





The Relationship between Learning Motivation and Achievement among Rural Senior High School Graduates

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Abstract

Although volume of previous empirical studies has explored motivation and performance related topics, few really examined samples in remote hinterland rural regions. Adopted a multi-theoretical model, the current study aims to explore rural senior high school graduates' foreign language (FL) motivation and its relationship with their FL achievement. Based on the convenient sampling methods, a total of 133 high school graduates from a very remote rural area in Zigui County, Yichang City, Hubei Province completed a questionnaire to report their FL motivation, and their English achievement was assessed through the grade of College Entrance Exam (Gaokao) obtained at the end of the questionnaire. The questionnaire results showed that students were motivated by instrumental and integrative reasons, and they also experienced significant external social pressure. The multiple linear regression analysis and correlation coefficients revealed that the variables were strongly related to FL achievement. Specifically, instrumental, and integrative motivation together accounted for 13.1% of the total variance in their FL achievement. Surprisingly, FL learning experience and social influences, such as teachers and parents, did not directly predict their FL achievement. This cross-sectional study was uniquely tailored to a rural context and offers practical and pedagogical insights for rural education in China as well as other countries with similar situations; however, more diverse samples and longitudinal studies are recommended for future research.

Keywords: English language learning, language achievement, motivation, rural high school education.

Introduction

Over the past two decades, the field of motivation has shifted from static, fixed models to a more dynamic perspective (Dörnyei, 2005; 2009; Liu & Thompson, 2018). Recent motivation studies have focused more on the influence of context on language learners (Lamb, 2012; Liu & Thompson, 2018), while others have adopted different models to examine the relationship between motivational constructs and achievement (Dörnyei & Chan, 2013; Gardner, 1985; Li & Zhang, 2021; Liu & Thompson, 2018). For example, the Second Language Motivational Self System (L2MSS), which includes the Ideal L2 Self (IS), the Ought-to L2 Self (OS), and L2



Learning Experience (LLE), has been widely used to study the connections between these three subconstructs and Intended Learning Effort (ILE) and language achievement (Dörnyei & Chan, 2013; Dunn & Iwaniec, 2022; Li & Zhang, 2021). Similarly, the Expectancy-Value Theory (EVT), which consists of expectancy components (learners' expectations of success) and value components (how much learners perceive tasks as valuable, useful, or enjoyable), has been explored in relation to language achievement, particularly among primary school students (X. Hu & McGeown, 2020; Tan et al., 2017).

In the context of China, studies on L2 motivation and achievement are also widely conducted, adopting various models, and targeting different groups. However, most of these studies focus on urban contexts (X. Hu & McGeown, 2020; Li & Zhang, 2021; Tsang et al., 2024; Wang, 2024; Y. K. Wong, 2018; 2020), with limited research exploring EFL motivation among senior high school learners in rural regions. Additionally, most existing motivation studies have employed a single theoretical model, however, the fact is that rural learners' motivational beliefs may differ significantly from their urban counterparts in many aspects (eg. access to teaching resources, availability of study materials, and learning opportunities), it is essential to develop a model that integrates various variables to suit the unique local context, which would allow for a more comprehensive and context-sensitive understanding of learner motivation in the target region. The current study integrates sub-constructs from multiple models, tailoring them to the local context. To our best knowledge, this is first study adopting multi-theoretical model to investigate graduated students' motivation and their Gaokao English achievement in a rural Chinese context.

2. Literature review

2.1 FL motivation

The study of motivation in foreign/second language (L2) learning has been researched for over 50 years. Early studies were heavily influenced by Gardner's (1985) social-psychological model, which emphasized psychological and contextual aspects, particularly the role of integrative and instrumental motivation. Later, during the cognitive-situated phase, scholars applied self-determination theory (SDT), which expanded the understanding of integrative and instrumental motivation into a more specific insights by examining how motivational orientations influence autonomy, competence, and relatedness (Deci & Ryan, 1985; Noels et al., 2003). Dörnyei (2009) introduced the seminal work of L2 Motivational Self System (L2MSS), shifting focus to learners' self-identity. This model suggests that language motivation is tied to how individuals envision their ideal future selves and how language learning connects to their learning experiences. Moving into the latest phase of research, Dörnyei (2009) explored the dynamic interaction between motivation and other cognitive, emotional, and social factors. He proposed the Complex Dynamic Systems Theory (CDST), which examines the evolving nature of language motivation throughout the learning process. Research on motivation in the Chinese context has been significantly shaped by both global theoretical frameworks and local educational realities. Early studies, grounded in Gardner's

Socio-Educational Model, primarily examined integrative and instrumental motivation among Chinese learners, focusing on how desires for global integration or career advancement influenced language learning (Y. M. Wong, 2011; Yu & Downing, 2012). As language motivational research has been gradually conducted across China, recent studies (particularly in the past 10 years) have witnessed an increase in the adoption of Dörnyei's L2 Motivational Self System (L2MSS) to explore connections between L2 motivational selves and various learning factors. These include language anxiety (Zhang & Lai, 2024), student effort (Li & Zhang, 2021; Liu & Thompson, 2018), and teacher support behaviors (Tao et al., 2022). Additionally, extensive studies also examined how the three subconstructs of motivation influence intended efforts and FL achievement (Li & Zhang, 2021; Liu & Thompson, 2018).

2.2 FL Motivation and Achievement

2.2.1 Integrative, Instrumental Motivation and L2 Achievement

The concept of integrative and instrumental motivation raised by Gardner in his Social-Educational Model was one of the very first to link motivational variables with language achievement. According to Gardner (1985), integrative motivation refers to language learners who are motivated by a desire to integrate into the target language community and culture, for example, to understand and communicate with native speakers, and to immerse themselves in local life. Instrumental motivation refers to learners who are motivated by practical gains, such as job opportunities, higher salaries, or academic success.

Existing research has produced varied and sometimes inconsistent findings regarding motivational factors in language learning. Numerous studies have demonstrated that both instrumental and integrative motivation significantly contribute to language learning achievement. For example, A recent investigation by Saputri and Hamzah (2025) identified the nexus between instrumental and integrative motivation and students' speaking proficiency at an Indonesian university. The study strongly underscored the pivotal role of motivational beliefs in enhancing oral competence and cultivating individual communicative confidence. Similarly, a study by Almasabi and Atamnah (2025) unveiled a statistically significant divergence between instrumental and integrative motivation among third-year primary students at a scientific institute in Najran. Their findings indicated that students exhibiting higher levels of integrative motivation were more likely to attain superior reading achievement. Furthermore, the empirical salience of both motivational types was corroborated by Park and Lim (2024), who reported that the composite variable functioned as a mediating construct linking self-efficacy and learning strategies in their examination of Korean university English learners. In contrast, Yu and Downing (2012) examined international students studying Chinese in China and found that integrative motivation served as a significant predictor of academic adaptation. Wei (2007) found that Chinese English language learners exhibited stronger instrumental motivation than integrative motivation, a pattern that was particularly pronounced when compared to learners from other East Asian countries like Japan (Tachibana et al., 1996). This aligns with the study by Mao (2011) who explored

96 second-year high school students in Zhejiang, findings also revealed a predominantly instrumental motivation among Chinese public high school students. One major reason of the dominant role of instrumental motivation over integrative motivation is the lack of direct exposure to native English-speaking communities, which limits opportunities for learners to develop a desire for cultural integration. Instead, English is often taught and learned as an academic subject with clear extrinsic rewards tied to test scores, university admission, and job competitiveness (Lamb, 2012). Additionally, social and parental expectations often prioritize academic and career success, which reinforced instrumental goals over cultural engagement. Thus, students are more likely to view English as a tool for social mobility rather than cultural connection.

Despite extensive global research on language learning motivation, few studies have specifically examined these motivational types in China's rural regions. To date, only one study by Ma et al. (2021) has investigated this population, exploring secondary middle school students' motivational beliefs in rural areas through the lens of Expectancy-Value Theory. The results revealed distinct regional differences in motivational patterns, with rural students demonstrating stronger instrumental motivation that significantly correlated with language performance. This research gap is particularly concerning given the well-documented disparities in educational resources and opportunities between rural and urban areas (G. Hu, 2003). The current lack of comprehensive studies in rural contexts highlights the need for further investigation into how motivational factors operate in these under-resourced educational settings.

2.2.2 EFL Learning Experience and Achievement

The reason why the EFL learning experience was explored is that it emphasizes the importance of context. According to Liu and Thompson (2018), “context affects the development of the selves and is the complex combination of a person's past and current language learning experiences. The learning experience examines the relationship and interaction between the learners and all the external factors involved in this learning process.” (p. 38). Extensive studies confirmed the importance of learning experience in influencing the achievement of foreign/second language learning (Dörnyei, 2009; Dörnyei & Muir, 2019; Li & Zhang, 2021; Liu & Thompson, 2018).

Empirical research on learning experiences has emerged from various parts of the world. For instance, Dörnyei and Muir (2019) explored the challenging question of what makes a classroom genuinely motivating. Drawing on an interdisciplinary approach, they highlighted how a positive learning environment can significantly impact students, they argued that such an environment doesn't happen by chance, it can be intentionally shaped through thoughtful interventions, especially by teachers acting as facilitators and adopting effective teaching practices. Brock et al. (2008) used the responsive classroom approach and explored various teaching practices to children's perceptions of the classroom among 520 children from 3 to 5 years old. The results showed a significant correlation between teachers practices and

children's perceptions and outcomes over time. Similarly, Wu (2003) developed a study examining the influence of learning environment on young foreign language learners through a longitudinal study. The results reveal that a supportive learning environment and effective intervention can intrinsically motivated young learners from the beginning. A study by Bai et al. (2025), which adopted a person-centered approach and targeted 685 primary school students in Hong Kong, reported that environmental factors, such as community influence and a shared appreciation of higher cultural values, varied across distinct profile groups. Those who possessed growth and mixed profiles tended to recognize more of the value in English learning, which in turn reinforced their motivation to develop and strengthen their language skills. However, research into the learning experience to achievement was also varied and inconsistent. A study conducted by Li and Zhang (2021), involving two high schools and a total of 198 10th graders in Tibet, claimed that learning experience (both positive and negative) was found to have no direct effect on language learners' Chinese achievement. The statistical link was significant only through the mediating effect of intended learning efforts.

EFL teaching in Chinese rural region is a totally different picture in rural environment (G. Hu, 2003; Ma et al., 2021). There are several challenges needing to overcome, including limited access to qualified teachers (many excellent teachers flow into cities for better living), large class size (normally 60-70 students in one class in high school), and an overemphasis on rote memorization and past paper-based teaching resources, which are supposed to be useful for exams, but often fail to develop students' communication skills (G. Hu, 2003). All these challenges are potential influencing factors on students' direct learning experience, and since a positive learning experience is a good indicator of language proficiency (Li & Zhang, 2021; Liu & Thompson, 2018), exploring the direct learning experience seems necessary. Hence, more research needed is found to investigate the effects of EFL learning experience on high school students in remote rural areas.

2.2.3 Social Influence and Achievement

In the social psychological model, Gardner emphasized that the social environment encompasses not only the broader community but also the home setting, where parents actively shape language learning. According to Gardner et al. (1999), parents may influence attitudes and even play "an active role in the language learning process by encouraging, supporting, and monitoring the curricular activities of children." (p. 422). Beyond the home environment, research in general education has identified multiple social influences on adolescents. These include peer effects on attitudes toward school subjects (Wentzel et al., 2004), as well as parental factors such as education level (Schlechter & Milevsky, 2010) and educational goals/practices (Spera, 2006), which significantly impact learners' academic interest and self-regulation. Teachers also play a crucial motivational role through both their pedagogical methods and the quality of teacher-student relationships (Patrick et al., 2007; Wentzel, 1998). Collectively, these findings demonstrate how social influences fundamentally shape adolescents' direct experiences within their learning environments.

There are few research claimed that parental expectations have little impact on students' language achievement. A meta-analysis by Özyıldırım (2024) drawn from 37 studies involving 45,428 students through the Comprehensive Meta-analysis Program reported that parental involvement plays a small but rather important overall impact on students' performance. Butler (2014) applied self-determination theory to examine how parents' socioeconomic status (SES) and beliefs influence their children's motivation in language learning in a middle school involving a total of 572 students aged 9 to 14. Findings revealed that Chinese parents had substantial but rather varied influence on children's motivation. High SES parents would adjust their behavior based on their children's changing needs, while those with low SES, often maintained controlling behaviors, set utilitarian goals, compared their children with others, and failed to cultivate their children's self-competence and self-determined motivation. Considering the important status of social influence placed upon language learners across different contexts, exploring the effect of highly localized rural context on FL learners seems necessary and warrant.

3. The Present Study

The study investigates motivational levels and their relationship with language achievement among 12th-grade students in rural Chinese high schools, while also assessing the predictive power of motivational constructs in explaining variance in language achievement. This research is motivated by three key considerations. First, while senior high school education serves as a critical bridge to higher education in China's national education system, research on foreign language (FL) motivation at this level remains scarce. Extensive studies have been conducted at tertiary levels (Liu & Thompson, 2018; Y. K. Wong, 2018), and in secondary middle schools (Dörnyei & Chan, 2013; Ma et al., 2021, 2023), with fewer focusing on primary students (e.g., Hu & McGown, 2021). Second, nearly all existing FL motivation studies in China have relied on a single theoretical model, potentially failing to capture important contextual nuances. Given that motivation is shaped by cultural, educational, and regional factors (Dörnyei, 2009; Gardner, 1985; Lamb, 2012). This methodological limitation may obscure locally specific variations. Finally, there is particularly limited research examining motivational levels and their association with EFL achievement among rural senior high school students. Given this research gap, the following research questions are addressed:

1. What are the reported motivational levels and EFL achievement of senior high school graduates in the rural region of Zigui County?
2. How are motivational constructs related to the EFL achievement of senior high school graduates in the rural region of Zigui County?
3. How do different motivational constructs predict the EFL achievement of senior high school graduates in the rural region of Zigui County?

4. Method

4.1 Participants

The convenience sampling method was adopted to recruit the participants. A total of 133 high school graduates from Zigui First High School in Zigui County, Yichang City, Hubei Province, participated in the study. The target school is the best high school in local region. Participants all come from the local area and their native language is Chinese, some of them even carry a local accent and cannot speak perfect mandarin. The target participants involved in this study normally start learning English from junior middle school (grade 7) and have no significant exposure to English-speaking environments. Unlike high school students in cities, students in rural regions normally have no competent and capable teaching staff, nor do they have advanced learning tools and resources, such as tablets, projectors, and access to English TV channels, etc. (Hu, 2003).

4.2 Measures

4.2.1 Motivation Questionnaire

The motivation questionnaire used in this study was developed by combining three theoretical models with local contextual factors. It consists of four scales: integrative motivation, instrumental motivation, direct EFL learning experience, social influences. The first two scales contain 10 items, adapted from Gardner and Smythe (1981). The EFL learning experience scale includes five items, developed from Dörnyei (2009) L2 Motivational Self System (L2MSS). The social influence scale was made based on Lamb (2012), specifically selected five items which are supposed to be suited to reflect the local context. In total, the questionnaire includes 20 questions, with responses measured on a 6-point Likert scale, ranging from strongly disagree (1) to strongly agree (6). The intermediate points are labeled as moderately disagree (2), slightly disagree (3), slightly agree (4), and moderately agree (5). Higher scores on the scale indicate greater motivation in learning English.

Although the original intention contained 4 motivational constructs, the Exploratory Factor Analysis with varimax rotation only revealed 3 underlying components, accounting for 74.51% of the total variance ($KMO=0.933$) (see table 1). The sum of all students' responses to the questionnaire was included. However, the third component, only witnesses one effective factor loading (question 12 accounting for 6.09% of the total variance), considering the limited question items, this category has been deleted. In the questionnaire, items 1 to 10 indicated the first factor, integrative motivation and instrumental motivation, accounting for 37.21% of the total variance; item 11 to 20 apart from question 12, belong to the second factor, EFL learning experience and social influence, accounting for 31.21% of the total variance. Although the factor loading for item 9 and 10 is over 0.5, they loaded more highly on factor 1, and therefore they were considered as components of factor 1.

Items	Factors	
	I	II

1. Study English is important because it will allow me to be more at ease with people who speak English.	0.865	
2. Study English is important because it will allow me to meet and converse with more and varied people.	0.812	
3. Study English is important because it will enable me to better understand and appreciate the English way of life.	0.894	
4. Study English is important because I will be able to interact more easily with speakers of English	0.857	
5. Study English is important because the things I want to do in the future involve English	0.725	
6. Study English is important because I will need it for my career	0.758	
7. Study English is important because it will make me more educated.	0.745	
8. Study English is important because it will be useful in getting a good job.	0.742	
9. Study English is important because other people will respect me more if I know English.	0.652	0.566
10. Study English is important because knowledge of English is useful for my hobbies	0.634	0.555
11. I like the atmosphere of my school English classes		0.703
13. My school English teachers make lessons really interesting.		0.813
14. I enjoy finding out for myself the meaning of English words		0.616
15. I enjoy learning from the environment		0.676
16. My parents feel that it is very important for me to learn English.		0.585
17. My family believe that I must study English to be an educated person.		0.653
18. My closest friends have positive attitudes towards English.		0.731
19. There's a friend who has really helped me learn English.		0.813
20. My teachers have really encouraged me to study English harder.		0.663

Table 1. Varimax rotated loadings for the two-factor solution for the expectancy-value scale.

Note: To sharpen the focus on the salient loadings, loadings lower than 0.50 were removed; factor 1 represents integrative and instrumental motivation, factor 2 represents learning experience and social influence

4.2.2 Language Achievement

To assess students' language achievement, this study utilized graduates' English scores from the College Entrance Examination (Gaokao), which represents the most authoritative and standardized assessment throughout high school. The Gaokao English test in China evaluates three core competencies: listening, reading, and writing (oral proficiency is not assessed). The reading section includes five reading passages with 20 multiple-choice questions and one cloze passage with 20 additional multiple-choice questions. These components measure students' comprehension of vocabulary, specific details, and main ideas. The listening section contains 20 questions assessing oral comprehension and the ability to understand short dialogues and passage meanings. For writing proficiency, students are required to complete two tasks: an email composition and a narrative continuation based on provided material. The entire examination lasts two hours and carries a maximum score of 150 points (Hubei Provincial Education Examination Authority, 2024). This standardized test is uniformly

administered to all Gaokao candidates throughout Hubei province, it is well enough to provide a comprehensive evaluation of English language abilities.

4.3 Procedures

Ethical approval was obtained from the University of Malaya Research Ethics Committee (UMREC). Following approval, the researcher engaged a university classmate who works at a primary school in target local area to facilitate the data collection process. He then contacted the homeroom teachers at target high school to distribute the online questionnaire through WeChat groups. Participation was entirely voluntary, with only willing respondents completing the survey. No personal information, such as names and demographical background was involved, and all related to motivation responses were anonymized to ensure confidentiality, with data collection conducted in strict accordance with ethical guidelines.

To address the research question, the exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were implemented to reveal the latent components, the reliability, and validity of the questionnaire model. And then, the correlation analysis was computed to test if the different constructs were correlated with language achievement. Lastly, multiple linear regression analysis was conducted to test the effect of different motivational constructs on the language achievements.

5. Results

5.1 Preliminary Analysis

The present study primarily explored the constructs of integrative motivation, instrumental motivation, EFL learning experience, and social influence on rural high school learners' language achievement. However, based on the results of the CFA, only two latent constructs were identified. Integrative motivation and instrumental motivation were combined into a single construct, while external influences, including direct classroom experiences and social influences such as parents, friends, and teachers, were merged into another construct.

The reliability and validity of the two scales were tested. Cronbach's Alpha was used to assess the reliability of the two subscales. The overall Cronbach's Alpha value for the 19 items was $\alpha = 0.897$, with $\alpha = 0.965$ for the combined first scale (integrative and instrumental motivation) and $\alpha = 0.93$ for another scale (learning experience and social influence), indicating excellent internal consistency (see Table 4). The validity of the questionnaire data was then analyzed through CFA. The results showed that the questionnaire model was acceptable, with $\chi^2/df = 2.481$, CFI = 0.924, IFI = 0.925, and TLI = 0.905 (see Table 2). Additionally, factor loadings, average variance extracted (AVE), and composite reliability (CR) for the two subscales were computed. The results indicated that integrative and instrumental motivation had strong factor loadings (ranging from 0.741 to 0.922), high CR (0.964), and good convergent validity (AVE = 0.730), indicating a reliable and well-defined construct. Although EFL learning experience and social influence had slightly lower but acceptable factor loadings (0.701–

0.839), it showed a high CR (0.927) and an AVE of 0.587, which is near the recommended threshold (≥ 0.5), suggesting moderate convergent validity (see Table 3).

Table 2. Construct Validity

χ^2/df	CFI	IFI	TLI	NFI
2.481	0.924	0.925	0.905	0.881

Table 3. Convergent Validity

	Route	SE	AVE	CR
Q10	<---	F1	0.857	
Q9	<---	F1	0.868	
Q8	<---	F1	0.901	
Q7	<---	F1	0.874	
Q6	<---	F1	0.922	
Q5	<---	F1	0.895	0.730
Q4	<---	F1	0.828	
Q3	<---	F1	0.825	
Q2	<---	F1	0.741	
Q1	<---	F1	0.819	
Q20	<---	F2	0.812	
Q19	<---	F2	0.768	
Q18	<---	F2	0.798	
Q17	<---	F2	0.705	
Q16	<---	F2	0.701	0.587
Q15	<---	F2	0.730	
Q14	<---	F2	0.821	
Q13	<---	F2	0.708	
Q11	<---	F2	0.839	0.927

Note: Q1-20 represents the questionnaire items; F1=integrative and instrumental motivation, F2=EFL learning experience and social influence; AVE=Average Variance Extracted; CR=Composite Reliability

5.2 Main Analysis and Results

Scores of the two subscales, together with students' F2 achievement, were descriptively analyzed. The results indicated that students reported a high level of integrative and instrumental motivation, with a mean score of 4.58. The mean score for EFL learning experience and social influence was also high, at 4.54. For FL achievement, the average grade was 105.99, indicating a relatively high level of English proficiency (see Table 4).

Table 4. Descriptive statistics for each measure (N=133)

Dimension	Item	α	Mean	SD	Skewness	Kurtosis
Achievement			105.99	16.748	-0.202	-0.815
F1	10	0.965	4.58	1.471	-1.021	0.167
F2	9	0.93	4.54	1.266	-0.983	0.867

Note. Item is the number of questions; α =(Cronbach) scale reliability index; scale 1 to 6 where higher score indicates more of the variable; Skewness, Kurtosis, and their standard errors are included as indicators of the normality of

distribution of the variables; F1 represents integrative and instrumental motivation; F2 represents EFL learning experience and social influence

Then the two subscales were correlated with FL achievement through a zero-order correlation (Pearson’s r) analysis to explore how they co-varied with one another. The analysis results WERE showed in Table 5. Both the integrative motivation and external social influence were greatly related to EFL achievement, and the integrative and instrumental motivation was comparatively higher than EFL learning experience and social influence. This finding is in accordance with many previous studies. Additionally, the significant link between integrative and instrumental motivation, and external social influence can be witness ($r=0.823$, $p<0.01$), which suggest that the two variables are closely interconnected, and they are key variables in motivation study.

Table 5. Zero order correlations between all indices

	F1	F2	Achievement
F1	1		
F2	.823**	1	
Achievement	.361**	.306**	1

Note: **Correlation is significant at the 0.01 level (2-tailed). F1 represents integrative and instrumental motivation; F2 represents EFL learning experience and social influence.

Table 6: Regression Analysis

Predictor	Unstandardized Coefficients		Standardized Coefficients		
	β	Std. Error	β	t	p
(Constant)	86.685	5.115		16.948	0
F1	3.842	1.637	0.337	2.347	0.02
F2	0.381	1.902	0.029	0.2	0.842
	F		9.773		
	p		<0.001		
	R ²		0.131		

Note: dependent variable: Achievement

Based on the data in Table 6, integrative and instrumental motivation significantly influenced achievement ($p = 0.02$, $\beta = 3.842$), indicating that a one-unit increase in this type of motivation is associated with a 3.842-unit increase in achievement. In contrast, EFL learning experience and social influence showed no significant impact on achievement ($p = 0.842$). The regression model significantly predicted achievement ($F = 9.773$, $p < 0.001$), explaining 13.1% of the variance ($R^2 = 0.131$).

6. Discussion

The current study uncovered the relationship between four motivational factors (integrative motivation, instrumental motivation, EFL learning experience, and social influence) and language achievement among students at a very remote local high school in Zigui County, Yichang City, Hubei Province. Through EFA, only two latent variables were identified: (1) integrative and instrumental motivation, and (2) external factors, which included EFL learning experience and social influence from parents, peers, and teachers. Statistical results disclosed

two major finds: 1) hinterland rural high school students exhibited high level of motivation in all measured constructs; 2) the scales of integrative and instrumental motivation were powerful predictors of their overall achievement.

Descriptive data showed that students exhibited high levels of motivation for both subscales, with mean scores of 4.58 and 4.54, respectively. This finding aligns with previous studies that have reported language learners to be highly motivated during their learning process (Almasabi & Atamnah, 2025; Bai et al., 2025; Li & Zhang, 2021; Saputri & Hamzah, 2025). Specifically, the high mean scores for both integrative and instrumental motivation in this study are consistent with the findings of Almasabi and Atamnah (2025) and Saputri and Hamzah (2025), who noted that both constructs play a crucial role in English learning among tertiary-level and primary-level students. A possible reason for this high motivation may be attributed to students' strong performance on the Gaokao English exam ($M = 105.99$), which may have boosted their confidence and stimulated a desire to further explore the subject in the future. On the other hand, the high mean score for social influence, such as that from teachers, peers, and parents, suggests that these senior high school graduates experience strong external pressure in their L2 studies. This result is supported by studies emphasizing the significant impact of environmental factors on students' motivation (Bai et al., 2025), and their language learning experience (Li & Zhang, 2021). In the current study, a closer look at the questionnaire reveals that item 16 ("My parents feel that it is very important for me to learn English") and item 20 ("My teachers have really encouraged me to study English harder") received particularly high mean scores of 4.96 and 5.10, respectively. A possible reason for this may lie in the social and educational context of rural areas, where the majority of parents prioritize English learning as a means to pursue upward mobility and access better opportunities. In such environments, students may experience heightened expectations from their families and communities, who view academic success as a crucial pathway out of their current socioeconomic limitations.

In terms of the relationship between motivation and achievement, the results revealed that both integrative, instrumental motivation, and external social influence were closely related to achievement, which is also in line with many previous studies (Al-Hoorie, 2017; Dörnyei & Chan, 2013; Lamb, 2012; Li & Zhang, 2021; Liu & Thompson, 2018). The results indicated that the integrative motivation, instrumental motivation, and external social influence are great variables for rural high school graduates during their FL learning process.

Regarding the effect of the two latent constructs on FL achievement, the results were not entirely consistent with previous studies. The present study found that instrumental and integrative motivation significantly explained FL achievement, accounting for 13.1% of the total variance. This finding aligns with many previous studies (Gardner, 1985; Samad et al., 2012; Wei, 2007; Yu & Downing, 2012). However, external factors—including EFL learning experience and social influence (e.g., parents, teachers, and peers)—did not directly contribute to rural high school students' achievement. This contradicts several earlier studies

that identified learning experience as a strong predictor of FL achievement (Li & Zhang, 2021; Liu & Thompson, 2018) and highlighted the influence of parents and teachers as major motivators during the FL learning process (Butler, 2014; Özyıldırım, 2024; Yamamoto & Holloway, 2010). The findings revealed that although high school graduates experienced pressure from external sources, they did not internalize these influences as motivation in the English learning process. Instead, they may have studied English mainly to fulfill the expectations of parents, teachers, and peers. This is understandable within the context of traditional Confucian culture, which emphasizes social responsibility and the importance of being a filial and meaningful member of the family and society (G. Hu, 2003; Ma et al., 2021). Moreover, while the mean scores indicated that students were highly influenced by external factors, the regression analysis showed that these influences had no direct impact on FL achievement. This could be because the students were under excessive pressure, and the resulting negative effects—such as demotivation or increased anxiety—may have ultimately hindered their performance.

However, there are some limitations. First, all participants were top candidates for the Gaokao exam in the local area, meaning their English proficiency is higher than that of students in other schools in the region. Therefore, the findings cannot be generalized to represent the language achievement of the entire region, nor do they reflect the broader situation of rural areas across China. Additionally, the four variables examined in this study accounted for only 13.1% of the variance in FL achievement among high school graduates. This suggests that future research could consider including additional variables or exploring other factors that may influence language achievement. Another important limitation is that the study employed a cross-sectional design and included limited motivational constructs, which may not fully capture the complexity of the phenomenon. This limitation is understandable, as most high school graduates were no longer in their hometowns at the time of data collection (many had temporarily relocated for work or travel) making it difficult to conduct interviews or gather more in-depth data. Despite these limitations, studying the language performance of high school students in rural China remains a valuable and necessary area of inquiry, especially given the widening gap between rural and urban education.

7. Conclusion

The study explored motivational orientations and the relationship between each motivational variable and FL achievement among high school graduates in a remote rural area. The findings revealed that students in this area were positively motivated, both internally and externally. Correlation analysis indicated that the two latent subscales were significantly associated with students' FL achievement. However, only instrumental, and integrative motivation directly predicted FL achievement, whereas learning experience and social influence did not contribute to Gaokao English scores. The study offered several pedagogical implications for high school education in rural regions of China. However, considering that the target participants were all drawn from a single high school, that the sample size was

limited, and that the range of motivational subscales was restricted, future research is recommended to include larger and more diverse samples across multiple rural schools. Additionally, longitudinal designs and the inclusion of more related variables could be adopted to capture the dynamic nature of motivation over time and to achieve a more comprehensive understanding of rural students' motivational beliefs. Such efforts would not only enhance the generalizability and robustness of the findings but also provide valuable implications for educators, policymakers, and local educational bureaus seeking to design more targeted and effective interventions to support English language learning in rural contexts.

Conflict of interests

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