that the participants in this study are all college students who have not yet fully entered society, with limited exposure to society. Therefore, extrinsic motivations from a social perspective are relatively weak. The second one is that with the diminishing status of the English subject under China's "dual reduction" policy, the benefits that learning English skills offer to students in terms of career advancement and personal status enhancement have decreased. According to Deci and Ryan, Extrinsically motivated English learners conduct research "to fulfill an external demand or reward contingency".[8] So, when they think extrinsic social factors can't meet their needs, their Extrinsic Motivation-Social will decrease.

From the interaction in students 'anxiety and their motivation, it is clear that, with high levels of anxiety, students are more likely to have the low levels of motivation. According to these results, teachers are suggested to give students affective support to reduce their anxiety during teaching process to help students establish motivation of English learning.

Extrinsic anxiety and motivation do not correlate in the same way as intrinsic anxiety and motivation, which should be noted as further research is done. Between anxiety and intrinsic motivation, there is a clear negative relationship, while anxiety shows no significant correlation with extrinsic motivation. According to the research by Wang Zhengfang, Zhou Ya, and Liu Xiangping, motivation affects the state of learning fluency, where higher fluency corresponds to lower learning anxiety, which explains the data results. When teachers apply these results in their real teaching process, they should focus on students' intrinsic motivation to reduce their English learning anxiety.

6. Conclusions

This study utilized questionnaire to investigate anxiety and motivation in Chinese college students' English language learning. From the results, it's clear that when studying English, motivation has a strong detrimental impact on anxiety. Additionally, this research highlights the distinctions between English learning's intrinsic and extrinsic motivation. Intrinsic motivation has a significant negative effect on anxiety, while extrinsic motivation has no effect on English learners' anxiety. Therefore, teachers of English are suggested to focus on students' learning motivation, especially intrinsic motivation, to reduce students' anxiety in English language learning. It also gives English learners a

study method that manage their emotions effectively to reduce their learning anxiety in order to have higher motivation to study English and have more possibility to get higher grades.

Given the results of this study, future research can be focused on investigating the differences between intrinsic and extrinsic motivation and how they affect anxiety in learning English. Furthermore, this study provides direction for the future research that whether there are exact factors connecting anxiety and motivation leads to a significant negative correlation between them.

References

- [1] Rachman S., *Anxiety*, Psychology Press, Hove, East Sussex, UK, 1998.
- [2] Alizadeh M. *The impact of motivation on English language learning*[J]. *International Journal of Research in English Education*, 2016, 1(1): 11-15.
- [3] Tsai C H, Chang I. *The study on motivation and anxiety of English learning of students at a Taiwan Technical University*[J]. *International Journal of English Language Teaching*, 2013, 1(1): 24-41.
- [4] Luo Lifang and Zhu Junping, *A comparative study of learning strategies and learning anxiety in students with different motivation types*. *Journal of Fujian Normal University (Philosophy and Social Sciences Edition)*, 2018(1): pp. 154-159.
- [5] Horwitz E K, Horwitz M B, Cope J. *Foreign language classroom anxiety*[J]. *The Modern language journal*, 1986, 70(2): 125-132.
- [6] Scovel, Thomas. "The effect of affect on foreign language learning: A review of the anxiety research." *Language learning* 28.1 (1978): 129-142.
- [7] Liu M, Huang W. *An exploration of foreign language anxiety and English learning motivation*[J]. *Education Research International*, 2011, 2011.
- [8] Ryan R M, Deci E L. *Intrinsic and extrinsic motivations: Classic definitions and new directions*[J]. *Contemporary educational psychology*, 2000, 25(1): 54-67.
- [9] Luo Z, Subramaniam G, O'STEEN B. *Will anxiety boost motivation? The relationship between anxiety and motivation in foreign language learning*[J]. *Malaysian Journal of ELT Research*, 2020, 17(1).
- [10] Chapell, M. S., Blanding, Z. B., Silverstein, M. E., Takahashi, M., Newman, B., Gubi, A., & McCann, N. (2005). *Test anxiety and academic performance in undergraduate and graduate students*. *Journal of Educational Psychology*, 97(2), 268-274.
- [11] Bećirović S. *Motivation, anxiety and students' performance*[J]. *Ahmetović, E., Bećirović, S., and Dubravac*, 2020, 2020: 271-289.
- [12] Aydın S, Yerdelen S, Yalmançı S G, et al. *Academic Motivation Scale for Learning Biology: A Scale Development Study*[J]. *Education & Science/Eğitim Ve Bilim*, 2014, 39(176).