Language learning beliefs, strategies, and attribution: A study of Chinese vocational students' in an EFL context

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Abstract

The significance of Chinese vocational English education and its impact has been increasingly emphasized. However, numerous issues among Chinese vocational college students are prevalent in English language learning. The findings of this study revealed that respondents reached a consensus on five aspects of their beliefs regarding language acquisition: communication strategy beliefs, self-management beliefs, the nature and difficulty of foreign language learning, motivations and expectations, and sense of self-efficacy. Communication strategy beliefs were ranked as the most prominent aspect, while sense of self-efficacy was rated as the least significant. Respondents' utilization of English language learning strategies demonstrated moderate levels, with cognitive and resource strategies receiving the highest ratings while monitoring strategies received the lowest. Additionally, respondents shared agreement on four attribution dimensions, with the effort being ranked first, followed by ability and luck; the situation was perceived as having the most negligible impact. Furthermore, positive relationships were observed among students' beliefs, strategies, and attributions.

Keywords: English language learning beliefs, language learning strategies, attribution, Chinese vocational students, EFL context

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1. Introduction

With the acceleration of globalization, English is increasingly crucial in various domains. Vocational English education enables students to acquire proficient skills in expression and communication, enhancing their employability and broadening their international perspective. Simultaneously, learning English enhances students' understanding of global affairs and the dynamics within the international community. With the rapid advancement of information technology, many academic disciplines require exchanges and collaborations in English. Vocational English education helps students effectively apply subject-specific knowledge and promotes disciplinary progress. Therefore, incorporating English education within vocational colleges is immensely important for student development and societal advancement (Trent & Liu, 2023).

However, Chinese vocational college English learners face numerous challenges in their learning process. Firstly, many students need more interest in English due to its perceived dullness and difficulty recognizing its long-term value and practical application. Secondly, students from diverse regions have varying English proficiency levels, posing significant obstacles to effective teaching. Additionally, proper learning methods and adequate mastery of essential skills result in low efficiency and satisfactory outcomes. Furthermore, some students experience fear or anxiety towards exams or oral expression, negatively impacting their enthusiasm for learning. To effectively address these difficulties, teachers, schools, and students must collaborate to implement measures such as improving teaching techniques, innovating activities, and content delivery while increasing practice opportunities to enhance teaching quality (Ye et al., 2023).

English language learning beliefs are powerful motivators fueling students' interest and enthusiasm for the subject. Only with unwavering faith can students maintain their drive to learn, empowering them to overcome setbacks and challenges confidently. Strong beliefs lead to clear objectives and aspirations, enabling students to achieve their goals through persistent effort and determination. With resolute conviction, students pursue progress and self-improvement relentlessly (Al, 2019). Learning English requires commitment and perseverance, demanding unwavering faith and strong willpower from learners. Only those with steadfast faith can persistently engage in the learning journey without quickly succumbing to discouragement or giving up prematurely. Cultivating a firm yet positive attitude towards English learning enables students to experience accomplishment while developing self-fulfillment and self-identity. Therefore, the significance of English language learning beliefs cannot be disregarded.

Effective language learning strategies significantly enhance students' efficiency in acquiring and mastering English knowledge. By employing appropriate strategies, students can expedite word memorization, comprehend grammar rules more effectively, and refine their listening, speaking, reading, and writing skills. Proficiency in specific learning strategies empowers students to devise study plans autonomously, select suitable learning resources, and evaluate the efficacy of their learning endeavors—thus fostering independent learning capabilities. Applying effective learning strategies facilitates continuous progress throughout the language acquisition process. It bolsters learners' confidence and sense of accomplishment while improving their English level and enhancing comprehensive qualities such as critical thinking, analytical prowess, and innovative aptitude (Pawlak, 2021). The significance of English learning strategies for students' academic achievements and future development is immense.

English learning attribution refers to how students explain and categorize the factors influencing their English learning outcomes. Accurate learning attribution is crucial in enhancing students' learning effectiveness and fostering their motivation to learn. Firstly, learners' attributions towards their English learning significantly impact their motivation. Positive attribution, involving ascribing academic performance to internal factors such as effort,

intelligence, and effective learning strategies, can bolster learners' self-confidence and motivation while encouraging them to persevere in their studies. Conversely, negative attribution that attributes academic performance to external factors like luck, difficulties encountered, or unfair teachers may undermine learners' confidence and dampen their motivation (Fielden & Rico, 2018). Correctly attributing one's progress helps shape a positive attitude towards studying while strengthening belief in one's abilities; it also enables learners to comprehend the reasons behind both success and failure so they can effectively learn from experience, promoting personal growth and development.

This study aimed to investigate Chinese EFL vocational students' beliefs, strategies, and attribution about English language learning and propose a language learning program. Specifically, this study sought to describe the demographic characteristics of the student-respondents, including gender, major, home location, and English proficiency level; determine their beliefs regarding English language learning; identify their language learning strategies; examine the relationships among beliefs, strategies, and attribution in English language learning; and propose a comprehensive language learning program for Chinese EFL vocational students that reinforces their beliefs, strategies, and attribution style to enhance their English proficiency.

In conclusion, this study is beneficial for vocational college students as it facilitates the cultivation of positive learning beliefs, strategies, and attribution while enhancing their enthusiasm and proficiency in English. Additionally, it assists educators in transforming students' negative beliefs and provides valuable guidance to teachers involved in teaching practices and reform initiatives within higher vocational colleges. Therefore, it is imperative to investigate Chinese vocational college students' English learning beliefs, strategies, and attribution and promote their adoption of accurate learning beliefs, strategies, and attribution.

2. Methods

Research Design - The study employed a descriptive methodology to examine Chinese vocational students' English language learning beliefs, strategies, and attribution. The data for this investigation were obtained through a survey to explore Chinese vocational students' English learning beliefs, strategies, and attribution.

Participants - The study participants were 385 first-year students from the Fuyang Institute of Technology in China, representing various majors and geographical origins. These students received identical English courses with consistent test requirements taught by instructors following the same syllabus and curriculum standards. Selecting this institution facilitated more manageable data collection and research investigations.

Instruments - The instruments in the study are questionnaires. The primary data collection instrument consisted of four parts: Personal Data Information, Language Learning Belief Questionnaire for Chinese Learners (LLBQCL), English Language Learning Strategy Questionnaire, and Multidimensional-Multiattributional Causality Scale (MMCS), comprising a total of 107 items. A 4-point Likert scale was predominantly utilized in the questionnaire, ranging from strongly disagree to agree strongly. To ensure reliability, a pilot study involving 30 participants was conducted to assess the validity of the questionnaire, which yielded satisfactory levels of reliability.

Procedure - The data collection involved distributing questionnaires through an online "Questionnaire Star" platform. Before the extensive survey, a reliability test was conducted to ensure the overall questionnaire reliability. Faculty members distributed the questionnaire to eligible students by providing them with a link or QR code. Participants accessed and completed the survey by scanning the QR code on WeChat. Data collection was facilitated using Questionstar's automated system, while statistical analyses were performed using SPSS 27.0 software. A total of 385 valid questionnaires were coded for statistical analysis in order to address the research inquiries.

Data Analysis - The present study employed quantitative data analyses encompassing various statistical procedures, including descriptive statistics such as frequencies, percentages, means, and standard deviations.

These procedures were utilized to summarize the English language learning beliefs of the students and their personal demographic information. A T-test was conducted to examine differences in English language learning beliefs among respondents based on their demographic profiles. Subsequently, the obtained data underwent rigorous analysis and interpretation.

Ethical Considerations - The author strictly followed ethical considerations, ensuring informed consent from all participants. In the questionnaire's initial section, respondents were asked to grant permission to protect their privacy and identity, with data exclusively used for research purposes. Respondents' identities remained anonymous throughout the study. A formal request was made to obtain approval from the college dean to conduct this research.

3. Results and Discussion

Table 1

Summary Table on Language Learning Beliefs

Indicators	Weighted Mean	Verbal Interpretation	Rank
Nature and Difficulty of Foreign Language Learning	3.10	Agree	3
Sense of Self-efficacy	2.66	Agree	5
Self-management Beliefs	3.13	Agree	2
Learning and Communication Strategy Belief	3.28	Agree	1
Motivations and Expectations	3.06	Agree	4
Composite Mean	3.05	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 1 provides a comprehensive overview of language learning beliefs among the respondents, encompassing five key dimensions: the nature and complexity of foreign language acquisition, self-efficacy perceptions, beliefs regarding self-management strategies, attitudes towards learning and communication strategies, and motivations and expectations. Notably, the composite mean score of 3.05 indicates a high level of adherence to these indicators above.

From the data presented, learning and communication strategy beliefs ranked first, with a significantly high mean value of 3.28, indicating participants' firm conviction regarding the importance of effective language-learning strategies. They demonstrated an acute awareness of employing diverse techniques to facilitate learning and communication. Subsequently, self-management beliefs emerged as another prominent factor with a mean value of 3.13, underscoring participants' general recognition of the crucial role played by self-management skills in language acquisition. Participants likely perceived planning, organization, and time management as indispensable to their success. According to Kern et al. (2019), Most Chinese vocational college students attach great importance to the practicability and professionalism of English learning. They realize the importance of cultural exchange and cross-cultural communication and focus on cultivating their cross-cultural awareness and ability.

The third-ranked indicator, with a mean value of 3.10, pertained to the nature and difficulty of foreign language learning, followed by the indicator of motivations and expectations. Participants acknowledged the challenges but did not find them overwhelming, showing a realistic perception of acquiring a new language and had favorable attitudes toward their motivations and expectations for language learning. The indicator of self-efficacy ranked last with a mean value of 2.66. Participants moderately believed in their ability to acquire a foreign language; however, self-efficacy scored lower than others, suggesting its lesser influence on their language learning beliefs. The findings are consistent with Li's (2017) study, which revealed that several factors characterize Chinese vocational college students' self-efficacy in English learning. These include a lack of confidence, perceived difficulty in learning English, and anxiety and fear of failure or frustration that can diminish motivation to learn. Additionally, limited experience with successful English language acquisition may impede the accumulation of self-confidence and enhancement of self-efficacy among some vocational college students.

The respondents' English language learning strategy responses are summarized in table 2. These strategies are

classified into four categories: Cognitive Strategies, Monitoring Strategies, Social Strategies, and Resource Strategies. The composite mean of 3.02 indicates the respondents' overall positive perception of English language learning strategies.

Table 2

Summary Table on English Language Learning Strategy

Indicators	Weighted Mean	Verbal Interpretation	Rank
Cognitive Strategies	3.04	Agree	1.5
Monitoring Strategies	2.98	Agree	4
Social Strategies	3.02	Agree	3
Resource Strategies	3.04	Agree	1.5
Composite Mean	3.02	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Cognitive and Resource Strategies received a high weighted mean value of 3.04, indicating agreement among the respondents regarding their effectiveness. Lin (2016) explored the relationship between learning strategies and academic performance and found that, in general, cognitive strategies are the most frequently used English learning strategies by Chinese vocational college students. In contrast, compensation, emotional, and social strategies were less used. Additionally, Liu (2015) studied the problems and solutions in the English learning strategies of students in regular Chinese schools and found that among the six learning strategies, students use compensatory and cognitive strategies the most, while social strategies are the least used.

The social and monitoring strategies ranked at the bottom two positions, with positive scores of 3.02 and 2.98, respectively, aligning with their perceived effectiveness. Respondents showed a stronger inclination towards employing cognitive and resource strategies than the other two strategies. This finding further emphasizes the respondents' recognition of these four language learning strategies as valuable tools for achieving favorable academic outcomes in English learning. Bai (2020) studied the use of English Learning strategies among vocational college students, and the findings indicate that the affective strategy has the best frequency of use, while the monitoring strategy exhibits the most minor usage.

Table 3

Summary Table on Attribution

Indicators	Weighted Mean	Verbal Interpretation	Rank
Ability	2.99	Agree	2
Effort	3.04	Agree	1
Situation	2.54	Agree	4
Luck	2.61	Agree	3
Composite Mean	2.80	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

The findings in Table 3 provide a comprehensive overview of respondents' perceptions of four distinct factors influencing English academic performance: ability, effort, situation, and luck. The composite mean score of 2.80 indicates that participants attribute their English language learning outcomes to all indicators. Respondents ' effort was the most strongly endorsed factor (mean value of 3.04), highlighting its pivotal role in shaping academic achievements. Ability ranked second, indicating students' recognition of its significant contribution to overall academic performance. According to Wang's (2015) investigation on the attribution tendency of Chinese new non-English majors in English learning, the internal attribution tendency is higher than the external attribution tendency in English learning success, showing that most non-English majors attribute their success or failure to internal, stable, and controllable factors, such as effort and ability.

Indicator 4 ranked third, indicating students' recognition of luck's influence on their academic performance. In contrast, the situation ranked last with a mean value of 2.54 despite being assessed as "Agree," suggesting students' acknowledgment of contextual and circumstantial factors in their academic performance. The findings suggest that success is more likely attributed to internal factors like ability and effort. In contrast, failure is often attributed to external factors such as luck, task difficulty, and ability attribution, which strongly predict

achievement. This result is also similar to the research results of some scholars on the cases of Chinese students' responses to English language learning attribution(Güneş, 2022).

Table 4

Relationship Between Language Learning Belief and English Language Learning Strategy

Nature and Difficulty of Foreign Language Learning	r-value	p-value	Interpretation
Cognitive Strategies	.629**	0.000	Highly Significant
Monitoring Strategies	.619**	0.000	Highly Significant
Social Strategies	.603**	0.000	Highly Significant
Resource Strategies	.594**	0.000	Highly Significant
Sense of Self-efficacy			
Cognitive Strategies	.754**	0.000	Highly Significant
Monitoring Strategies	.751**	0.000	Highly Significant
Social Strategies	.681**	0.000	Highly Significant
Resource Strategies	.670**	0.000	Highly Significant
Self-management Beliefs			
Cognitive Strategies	.834**	0.000	Highly Significant
Monitoring Strategies	.831**	0.000	Highly Significant
Social Strategies	.779**	0.000	Highly Significant
Resource Strategies	.768**	0.000	Highly Significant
Learning and Communication Strategy Beliefs			
Cognitive Strategies	.686**	0.000	Highly Significant
Monitoring Strategies	.631**	0.000	Highly Significant
Social Strategies	.633**	0.000	Highly Significant
Resource Strategies	.654**	0.000	Highly Significant
Motivations and Expectations			
Cognitive Strategies	.812**	0.000	Highly Significant
Monitoring Strategies	.780**	0.000	Highly Significant
Social Strategies	.736**	0.000	Highly Significant
Resource Strategies	.723**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 4 presents the association between language learning belief and English language learning strategy. The computed rho-values were observed to indicate a strong positive correlation, and all resulting p-values were found to be below the predetermined alpha level. These findings reveal a significant relationship, suggesting that higher beliefs are associated with more effective strategies. Tang (2015) argued that exploring the relationship between language learning beliefs and strategies can enhance foreign language educators' and researchers' understanding of learners' perceived beliefs and strategies, thus optimizing classroom instruction for maximum effectiveness. Learners' beliefs about language learning are significantly associated with their use of learning strategies, which aligns with Yang's (2016) findings that learning beliefs influence acquiring a new language. Learning beliefs, strategies, and academic achievement are interconnected and mutually influential. Notably, learning beliefs directly impact the selection and implementation of appropriate strategies.

Table 5

Relationship Between Language Learning Belief and Attribution

Nature and Difficulty of Foreign Language Learning	r-value	p-value	Interpretation
Ability	.522**	0.000	Highly Significant
Effort	.540**	0.000	Highly Significant
Situation	.299**	0.000	Highly Significant
Luck	.197**	0.000	Highly Significant
Sense of Self-efficacy			
Ability	.533**	0.000	Highly Significant
Effort	.546**	0.000	Highly Significant
Situation	.352**	0.000	Highly Significant
Luck	.139**	0.006	Highly Significant
Self-management Beliefs			
Ability	.654**	0.000	Highly Significant
Effort	.622**	0.000	Highly Significant
Situation	.314**	0.000	Highly Significant
Luck	.134**	0.008	Highly Significant

Learning and Communication Strategy Beliefs			
Ability	.577**	0.000	Highly Significant
Effort	.534**	0.000	Highly Significant
Situation	.253**	0.000	Highly Significant
Luck	.124*	0.015	Highly Significant
Motivations and Expectations			
Ability	.626**	0.000	Highly Significant
Effort	.599**	0.000	Highly Significant
Situation	.382**	0.000	Highly Significant
Luck	.159**	0.002	Highly Significant

Legend: Significant at p-value < 0.01

The association between language learning belief and attribution is presented in Table 5, showing a strong positive correlation with all p-values below the alpha level. This indicates a significant relationship, suggesting that higher beliefs are linked to better attributions. The robust correlation between English learning beliefs and outcome attributions highlights the influential role of individuals' attitudes on their behavior and motivation for learning. Positive beliefs combined with accurate attribution can effectively enhance mastery of English skills and improve learning outcomes. This finding aligns with Zhang's (2015) finding, highlighting the importance of English educators understanding student attribution in pedagogy, as it significantly influences their success, engagement, and resilience. Attribution also shapes students' expectations, emotions, values, and beliefs about their abilities, impacting their motivation.

Table 6

Relationship Between English Language Learning Strategy and Attribution

Cognitive Strategies	r-value	p-value	Interpretation
Ability	.670**	0.000	Highly Significant
Effort	.665**	0.000	Highly Significant
Situation	.386**	0.000	Highly Significant
Luck	.180**	0.000	Highly Significant
Monitoring Strategies			
Ability	.709**	0.000	Highly Significant
Effort	.675**	0.000	Highly Significant
Situation	.411**	0.000	Highly Significant
Luck	.208**	0.000	Highly Significant
Social Strategies			
Ability	.715**	0.000	Highly Significant
Effort	.711**	0.000	Highly Significant
Situation	.409**	0.000	Highly Significant
Luck	.269**	0.000	Highly Significant
Resource Strategies			
Ability	.712**	0.000	Highly Significant
Effort	.704**	0.000	Highly Significant
Situation	.416**	0.000	Highly Significant
Luck	.236**	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 6 illustrates the association between English language learning strategy and attribution. It was observed that there is a strong direct correlation between the two, with all resulting p-values below the alpha level, indicating a significant relationship. This suggests that using better strategies leads to improved attribution of success in language acquisition. Yau (2022) explored the relationships among reading motivation, strategy use, literacy, and causal attribution in a second/foreign language context. The findings revealed a significant positive correlation between all factors above, emphasizing the substantial impact of English learners' causal attribution on their employment of effective English learning strategies. In a previous investigation by Wang (2015) focusing on non-English majors, an examination was carried out to ascertain the relationship between learning strategies, attribution patterns, and English achievement levels; this inquiry yielded evidence supporting a positive correlation between language learning strategy adoption and attribution tendencies.

Table 7

An Enhanced Language Learning Program for EFL Vocational Students

Key Result Area one：Language Learning Beliefs --Sense of Self-efficacy	
Objectives	-To enhance students' self-efficacy in the EFL context, -To foster students' learning confidence, improve language acquisition abilities, and elevate English proficiency levels.
Strategies/ Activities	-Establishing achievable and specific learning objectives for English language acquisition within a designated timeframe through an academic workshop on goal setting and time management skills. -Enhancing students' self-confidence by providing constructive feedback in English through academic lectures on "The Art of Providing Feedback" and "Techniques for Effective Feedback". -Fostering intrinsic motivation among students through an academic salon focused on "Developing Independent Learning Habits". -Facilitating students' success by implementing simplified language learning tasks via the creation of infographics on "Streamlining Language Learning Tasks". -Creating a conducive and empowering language learning environment by enhancing guidance support services for students facing challenges in acquiring the English language.
Success Indicators	90% of the students demonstrate a significant improvement in their self-efficacy and recognize the paramount importance of possessing a high level of self-efficacy. 90% of the students exhibit enhanced learning confidence, thereby enhancing their language acquisition skills and proficiency in English. 90% of the students cultivate an intrinsic motivation mechanism for language learning, fostering the establishment of independent learning habits.
Persons Involved	Teachers, Students
Key Result Area Two：Sense of Self-efficacy--Monitoring Strategies	
Objectives	-To help learners gradually realize the value of monitoring strategy -To guide learners to use the monitoring strategy correctly to improve their English learning ability -Enhance students' ability to learn collaboratively and communicate effectively
Strategies/ Activities	-Introducing students to monitoring techniques through interactive classroom discussions modules. -Providing opportunities for English language practice through participation in English speech and writing contests. -Guiding students to regularly monitor and assess their progress using a study progress chart. -Recommending regular self-reflection on learning outcomes and experiences through written discourse, oral presentations, or collaborative sharing.
Success Indicators	90% of the students realize importance of monitoring strategies and are familiarize to use the monitoring strategy correctly to improve their English learning ability 90% of the students' ability to learn collaboratively and communicate effectively are improved.
Persons Involved	Students, Instructors
Key Result Area Three: Attribution--Situation	
Objectives	-Guide students to change negative attributions. -Cultivate students' positive attribution habits. -Enable students to develop the ability of regular self-reflection and scientific self-evaluation and academic evaluation -To guide students to treat English test failure positively and develop the spirit of perseverance
Strategies/ Activities	- Coordinating students to engage in viewing inspirational English films - Facilitating exceptional students to deliver presentations and participate in knowledge-sharing sessions - Reinforcing accurate student attributions through verbal commendations, certificates of recognition, or modest incentives - Assigning intellectually stimulating learning tasks, such as composing English narratives, melodies, verses, etc. - Encouraging students to regularly engage in self-reflection on their learning outcomes and attributions through written learning journals and group discussions
Success Indicators	90% of the students develop positive attribution habits; 90% of the students have the ability of regular self-reflection and scientific self-evaluation and academic evaluation; students treat English test failure positively and develop the spirit of perseverance
Persons Involved	Students, Instructors

4. Conclusion and Recommendations

The study findings revealed that respondents reached a consensus on five aspects of their beliefs regarding language learning: communication strategy beliefs, self-management beliefs, the nature and difficulty of foreign language learning, motivations and expectations, and sense of self-efficacy. Communication strategy beliefs were ranked as the most prominent aspect, while sense of self-efficacy was rated as the least significant. Respondents' utilization of English language learning strategies demonstrated moderate levels, with cognitive and resource strategies receiving the highest ratings while monitoring strategies received the lowest. Additionally, respondents shared agreement on four attribution dimensions, with the effort being ranked first, followed by ability and luck; the situation was perceived as having the most negligible impact. Furthermore, positive relationships were observed among students' beliefs, strategies, and attributions.

Teachers may adapt their teaching methods based on students' English learning beliefs, utilization of strategies,

and attribution styles in order to create a supportive learning environment that enhances confidence through positive feedback and encouragement. Language learners can enhance their EFL beliefs, strategies, and attribution by fostering confidence, developing a comprehensive study plan, utilizing diverse resources, engaging in deliberate practice and reflection, and appropriately attributing successes and failures. Department administrators in China could implement the proposed language learning program to enhance students' English proficiency. Additionally, Vocational colleges have the potential to offer relevant English language courses with a focus on practical application that enables students to apply their knowledge in real-life situations and work environments to improve language proficiency, self-confidence, and faith in the learning process.

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