

# How Motivation Affects Academic Performance: A Study of English Learning Motivation Among Chinese Undergraduates

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**Abstract.** Under the circumstance that English learning is facing unprecedented opportunities and challenges, more and more importance should be attached to English learning in order to better develop the sustainable globalization. This study is to clarify the connection between academic success and motivation for learning English. The questionnaire has been separated by the research team into two categories: intrinsic motivation and extrinsic motivation. By means of systematic sampling and questionnaire survey, the research team collected the final scores of freshmen in an English course and asked them to fill in a questionnaire about learning motivation. It turned out that intrinsic motivation does have a positive impact on English learning academic performance. However, the research team didn't find any correlation between the factor of extrinsic. In this research, intrinsic motivation has been verified to have a strong and positive correlation with academic success, but the connection between extrinsic motivation and academic performance remains unclear.

**Keywords:** English learning; motivation; academic performance.

## 1. Introduction

English is an essential tool for economic growth, modernisation and globalisation [1]. Motivation for learning English is key. Unprecedented opportunities and challenges currently exist in China. The study of a second language is undergoing significant changes and opportunities in the context of sustainable development. English is not only a key instrument for addressing the growth of modernization and globalization, but it is also used to train professionals in having a worldwide perspective and international competence [1]. Students' enthusiasm for studying English affects how actively they learn the language. An active center called motivation drives effort, tenacity, and task performance [2].

The years 1982 to 1986 consisted of using a self-assessment instrument to assess students' motivation and learning strategies that ranged from early instruments to assess the efficacy of 50 to 140 elements. Teresa Duncan and Wilbert J. Mckeachie used these here at the University of Michigan [3]. "Learning to Learn" which is referred to the use of these instruments. Prior studies have demonstrated that the processes of learning through self-regulation and subsequent academic performance are influenced by motivation [4, 5]. It involves the effects of motivation on school success. In addition, further studies are necessary to verify the causal relationships between variables.

In the process of lifelong learning, one of the goals of higher education is to increase incentives. It may be assumed that the internal motivation for learning is growing and strengthening. In the interview study, Van Etten, Pressley, Freebern, and Echevarria (1998) discovered that every student's main motivator was achieving a good grade in class. Extrinsic rewards, however, give information and have an impact, so they can be useful even for kids who are naturally driven [6].

In this study, motivation maybe contains showing one's ability to his family, friends, or others; mastering skills being taught in this class; attempting to understand the material as completely as possible; doing well in this class, and so on.

This study only investigates the effect of academic performance incentives on English learning. This study wants to find out the connection between second language learning motivation and learning performance, thereby explaining how English learning motivation affects English academic performance, achieving the ultimate goal of helping classrooms better teach English and students better learn English.

## **2. Literature Review**

### **2.1. Theoretical Research of L2 Motivation**

It is recognized that motivation is a significant factor in L2 acquisition. The word “motivation” was first proposed by Gardner and Lambert (1972) to study and explain some phenomena in the process of L2 acquisition [7]. Gardner and his colleagues conducted a pioneering systematic study of L2 motivation from the perspective of social culture and proposed a “socio-educational model”, which considered the language acquisition process to be a causal interaction between four classes of variables: social background, individual differences, language acquisition contexts and outcomes. Gardner divided motivation into instrument motivation and integrative motivation while he thought that integrative motivation is more important. This standpoint is a classic view in the area of L2 motivation research, and has a wide influence on subsequent research. Another general classification of motivation is internal motivation and external motivation. These two classifications have their own overlap, but they do not correspond to each other. Dörnyei (2009) introduced the possible selves’ notion from Markus and Nurius (1986) and the self- discrepancy theory from Higgins (1987) into the study of L2 motivation to establish the L2 Motivational Self-System (L2MSS) [8]. The system is composed of three dimensions: Ideal L2 Self, Ought-to L2 Self and L2 Learning Experience. Although Dörnyei did not offer a corresponding methodology, this theory was continuously improved by other scholars in the past decade.

### **2.2. L2 Motivation Research**

In numerous studies of self-determination, motivation is regarded as a dynamic process [9]. Another scholar, Dörnyei (2003), also regarded motivation as a dynamic process [10]. In the 1990s, research on L2 motivation tended to diversify. In addition to social psychology, theories of motivation psychology and pedagogy were gradually introduced into this field. Furthermore, there are more studies on foreign language learning motivation and various related factors such as Henry's (2017) research on multilingual identity and learning motivation, Thorsen's study (2018) on the teacher-student relationship and learning motivation, Liu's (2016) research of the relationship between emotion, culture and second language use and Ramage's (1990) theory on foreign language learning perseverance and learning motivation [11, 12].

As the L2 motivation theory is developing rapidly, empirical studies on L2 motivation become increasingly rich. A survey is commonly used in empirical research on L2 motivation. Tremblay & Gardner (1995) absorbed the hierarchy of needs, expectation-value theory and self-efficacy, and put forward an expanded model of learning motivation, which is the only theory of learning motivation that has undergone a comprehensive empirical test [13]. Regarding measuring tools, Gardner (1985) designed a language learning motivation survey tool (ATMB, Attitude/Motivation Test Battery) on the basis of empirical research [13]. This scale contains 134 questions and measures students' learning motivation from 13 dimensions. ATMB scale become a classic research tool in a large amount of L2 motivation research, and is widely used in subsequent empirical studies of L2 motivation.

## **3. Research Method**

The first step is to identify research issues. The second is to prepare a questionnaire about English learning motivation by referring to MSLQ. The questionnaire includes two parts: students' learning motivation and learning achievement. The third is to distribute MSLQ to freshmen majoring in

English at Wuhan University of Science and Technology through wjx.cn to collect different learning motivations of students in English classes. The questionnaire was distributed on January 13, 2023, and the deadline time was January 19, 2023. The fourth is to collect the final English examination results of the undergraduates who have finished the questionnaire effectively. 124 questionnaires were distributed. A total of 81 samples were collected. The efficiency of the questionnaire is about 65%. The fifth is to make an analysis and make a study using the data obtained through SPSS. The sixth is to draw a conclusion on the correlation between Chinese students' learning motivation and their academic achievements in English class.

### 3.1. Data Analysis

The questionnaire analysis is to analyze data using the reliability analysis method and validity analysis. (i) Reliability analysis is to testify to the stability and consistency of the outcomes of the questionnaire (ii) Validity analysis is to analyze whether the design of the questionnaire is reasonable.

The descriptive analysis is to analyze data using correlation analysis and cross-analysis. (i) Correlation analysis is to analyze the relationship between undergraduates' learning motivation and their academic performances. (ii) Cross analysis is to analyze the English achievements of students with different learning emotions and motivations.

The variance analysis approach is used to analyze whether individual learning motivation has a significant impact on the individual's performance.

### 3.2. Hypothesis

Students' emotions while studying English might impact their English performance. When a student experiences a pleasure, happiness, and other positive feelings in English class, he or she is more likely to do well on the examination. In contrast, when students experience anxious emotions like fear, uneasiness, and concern in class, their test performance tends to be low.

## 4. Results

After the first analysis, the overall Cronbach's Alpha of the questionnaire reached 0.934, illustrating a high internal consistency of this questionnaire. The result of the first validity analysis showed that the commonality values of analysis items Q6, Q16, Q19 and Q24 were lower than 0.4, so the above items were deleted. After removing the four project variables, the reliability analysis was carried out again. The overall Cronbach's Alpha of the questionnaire was 0.927 (see Table 1). The data had high internal consistency and could be used for further study and discussion.

**Table 1:** Reliability Analysis Results.

Number of Items	Sample Capacity	Cronbach $\alpha$ Coefficient
21	81	0.927

After factor analysis, two factors were extracted from the remaining 21 item variables, and KMO (Kaiser-Meyer-Olkin) was 0.884, indicating that the questionnaire had good content validity and structural validity. According to the results of validity analysis and factor analysis, Q1, Q2, Q3, Q4, Q5, Q7, Q8, Q10, Q11, Q12, Q13, Q15, Q17, Q18, Q20, Q21, Q23, Q25 were generated into new variable factor 1: intrinsic motivation; Q9, Q14 and Q22 are generated into new variable factor 2: extrinsic motivation.

**Table 2:** Correlation Analysis Results.

		Achievement
Factor 1 (Intrinsic Motivation)	Correlation Coefficient	0.613**
	p	0.000
* p<0.05 ** p<0.01		

The correlation analysis is employed to explore the correlation between achievement and intrinsic motivation in second language learning. As shown in Table 2, the specific analysis results show that the Pearson correlation coefficient between achievement score and intrinsic motivation is 0.613, and shows a significant level of 0.01, which indicates that there is an outstanding positive relationship between achievement score and intrinsic motivation. In addition, there was no direct correlation between external motivation and achievement ( $p=0.675>0.05$ ).

The outcomes of linear regression analysis in Table 3 also show that intrinsic motivation will have a substantial positive impact on the score, and intrinsic motivation can explain the 37.6% chance of the score. Therefore, the stronger the intrinsic motivation for second language learning, the more positive it will be for the improvement of performance.

**Table 3:** Regression Analysis Results.

	<b>Regression Coefficient</b>	<b>95% CI</b>	<b>VIF</b>
Constant	54.844** (14.076)	47.208 ~ 62.481	-
Factor 1( Intrinsic Motivation)	5.253** (6.904)	3.762 ~ 6.744	1.000
Sample Capacity	81		
$R^2$	0.376		
Adjusted R-Square	0.368		
$F$ -value	$F(1,79)=47.668, p=0.000$		
Dependent Variable: <b>Achievement</b>			
D-W value:2.137			
* $p<0.05$ ** $p<0.01$			

## 5. Discussion

After generating two variable factors according to the results of validity analysis and factor analysis, the team's prediction didn't match up with the actual results perfectly. On the one hand, intrinsic motivation is significant in English learning. Students learning English who are intrinsically driven perform better on average than those who are not. Students who are intrinsically motivated get better grades and they do not take English as a burden to study. Instead, they consider English as a significant tool for the future or a meaningful way to fulfill college life. So basic course standards for them have become invisible because these standards are just their beginnings. For these students who have more intrinsic motivations, they have relatively higher goals and standards for themselves, and getting great academic performance is just a must on their way toward further study. But on the other hand, the results didn't show any information or relationship about extrinsic motivation. There are some students who are extrinsically motivated and only get a pass mark, but also some of these extrinsically motivated students get high scores than those who have an intrinsic motivation to learn English. Precisely speaking, the research can't tell any correlation between extrinsic motivation and academic performance.

### 5.1. Limitations and Improvements

This research focused on Chinese freshman's motivation toward English. Unlike middle school and high school, English has become a flexible subject for Chinese undergraduates. In many universities, students are not required to learn English all the time till each semester's end. Instead, the school will usually set various standards and it's acceptable for students who don't major in English to apply for exemption at the very first beginning if they have already reached the goals. There are also situations in that students put much more effort into English out of their willing. So different motivations can clearly lead to different outcomes in learning English. Under these circumstances, the freshmen's motivation can best explain the link between academic achievement and learning motivation for undergraduates.

However, the design of the research isn't comprehensive, and the questionnaire only pays special attention to intrinsic motivation and limited information about extrinsic motivation makes it arduous to further explore its relationship. The research team consider it beneficial that the questionnaire should be based on previous research and also be improved so that the results will be more valid and effective. As it turns out, more improvements and polish should be added in order not to cause asymmetry. First, more questions about various motivations should be added to better ensure the completeness of the research. The preconceived notion shouldn't exist in the whole process. The proportion of both intrinsic and extrinsic motivation should be equally the same. This equal division will make the questionnaire more rigorous and the whole research more convincing. Second, it's quite limiting to take only one university into consideration since various college rules and courses make it a multi-branch for researchers to select the directions and further surveys. In this case, the research should expand the research scope so as to acquire more samples.

In conclusion, this research does not offer English learners a complete answer to the study for all kinds of motivations and academic performance, it is necessary to explore more comprehensive and further explanations for learning motivation and academic performance.

## 5.2. Future Directions

Future research can focus on the classification of motivation since this research only divide motivation into intrinsic and extrinsic. Other classifications should also be researched to further explore the detailed relationship between motivations and academic performance. Various age groups of students should also be taken into consideration. From primary school to university, the change in learning motivation and learners' actual performance are still yet to be studied. More experimental groups should be set to systemically explore the correlation between motivation and academic performance.

## 6. Conclusion

In this research, quantitative and qualitative methods are both employed. In view of the background that the globalization process is rapidly accelerating, a large number of Chinese students hold different motivations and perspectives for English learning. The research will give clear relations between English learning motivation and academic performance, which assists teachers in better adjusting the classroom pattern and enables students to select suitable ways of language learning. For English learning, the research team holds the opinion that academic performance will to some extent improve as soon as the students' motivation tends to be more intrinsic. As this research makes clear clarification and the effect of English learning motivation, the research team speculates that intrinsic motivations can provide students with more enjoyment and efficiency than extrinsic motivations do. The possible results for the influence of intrinsic learning motivation are speculated to be positive. In a word, intrinsic learning motivation does bring a good effect on academic performance.

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