# Analysis of Learning Motivation of English Majors Based on SPSS: A Case Study of Panzhihua University

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*Abstract: This study aims to understand the current status and influencing factors of learning motivation among English major students at Panzhihua University. A comprehensive review of the literature clarifies the concept of academic motivation and its pivotal role in student success. This study employs questionnaire surveys and SPSS software to conduct statistical and analytical procedures on the data. The findings reveal that the learning motivation of the students majoring in English at Panzhihua University is influenced by multiple elements, with personal interest, classroom interaction, and teaching methods of teachers being the principal influences. The article consequently propounds a multitude of measures to augment the impetus for learning, including the integration of long-term and short-term incentives, the harnessing of the transferability of motivations, the reinforcement of the synergy between internal and external motivators, the cultivation of students' interest in learning English, and the attention to students' inclinations and psychological states. This study holds practical reference value for enhancing the efficacy of English instruction and fostering academic accomplishments among students.*
*Key Terminology: English majors, learning motivation, SPSS*

## I. Introduction

This chapter outlines the rationale for the selected research topic and provides an overview of the background and current state of English major students' learning motivation at Panzhihua University.

### 1.1. Research Background

In the contemporary context of globalization, English has emerged as a crucial tool for international communication. The increasing global demand for English proficiency has led to an unprecedented emphasis on English education worldwide. In China, English stands as a significant foreign language subject, garnering extensive attention in both teaching and learning[1]. At the tertiary education level, English majors are held to high expectations; they are expected not only to master solid English language skills but also to possess robust cross-cultural communication abilities. Social Cognitive Theory posits that academic achievement is driven by a combination of internal individual factors and external environmental factors[2]. Among these, individual factors can be broadly categorized into cognitive and non-cognitive elements. Within the non-cognitive factors, motivation is identified as a central component[3]. Student learning motivation directly impacts learning outcomes; low motivation can lead to a decline in students' enthusiasm for learning and may even result in aversion to studying, adversely affecting both English language acquisition and personal development[4]. However, the current state of learning motivation among English majors is not encouraging. Therefore, studying students' learning motivation is of significant importance for improving teaching practices, enhancing student learning outcomes, and fostering personal development[5].

Domestic higher education institutions in China report issues such as learning burnout, waning interest, and a lack of concentration among English majors[6]. This is also the case at Panzhihua University, a comprehensive undergraduate institution in Southwest China. The university's English program is dedicated to nurturing professionals with excellent humanistic literacy and high-level English proficiency. Over the past few years, there have been significant improvements in faculty, teaching facilities, and pedagogical approaches. Nevertheless, the learning motivation of English majors at the School of Foreign Languages faces complexity and variability due to the intensifying educational competition and pressures from the job market. On one hand, there is a lack of interest and enthusiasm for English learning among students. On the other hand, they express anxiety over the uncertainty of their future career development, which impacts their learning motivation.

Therefore, studying the learning motivation of English majors at the School of Foreign Languages at Panzhihua University is of significant importance. A thorough analysis of the current state, characteristics, and influencing factors of students' learning motivation can provide educators with scientific teaching strategies and recommendations. It can also assist students in gaining a better understanding of themselves, stimulating their intrinsic motivation to learn English, and achieving superior performance in their future academic and

professional endeavors.

### 1.2. Research Status

In the domain of English major education, the exploration of student learning motivation has garnered widespread attention from scholars internationally. International research on learning motivation commenced early and has encompassed a broad spectrum of topics, with a primary focus on the construction of motivational theories and their impact on student learning outcomes. A search on the Web of Science database using 'Learning Motivation' as a keyword yielded 67,795 related research reports spanning from 1962 to 2024, inclusive of various types such as articles, proceeding papers, and review articles. This corpus includes 45,268 papers, 16,034 conference papers, and 2,531 review articles, among which 313 are highly cited papers and 18 are hot papers. The research surge was notably concentrated between 2018 and 2023, with a total of 35,888 papers published. A refined search combining 'Learning Motivation' and 'English majors' yielded 3,413 related studies, featuring 28 highly cited papers and one hot paper. Within this body of work, 595 articles pertain to Self-regulated Learning, 320 to Language Policy, 132 to Science Education, and 105 to the Technology Acceptance Model. Notably, Gardner and Lambert (1972) introduced an influential dichotomy of integrative and instrumental motivation[7], positing that learners' social and psychological needs are key drivers in foreign language acquisition. Building upon this foundation, Deci and Ryan (1985) developed the Self-Determination Theory[8], emphasizing the roles of intrinsic and extrinsic motivation throughout the learning process and offering a new perspective on the internal structure of learning motivation. Dörnyei and Otto (1998) further advanced the field of second language motivational self-systems, suggesting that student motivation is multidimensional, encompassing aspects such as the perceived value of language learning, achievement expectations, and emotional attitudes[9].

Domestic research on learning motivation has also been vigorous. A search on the China National Knowledge Infrastructure (CNKI) database with the themes 'undergraduate English majors' and 'learning motivation' yielded a total of 149 relevant articles in Chinese, and 48 in other languages. Among the Chinese studies, there are 110 academic journal articles, 11 dissertations, 3 conference papers, 4 academic collections, and 21 specialized journal articles. Within the 149 Chinese studies, 39 articles focus on learning motivation, 12 on learning strategies, 8 on instrumental motivation, and 12 on learner characteristics. Since 1998, Professor Feng Yufang has linked the learning motivation of English majors to their performance in the Test for English Majors-4 (TEM-4), marking a significant shift in the domestic research landscape[10]. Early studies primarily examined the effects of integrative and instrumental motivation on English learning outcomes, with a focus on psychological factors such as personal motivation, emotional factors, and self-efficacy. Some studies also explored the impact of learning strategies and educational environments on student motivation.

In recent years, research has begun to investigate a broader range of motivational types, such as task motivation and achievement motivation, and has attempted to integrate these with the actual situations of domestic students to examine both internal and external factors affecting learning motivation. From 2010 to 2014, research expanded to include the influence of sociocultural factors, such as family, social interaction, and media. The advent of the digital age has also drawn attention to the impact of technology on students' interests and motives. For instance, Chen Zhaohui (2014) conducted an empirical analysis of college students' English learning motivation using SPSS software, finding that self-efficacy, interest, and goal orientation significantly impact college students' English learning motivation[4]. These studies also demonstrate that supportive learning environments and positive teacher-student interaction can significantly improve students' learning motivation. Comparative studies reveal that domestic students' motivation has specific cultural characteristics, particularly the instrumental motivation driven by family expectations and test pressure.

From 2015 to the end of 2020, research increasingly emphasized the relationship between English majors' learning motivation and career development, focusing more on how English proficiency influences individual career paths and predicting career success through learning motivation. Cross-cultural communication research has also gained attention, particularly regarding the motivational drivers of English majors in international and intercultural settings. In 2018, Yu Xiuping and Wang Miaotian used SPSS software to analyze factors affecting college students' entrepreneurial intentions, finding that entrepreneurial motivation, social support, and individual ability significantly impact these aspirations[11]. Zheng Haipeng in 2019 conducted a multivariate linear regression study on factors affecting college students' salary expectations after graduation, highlighting the significant roles of family background, major choice, and internship experiences[12].

Li Yijuan and Chen Xiaokui (2022) indicated that since the beginning of 2020, some studies have found widespread learning burnout among college English majors, which can be attributed to the impact of the pandemic[13].

Despite the extensive research, studies on English majors at regional undergraduate institutions like Panzhihua University remain scarce. Considering the unique impact of local cultural backgrounds and educational resources on students' learning motivation, this study selects English majors at Panzhihua University

as the research subjects. The aim is to explore their current learning motivation and provide targeted recommendations to enhance their motivation, thereby bridging this research gap.

## 1.3. Research Significance

The analysis presented underscores the importance of gaining an in-depth understanding of the learning motivations and their influencing factors among English majors at Panzhihua University. By examining the motivational factors of students, a clearer insight into their learning needs and inclinations can be achieved. This understanding is instrumental in devising targeted teaching strategies and measures. Consequently, it serves as a reference for enhancing the effectiveness of English language teaching and fostering students' academic achievements.

## II. Concepts and Influencing Factors of Learning Motivation

This chapter aims to elucidate the concept of learning motivation and its determinants. It delves into an in-depth exploration of the theoretical frameworks that underpin this construct.

## 2.1. The Concept of Learning Motivation

Learning motivation is a pivotal concept in educational psychology, focusing on the psychological factors that encourage students to actively engage in and persist with their educational endeavors. Within the educational sphere, learning motivation is recognized as a significant predictor of student learning outcomes, particularly in language acquisition, where its impact is more pronounced. This is because it directly affects students' language absorption capabilities and the efficiency of language use[14].

The theoretical foundations of learning motivation can be elucidated through several distinct models. Among these, Self-Determination Theory (SDT), proposed by Deci and Ryan, underscores the importance of intrinsic motivation in the educational context[15]. SDT differentiates between intrinsic and extrinsic motivation and posits that a learning environment that supports students' autonomy, competence, and relatedness can effectively enhance intrinsic motivation. This, in turn, facilitates more effective learning and superior personal development. Another influential theory is Goal-Setting Theory, put forth by Locke and Latham, which suggests that setting clear and challenging goals can markedly improve an individual's motivation and achievements[16]. In a learning environment, well-defined learning objectives help students focus their attention and manage their resources effectively to achieve desired learning outcomes.

Dörnyei and Otto's model of second language learning motivation further refines the complexity of learning motivation, especially within the domain of second language acquisition[9]. Their model views motivation as a dynamic process influenced by the learner's personal goals, environmental conditions, and sociocultural factors. This perspective reveals how educators can stimulate students' learning motivation by adjusting teaching strategies and the learning environment.

Learning motivation can essentially be categorized into two types: intrinsic and extrinsic[5]. Intrinsic motivation stems from an individual's interest, satisfaction, or sense of personal achievement derived from the learning activity itself. This type of motivation ignites curiosity and the desire to explore, leading to a greater sense of self-fulfillment and achievement during the learning process. In contrast, extrinsic motivation originates from external factors such as rewards, evaluations, competition, and pressure. These factors often prompt individuals to engage in learning activities to achieve external objectives.

Moreover, the development and fluctuation of learning motivation are influenced by a multitude of factors, including personal needs, interests, goals, self-efficacy, and external environmental incentives. For example, an individual's belief that learning a language can enhance career prospects or personal qualities may serve as a significant motivator for learning engagement. Successful learning experiences can bolster learners' self-efficacy and intrinsic motivation, encouraging sustained learning efforts. Thus, learning motivation is a dynamic process that evolves with changes in both internal and external conditions of the learner.

Understanding and analyzing the learning motivation of English majors is of significant importance. Learning English involves more than the accumulation of grammar and vocabulary; it also encompasses the cultivation of cross-cultural communication skills. Therefore, stimulating and maintaining students' learning motivation, particularly intrinsic motivation, is crucial for improving their academic performance and developing their cross-cultural communication abilities[17]. By investigating the learning motivations of English majors at Panzhihua University, a better understanding of their learning needs and motivators can be achieved, providing the college with more targeted suggestions and strategies for teaching practice.

## 2.2. Factors Affecting Learning Motivation

Learning motivation is influenced by a myriad of factors that span across individual characteristics, educational settings, and sociocultural dimensions.

Personal factors, such as students' interests and hobbies, self-efficacy, and goal orientation, exert

significant influence on learning motivation[18]. For instance, students with a keen interest in English learning are more likely to invest greater time and effort into their studies. Self-efficacy is a pivotal factor; students with high self-efficacy are more likely to demonstrate heightened interest and perseverance when faced with learning challenges. Moreover, students' goal orientations, whether aimed at mastering knowledge and skills for career advancement or merely to fulfill examination requirements, can markedly affect their learning motivation.

Educational environments also play a crucial role in shaping learning motivation, encompassing factors such as teaching methodologies, curriculum design, school culture, and peer interactions[19]. Teachers who actively engage in interaction and encourage exploration can significantly stimulate students' intrinsic motivation. A well-conceived curriculum can spark interest and bolster motivation. Additionally, a school culture that places a high value on academic achievement and offers abundant learning resources can positively impact students' motivation to learn.

Sociocultural factors, including family influence, societal expectations, and cultural background, also significantly contribute to learning motivation. The educational philosophy of the family, the importance placed on learning English, and parental expectations all have a substantial impact on students' motivation to learn. The general demand for English proficiency and the value assigned to English competence in the job market serve as external motivators. Furthermore, cultural differences, such as varying perceptions of English as an international language, can also shape students' motivation to learn English.

In summary, the formation and development of learning motivation are complex processes influenced by the interplay of personal, educational, and sociocultural factors[1]. Understanding these factors is essential for devising effective educational strategies and enhancing student learning outcomes.

### III. Research Process
After thorough examination of the theoretical knowledge, the subsequent phase involves embarking on the research project. The initial step is to define the research objectives, subjects, and methodologies. Ultimately, data conclusions are drawn through statistical analysis and interpretation.

### 3.1. Research Design
This section primarily introduces the research design for exploring the factors influencing the learning motivation of English major students at Panzhihua University, focusing on three aspects: research objectives, subjects, and methods.

### 3.1.1. Research Objectives
The purpose of this study is to investigate the factors affecting the learning motivation of English major students at Panzhihua University and to rank their impact. The study aims to propose feasible educational and teaching strategies based on the research findings, offering practical guidance for teaching practices.

### 3.1.2. Research Participants
The primary focus of this study is on a cohort of 539 English major students, ranging from the first to the third year, at Panzhihua University. The breakdown of the participants includes 177 first-year students, 191 second-year students, and 171 third-year students, with a demographic composition of 454 female and 85 male students. The selection of this group was deliberate and based on several considerations.

Firstly, Panzhihua University is situated in a distinct region of Southwest China, offering a unique geographical and cultural context that provides a distinctive perspective for the study of English major students' learning motivations. This context is crucial for understanding the nuances that may influence learning attitudes and motivations.

Secondly, the English major students at Panzhihua University, as a specialized group, exhibit a degree of representativeness and research value in terms of their attitudes towards English learning, their motivations, and the underlying reasons for these motivations. A thorough analysis of the learning motivations of this cohort, coupled with targeted recommendations based on the findings, can offer valuable insights for the future reform and development of the English major program at Panzhihua University and similar institutions.

### IV.  Research Methodology
### 4.1. Questionnaire Survey Method
For this study, a questionnaire was developed using the Wenjuanxing (Questionnaire Star) platform, specifically targeting English major students at Panzhihua University. The "School of Foreign Languages Student Learning Motivation Survey" was distributed to collect data related to participants' English learning endeavors. The questionnaire, designed based on Dörnyei's Motivational Self System Theory, aimed to assess students' levels of learning motivation and the factors influencing it[8]. The survey was divided into four sections to comprehensively understand students' motivations and learning environments. The first section inquired about

the reasons behind students' choice of majoring in English; the second section explored students' objectives for learning English, such as securing employment or pursuing postgraduate studies; the third section evaluated students' perceptions of their learning environment; and the fourth section focused on their study methods. The questionnaire encompassed a range of topics, including personal background information, attitudes towards English learning, types of learning motivation, and potential factors influencing motivation.

The questionnaire utilized a 5-point Likert scale, ranging from '1' for 'strongly disagree' to '5' for 'strongly agree,' effectively capturing the extent of students' agreement with each statement. The data collected were extensive, not only measuring learning motivation directly but also including students' personal information and sentiments, with the aim of achieving a comprehensive and multidimensional analysis of motivation.

### 4.2. Qualitative Analysis Method

Prior to the formal commencement of this study, an extensive review of recent literature from both domestic and international sources was conducted. This involved a meticulous examination of various studies presented by scholars and a detailed design of the research approach. Throughout the research process, continued engagement with relevant literature allowed for the identification and supplementation of theoretical gaps, drawing on established research methodologies and paper structures within the field to inform the writing of this paper.

### 4.3. Quantitative Analysis Method

The study employed SPSS 26.0 software for the quantitative analysis of the collected data. A series of analytical techniques, including correlation analysis, principal component analysis, exploratory factor analysis, and multiple linear regression analysis, were utilized to process the data, establish relevant models, and explore the interrelationships among various factors, thereby fulfilling the objectives of this research.

### 4.4. Survey Procedure

Following the clarification of research objectives, subjects, and methodologies, the formal study commenced. Initially, from mid-April to May, a total of 620 survey questionnaires were distributed to students ranging from their first to third year. Upon completion of the survey period, 539 valid responses were collected, with 81 responses deemed invalid. After obtaining the sample data, it was preliminarily filtered using the Questionnaire Star mini-program and then exported to Excel. Subsequently, the data was imported into SPSS version 26.0 for comprehensive data analysis.

## V.    Data Statistics and Analysis

After importing the survey data into SPSS software, the initial step was to conduct a frequency analysis. By selecting "Descriptive Statistics: Frequencies" from the "Analyze" menu, the 15 variables corresponding to the survey questions were entered into the variable list, yielding a frequency table (for Appendix). The frequency table revealed that the majority of respondents' choices were concentrated between "Uncertain" and "Agree." Subsequently, the data underwent a series of analyses, including correlation analysis, principal component analysis, exploratory factor analysis, and multiple linear regression analysis.

### 5.1. Correlation Analysis of Motivational Factors

The analysis proceeded with an examination of the interrelationships among the factors influencing learning motivation. This was executed by selecting "Correlation: Bivariate" from the "Analysis" menu, whereupon the 15 variables were included in the analysis. The "Correlation Coefficient: Pearson" option was engaged, and a "Two-Tailed Test" was chosen for assessing significance. The correlation matrix, depicted in Table 1, revealed that all variables exhibited positive correlations, with the majority indicating significant intercorrelations ($P < 0.01$). It is noteworthy that no correlation was observed between the choice of majoring in English and employment trends [14].

### Table 1 Analysis of Correlation between Learning Motivation

|     | IE        | IET        | EC        | SA     | JO  | GS  | SA  | PE  | ER  | IT  | ET  | SL  | C   | RA  | EPA |
|-----|-----------|------------|-----------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IE  | 1         | .          |           |        |     |     |     |     |     |     |     |     |     |     |     |
| JFT | .428**    | 1          |           |        |     |     |     |     |     |     |     |     |     |     |     |
| EC  | .115**    | .270**     | 1         |        |     |     |     |     |     |     |     |     |     |     |     |
| SA  | .345**    | .200**     | .135**    | 1      |     |     |     |     |     |     |     |     |     |     |     |
| GJ  | .432*     | .316*      | .335*     | .289*  | 1   |     |     |     |     |     |     |     |     |     |     |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GS | .402** | .337** | .184** | .384** | .506** | 1 | | | | | | | | | |
| AC | .593** | .341** | .128** | .299** | .507** | .450** | 1 | | | | | | | | |
| PE | .377** | .387** | .266** | .272** | .415** | .457** | .468** | 1 | | | | | | | |
| ER | .376** | .296** | .242** | .177** | .339** | .373** | .428** | .422** | 1 | | | | | | |
| IT | .178** | .242** | .211** | 0.074 | .274** | .202** | .263** | .278** | .174** | 1 | | | | | |
| ET | 0.07 | .165** | .316** | 0.036 | .308** | .196** | .178** | .263** | .117** | .386** | 1 | | | | |
| SL | .368** | .311** | .141** | .267** | .321** | .347** | .439** | .300** | .403** | .251** | .262** | 1 | | | |
| CP | .463** | .321** | .159** | .325** | .335** | .421** | .489** | .410** | .388** | .243** | .217** | .516** | 1 | | |
| RA | .342** | .313** | .116** | .318** | .266** | .363** | .353** | .376** | .389** | .171** | .155** | .456** | .686** | 1 | |
| EPA | .360** | .305** | .168** | .195** | .324** | .363** | .395** | .384** | .416** | .254** | .246** | .492** | .584** | .626** | 1 |

Note: The symbols '**' and '*' denote levels of statistical significance, where '**' indicates a P-value less than 0.01, and '*' indicates a P-value less than 0.05. The 'P' value refers to the Pearson correlation coefficient, which measures the strength and direction of the linear relationship between two variables.

Below is a list of motivations and influences, each designated by an abbreviation, that were considered in the study of English major students' learning motivations:

IT: I chose English as my major due to my affinity for the language.

IFT: Family elders and former teachers influenced my decision to major in English.

EC: A primary objective of my English studies is to succeed in exams and acquire pertinent certificates and diplomas.

SA: Studying abroad is among my goals for learning English.

GS: I aim to pursue graduate studies as a goal of learning English.

JO: Securing a desirable job is one of my objectives for learning English.

AC: I derive a sense of accomplishment from excelling in English.

PE: The expectation of excellence in English from my parents serves as motivation for me to perform well.

ER: The current educational resources and materials are instrumental in enhancing my English learning.

IT: My enthusiasm for learning English is influenced by my appreciation for the teaching faculty.

ET: The prevailing employment trends for English majors influence my motivation to study English.

SL: I make a concerted effort to study English during my leisure time.

CP: I actively engage in school-sponsored competitions, such as speech contests and English language events.

RA: I am proactive in participating in various research activities, including writing papers and conducting surveys.

EPA: I am involved in extracurricular practice activities organized by the school, such as community service.

## 5.2. Learning Motivation through Principal Component Analysis

Given the substantial intercorrelations observed among the variables, a PCA was employed to consolidate the dimensionality of the fifteen variables under investigation. To initiate this analysis, one should navigate to 'Factor Analysis: Dimensionality Reduction' within the 'Analysis' menu, maintaining all other settings at their default values, with the exception that the cumulative variance contribution rate should surpass 85%. As depicted in Table 2, factors were selected based on their significant contributions to learning motivation, ensuring that the cumulative variance contribution rate exceeded the threshold. The initial ten principal components achieved a cumulative variance contribution rate of 87.573%, surpassing the 85% benchmark and thereby validating the representation of students' learning motivation[20,21].

**Table 2 Characteristics of the learning motivation principal component factor and its variance contribution rate**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 5.628 | 37.519 | 37.519 | 5.628 | 37.519 | 37.519 |
| 2 | 1.433 | 9.552 | 47.071 | 1.433 | 9.552 | 47.071 |
| 3 | 1.183 | 7.885 | 54.957 | 1.183 | 7.885 | 54.957 |
| 4 | 0.870 | 5.798 | 60.754 | 0.870 | 5.798 | 60.754 |
| 5 | 0.858 | 5.722 | 66.477 | 0.858 | 5.722 | 66.477 |
| 6 | 0.756 | 5.041 | 71.518 | 0.756 | 5.041 | 71.518 |
| 7 | 0.670 | 4.467 | 75.985 | 0.670 | 4.467 | 75.985 |
| 8 | 0.620 | 4.135 | 80.121 | 0.620 | 4.135 | 80.121 |
| 9 | 0.577 | 3.845 | 83.965 | 0.577 | 3.845 | 83.965 |
| 10 | 0.541 | 3.608 | 87.573 | 0.541 | 3.608 | 87.573 |
| 11 | 0.442 | 2.946 | 90.519 | | | |
| 12 | 0.421 | 2.808 | 93.326 | | | |
| 13 | 0.388 | 2.584 | 95.910 | | | |
| 14 | 0.348 | 2.317 | 98.227 | | | |
| 15 | 0.266 | 1.773 | 100.000 | | | |

### 5.3. Exploratory Factor Analysis of Factors Affecting Learning Motivation

Before proceeding with the dimensionality reduction, an Exploratory Factor Analysis (EFA) was essential to understand the underlying structure of the learning motivation factors. The EFA aimed to identify the core components that represent the various aspects of students' motivations to learn English. The analysis was conducted by selecting 'Factor Analysis: Dimensionality Reduction' from the analytical menu and applying the 'Maximal Variance Method' for rotation. This method is particularly useful for extracting the main factors that contribute to the variability in the data. To ensure the relevance of the factors, the analysis was configured to exclude factors with loadings below 0.4, thus focusing on those with substantial influence[20].

Upon obtaining the rotated component matrix, factors with low loadings were disregarded, leading to the identification of key factors that shape learning motivation. Factor 1, henceforth denoted as F1, consolidates elements such as active learning of English, participation in competitions, engagement in research activities, and involvement in extracurricular practical activities. The respective loadings for these components are 0.401, 0.776, 0.870, and 0.787, which underscores the interconnected nature of these activities in enhancing motivation.

Factor 2, designated as F2, encompasses the affection for English, the pursuit of employment, and the sense of achievement, with loadings of 0.796, 0.479, and 0.766, respectively. This factor highlights the personal and professional aspirations that drive students' motivation.

Factor 3, labeled F3, integrates the dual objectives of job hunting and graduate school applications, with loadings of 0.656 and 0.814, respectively. This factor reflects the strategic considerations in students' educational and career planning.

Factor 4, named F4, combines the importance of teaching facilities with the active learning of English, represented by loadings of 0.781 and 0.603, respectively. This factor emphasizes the critical role of educational infrastructure in nurturing a motivated learning environment.

Factors 5 through 10 are characterized by high loadings, indicating their individual significance. Factor 5, with a loading of 0.891 for employment trends, is termed F5. Factor 6, which has a loading of 0.932 for the achievement of passing exams and obtaining certificates and diplomas, is denoted as F6. Factor 7, with a loading of 0.926 for the aspiration to study abroad, is labeled F7. Factor 8, reflecting the influence of family elders with a loading of 0.906 for choosing English as a major, is named F8. Factor 9, which captures the impact of a teacher's enthusiasm with a loading of 0.956, is designated as F9. Lastly, Factor 10, representing parental expectations with a loading of 0.807, is named F10.

Table 3 Component Matrix Plot of Exploratory Factor Analysis after Rotation for Learning Motivation

| | Component | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| IT | | 0.796 | | | | | | | | |
| IFT | | | | | | | | 0.906 | | |
| EC | | | | | | 0.932 | | | | |
| SA | | | | | | | 0.926 | | | |
| GJ | | 0.479 | 0.656 | | | | | | | |
| GS | | | 0.814 | | | | | | | |
| AC | | 0.766 | | | | | | | | |
| PE | | | | | | | | | | 0.807 |
| ER | | | | 0.781 | | | | | | |
| IT | | | | | | | | | 0.956 | |
| ET | | | | | 0.891 | | | | | |
| SL | 0.401 | | | 0.603 | | | | | | |
| CP | 0.776 | | | | | | | | | |
| RA | 0.870 | | | | | | | | | |
| EPA | 0.787 | | | | | | | | | |

### 5.4. Learning Motivation Multivariate Linear Regression Analysis

The Comprehensive Quality Assessment score for college students is a holistic metric that not only reflects academic achievements but also encompasses evaluations of moral character and social engagement, representing a comprehensive assessment of students' overall abilities[22]. Such an evaluation system is designed to motivate students to focus not only on academic learning but also to cultivate personal virtues and a sense of social responsibility. Furthermore, high scores are often directly linked to material incentives, such as scholarships, which can more effectively enhance students' learning motivation and encourage them to strive for an improvement in their overall quality[3]. The 2023 Comprehensive Quality Score at Panzhihua University represents an objective and integrated evaluation of students across five dimensions: morality, intelligence, physical education, aesthetics, and labor. It is thus posited that the Comprehensive Quality Score serves as an indicator of the driving force behind students' learning motivation.

After the dimensionality reduction of the learning motivation factors and the clarification of their representative content, a multivariate linear regression analysis was conducted to assess the impact of these factors on the Comprehensive Quality Score of the 2023 student cohort. The Comprehensive Quality Score for the year 2023 was set as the dependent variable, with the aim of identifying the factor with the most significant influence on this score, as depicted in Figure 4. The magnitude of the standardized Beta coefficient indicates the strength of the relationship between the independent variables and the dependent variable. A negative standardized Beta coefficient suggests a negative correlation, while a positive value indicates a positive correlation[20].

**Table 4 Represents the multivariate linear regression model of learning motivation**

| | Unstandardized Coefficients | | Standardized Coefficients | t | Significance |
|---|---|---|---|---|---|
| | B | Standard Error | Beta | | |
| Constant | 2.749 | 0.014 | | 195.490 | 0.000 |
| F1 | 0.010 | 0.014 | 0.032 | 0.745 | 0.456 |
| F2 | -0.023 | 0.014 | -0.069 | -1.606 | 0.109 |
| F3 | -0.018 | 0.014 | -0.054 | -1.267 | 0.206 |
| F4 | -0.018 | 0.014 | -0.055 | -1.275 | 0.203 |
| F5 | 0.001 | 0.014 | 0.005 | 0.106 | 0.916 |
| F6 | 0.012 | 0.014 | 0.035 | 0.823 | 0.411 |
| F7 | -0.017 | 0.014 | -0.052 | -1.217 | 0.224 |
| F8 | -0.006 | 0.014 | -0.018 | -0.419 | 0.675 |
| F9 | -0.025 | 0.014 | -0.076 | -1.777 | 0.076 |
| F10 | 0.010 | 0.014 | 0.030 | 0.696 | 0.487 |

### 5.5. Data Statistics and Analysis

Table 4 reveals that the greatest influence on students' learning motivation is attributed to Factor 9 (F9), which pertains to the affective relationship between teachers and students. Following closely are Factor 2 (F2), encompassing a fondness for English leading to the choice of the English major, securing a good job, and achieving a sense of accomplishment; Factor 4 (F4), involving teaching facilities and proactive engagement with English learning; Factor 3 (F3), which includes the pursuit of a good job and postgraduate studies; Factor 7 (F7), representing the aspiration to study abroad; Factor 6 (F6), related to passing examinations and obtaining certifications; Factor 1 (F1), which covers active learning of English, participation in competitions, involvement

in research activities, and engagement in extracurricular practical activities; Factor 10 (F10), reflecting parental expectations to excel in English; Factor 8 (F8), indicating the influence of elders in choosing the English major; and Factor 5 (F5), which is the trend in employment opportunities.

Two key observations stand out from the conclusions drawn:

Firstly, as depicted in Table 4, employment trends have the least influence on students' learning motivation. This suggests that while students' learning motivation is influenced by a multitude of factors, employment trends are just one among them. It is likely that students are more significantly impacted by their intrinsic motivations, with the educational system's requirements and evaluation criteria having a more direct effect on their learning behaviors than market employment trends. Additionally, some students may still be focused on exam scores and degree requirements from their earlier educational experiences, thus neglecting their own career development planning and not paying attention to market employment trends. Consequently, although employment trends may influence students' choices of majors or courses, their direct impact on learning motivation is relatively weak. Furthermore, the lack of clear career planning among a significant number of students means they do not pay attention to employment trends, thereby diminishing the influence of these trends on their learning motivation.

Secondly, as inferred from Table 3, both F2 and F3, after dimensionality reduction, include the factor of securing a good job. F2 includes the choice of the English major driven by a love for the language, the pursuit of a good job, and the achievement of a sense of accomplishment. Students influenced by these factors often have clear career plans from the outset and continuously strive to enhance their sense of accomplishment through participation in competitions, engagement in research activities, and performance in examinations, using feedback to improve and ultimately secure a satisfying job. F3 includes the dual objectives of securing a good job and pursuing postgraduate studies. Students influenced by these factors recognize that, given current employment trends, a standard undergraduate degree may not suffice to secure a desirable job, leading them to opt for postgraduate studies to enhance their academic qualifications and improve their job prospects.

## VI.    Boosting English Learning Motivation at Panzhihua University

Following the insights gained from the analysis of learning motivations among English majors at Panzhihua University, this chapter proposes a multifaceted approach to enhance motivation. The strategies are categorized into five key areas: integrating long-term and short-term motivations, leveraging existing motivational factors, reinforcing internal and external motivators, cultivating interest in English studies, and addressing students' attributional tendencies and psychological well-being.

### 6.1. Integration of Long-term and Short-term Motivations

To elevate student motivation, a synergistic approach combining long-term aspirations with short-term incentives is essential. Factors such as teacher-student rapport, the perceived benefits of an English major—such as securing employment or a sense of achievement—facilities for teaching, active learning opportunities, and the prospects of career or academic advancement can serve as foundational elements in crafting a strategic motivational framework. Long-term motivations are often aligned with end goals, focusing on significant career or life achievements, while short-term motivations are driven by the pursuit of immediate rewards and tangible outcomes, such as positive feedback or academic certifications[8]. A balanced approach that integrates both perspectives can effectively stimulate students' enthusiasm and foster a sustained drive for learning.

Research findings suggest that long-term goals, as represented by factors F2, F3, and F7, are significant motivators for students when selecting their major, planning their careers, or considering study abroad opportunities. Conversely, short-term objectives, exemplified by F6 and F4, also play a crucial role in driving student motivation. This underscores the necessity of a holistic approach that values both immediate achievements and long-term educational and career development.

From this perspective, the following measures are proposed to enrich the learning experience:

Course and Activity Design: Integrate career-oriented goals into the curriculum to provide students with a practical understanding of how English can be applied across various professional domains. Design learning objectives and activities that address both short-term and long-term goals, with short-term projects like language competitions and social events to offer students a sense of accomplishment and continued motivation[23].

Individualized Guidance: Tailor study plans to align with each student's career and learning objectives. Mentorship and regular goal-setting discussions can help students achieve short-term milestones while keeping sight of their long-term aspirations.

Learning Feedback and Reward Mechanism: Implement a system of immediate feedback to motivate students. Utilize online platforms for real-time learning analytics, enabling educators to provide targeted feedback, thereby enhancing students' self-efficacy and maintaining their motivation to learn.。

### 6.2. Utilization of Transfer of Existing Motivation

The strategic transfer of existing motivation is a pivotal approach to improving learning efficiency. In elevating the motivational levels of English major students at Panzhihua University, the effective harnessing and transference of their current motivational drives to novel learning tasks have proven particularly effective. Throughout their English learning journey, students frequently demonstrate robust motivation in specific domains, such as an avid interest in English songs, films, or literature. These interests can act as catalysts to ignite students' passion for learning. By intertwining these interests with academic tasks, the motivation of students can be effectively transferred and reinforced.

To build upon these findings, targeted instructional strategies can be proposed, focusing on two of the most impactful factors: the teacher-student relationship and the motivational drivers for choosing an English major, which include a love for the language, the ambition to secure desirable employment, and the pursuit of a sense of accomplishment .

Enhancing Teacher-Student Relationships: Capitalizing on the existing student motivation through the fortification of teacher-student relationships is a proven strategy. The teacher-student dynamic has been recognized as the most influential factor in shaping students' learning motivation. A constructive relationship can significantly boost students' interest in learning, their satisfaction with the learning process, and their academic achievements. Evidence suggests that students who perceive genuine care and support from their teachers are more inclined to demonstrate heightened intrinsic motivation and engage in self-directed learning practices[8]. To foster this, it is recommended that informal interactions between teachers and students be increased, such as through regular one-on-one tutoring sessions. Additionally, educators should engage in professional development focused on emotional intelligence to better empathize with and respond to the emotional and developmental needs of their students. Instituting 'open door' policies can also facilitate more relaxed and open communication, fostering a stronger sense of trust and understanding.

Aligning Personal Interests with Career Objectives: The motivation for selecting English as a major often stems from a confluence of personal interests and anticipated career trajectories. By aligning course content and pedagogical approaches with students' career aspirations, their intrinsic motivation and academic performance can be simultaneously enhanced[24]. To this end, it is crucial to heighten students' awareness of career planning and to facilitate targeted interviews that assist students in aligning their career goals with personal preferences. Introducing career-oriented lectures and seminars led by industry experts can further solidify the link between academic study and professional development. Establishing internship and career guidance programs can provide students with invaluable practical experience, aligning their academic pursuits with real-world applications.

### 6.3. Strengthening the Synergy of Intrinsic and Extrinsic Motivation

When elevating the motivation of English major students at Panzhihua University, integrating intrinsic and extrinsic motivators is especially crucial. Intrinsic motivation is characterized by an individual's internal drive to learn, stemming from genuine interest in the subject matter, intellectual curiosity, or the inherent challenge of the learning task. Conversely, extrinsic motivation arises from external factors such as parental support, teacher encouragement, scholarship incentives, or the pressures of future employment prospects. For English majors, intrinsic motivation may be inspired by a fascination with English culture, an appreciation for foreign literature, or a wish to engage in cross-cultural communication. Extrinsic motivation could be influenced by the academic environment, familial expectations, or societal valuation of English language proficiency.

To leverage career prospects as a means of enhancing intrinsic motivation, it is important to recognize that students often select English studies due to external incentives like career advancement opportunities and potential economic rewards. Illustrating the tangible benefits of English proficiency in professional development can markedly boost extrinsic motivation[16]. Consequently, educational institutions should forge partnerships with industry to provide internships and employment opportunities, offering students a glimpse into the practical applications of their studies. Supplementary initiatives, such as hosting seminars and inviting alumni to discuss their professional journeys, can further enrich students' understanding of the language's utility in their future careers.

These measures serve to not only amplify intrinsic motivation but also to effectively harness extrinsic incentives. Educators are encouraged to adopt a diverse array of strategies, tailoring motivational enhancement techniques to accommodate individual student differences and specific contextual factors. A tailored approach that addresses both intrinsic and extrinsic aspects can more effectively cater to the varied needs of students, thereby significantly enhancing their overall motivation to learn.

### 6.4. Focusing on Students' Attribution Tendencies and Psychological Well-being

To bolster student motivation, particularly in relation to their attribution tendencies and psychological well-being, targeted measures can be implemented.

Strengthening teacher-student relationships, creating a positive educational environment. Ryan and Deci's Self-Determination Theory[8] posits that teacher support is instrumental in fostering a sense of belonging among students, which in turn can stimulate intrinsic motivation. Hattie's "Visible Learning" research[25] further underscores the profound impact of teacher-student relationships on learning outcomes. Empirical evidence suggests that the quality of these relationships, denoted as Factor 9, is a paramount influence on students' motivational levels. Positive interactions with teachers can lead to enhanced emotional engagement, increased commitment to learning, and greater autonomy in students. When students perceive a supportive and caring environment, they are more inclined to develop intrinsic motivation. To cultivate this, the following strategies are proposed: establishing regular one-on-one interactions and organizing periodic meetings to allow for the private expression of students' learning needs and emotions; and adopting emotionally supportive teaching practices that provide positive feedback and encouragement.

Reinforcing students' career goals and personal interests, elevating academic and professional expectations. Goal-setting theory highlights the significance of setting clear and challenging objectives to motivate individual effort and maintain persistence. Locke and Latham's research[16] demonstrates that specific, high-aspiration goals can markedly improve personal performance and motivation. The motivations for selecting English as a major are often intertwined with career objectives, such as securing employment or pursuing further education, and personal interests like a passion for the English language. By articulating and reinforcing these goals, educators can elevate students' goal-orientation and motivation to learn. Integrating students' career aspirations and personal interests into the curriculum can make learning more relevant and practical, thus enhancing motivation. Strategies include designing career-related projects, inviting industry professionals for guest lectures, and offering learning experiences that bridge academic study with professional practice. To further strengthen these elements, the following approaches are recommended: integrating career-relevant content into the curriculum through case studies, internships, and industry analysis; organizing career planning workshops featuring alumni and industry experts; and developing personalized learning pathways with elective courses aligned with students' interests and career goals.

Through these targeted measures, the motivation to learn can be effectively enhanced, paving the way for students' success in their academic pursuits and professional endeavors.

## VII. Summary

This paper presents a thorough analysis of the motivational status of English major students at Panzhihua University, as surveyed, and explores the factors that influence their motivation. Utilizing empirical data and employing SPSS software for statistical analysis, the study identifies various determinants affecting student motivation. Teacher-student relationships emerge as the most significant influence, followed by a passion for English, career aspirations, a sense of accomplishment, the quality of educational infrastructure, proactive engagement with English, postgraduate ambitions, international exposure, certification through examinations, competitive participation, research involvement, extracurricular activities, parental expectations, familial influence, and awareness of job market trends. The paper proposes a suite of targeted interventions designed to elevate the motivational levels among English majors at Panzhihua University.

In conclusion, enhancing motivation is an intricate and systemic endeavor that necessitates the collaborative efforts of educators, students, and academic institutions. The recommendations proffered in this study, grounded in empirical evidence, offer valuable insights and a roadmap for improving student motivation at Panzhihua University and beyond. Subsequent research endeavors should aim to explore the nuances and strategies that can further motivate students within diverse educational contexts, thereby contributing to the evolution of English language education.

## Research Limitations

The present study aims to explore the learning motivation among English majors at Panzhihua University, with an acknowledgment of several limitations stemming from external factors and the author's level of expertise. Firstly, the subjectivity inherent in questionnaire surveys may potentially introduce inaccuracies into the results. It is recognized that any single study, including this one, is based on a specific research design and sample estimation, which may not

fully align with the broader population[26]. The scope of this study is confined to English majors from the first to the third year at the School of Foreign Languages at Panzhihua University, which may further limit the generalizability of the findings. Secondly, while existing research endeavors to ensure objectivity, there is a noted scarcity in controlling for subjective factors such as gender distribution[22,27]. Beyond gender, this study did not adjust for grade level distribution and did not extend its analysis to include students from other regions. Variations in these factors could also lead to variations in the study outcomes. Additionally, the proficiency in utilizing SPSS for data analysis and in theoretically exploring the motivational factors of English majors may not be fully comprehensive. It is important to acknowledge these potential shortcomings, and future research

should aim to address these limitations through more rigorous methodological approaches and a broader theoretical perspective. The author is committed to enhancing academic proficiency in subsequent studies to achieve more reliable and universally applicable research outcomes.

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