

Perceived Self-Efficacy and Listening Comprehension Performance among Chinese University Students of Spanish as a Foreign Language (ELE)

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Abstract

Researchers recognize perceived self-efficacy as a key factor influencing second language learning. However, little is known about its specific relationship with listening comprehension among Chinese university students learning Spanish as a foreign language (ELE). This study addresses that gap by examining the association between self-efficacy and listening performance in ELE. A correlational-descriptive design was applied. Self-efficacy was measured using a validated questionnaire that showed strong internal consistency ($\alpha = 0.951$), further supported by descriptive statistics and exploratory factor analysis, which revealed a unidimensional structure explaining 68.19% of the total variance. Listening comprehension performance was assessed using standardized DELE tests, with mean scores declining progressively across proficiency levels, from A1 ($M = 89.10$) to A2 ($M = 68.41$) to B1 ($M = 57.00$), and with greater variability at the higher levels. Ninety-seven students participated in the study. Spearman's correlation analysis indicated no statistically significant association between self-efficacy and listening comprehension performance at any proficiency level. Findings suggest that contextual and individual variables, rather than self-perceived competence alone, may shape listening outcomes, and they highlight the value of integrating innovative, confidence-building approaches into ELE instruction.

Keywords

Self-Efficacy, Listening Comprehension, Spanish as a Foreign Language (ELE), Chinese University Students

1. Introduction

The acquisition of Spanish as a Foreign Language (ELE) by Chinese-speaking students depends on several linguistic and psychological factors. Chinese and Spanish differ notably in their phonological and prosodic systems. These differences can create substantial difficulties during the learning process (Ding & Wang, 2023). Such difficulties often affect different language skills. Oral production, listening comprehension, and vocabulary development are among the most affected (Sugimoto, 2021). Beyond linguistic differences, students' first and second languages can moderately influence their proficiency level. They can also shape perceived self-efficacy and the type of achievement students attain (Goetze & Driver, 2022). Self-efficacy, in turn, influences how students respond to demanding listening activities. This response ultimately affects their performance in such tasks (Fryer et al., 2025).

Zhou and Thompson (2023) show that listening comprehension difficulties vary according to cognitive stage and competence level. They argue that self-efficacy predicts such difficulties better than competence itself. These results carry relevant pedagogical implications for English as a Medium of Instruction (EMI), as well as for linguistic support programs during transition stages (Zhou & Thompson, 2023).

2. Literature Review

The study of self-efficacy has led to the creation of measurement instruments across various domains. One example is the Motivated Strategies for Learning Questionnaire (MSLQ), developed by Pintrich et al. (1993). Others include the Questionnaire of Self-Efficacy in Foreign Language Learning (QSL), an 11-item scale developed by Kutuk et al. (2022), and the Questionnaire of English Self-Efficacy (QESE) by Wang et al. (2014). Developed with 32 items to measure EFL learners' self-efficacy beliefs (Wang & Sun, 2024). These instruments are among the most widely used, particularly in the teaching of English as a second language (Wang & Sun, 2024). This situation represents both a gap and an opportunity for the design of instruments measuring self-efficacy in ELE, one that could support the development of innovative educational programs and didactic strategies.

Listening comprehension is a key competence for effective communication among Spanish language teachers in Chinese universities (Cecilia-Tumino et al., 2020), as well as for cultural integration between China and Spanish-speaking countries. It is therefore necessary to understand how self-efficacy manifests and influences this skill within a cultural context whose characteristics may offer new perspectives in the psychology of language learning (Ding & Wang, 2023).

Findings from similar contexts show that metacognitive practice cycles (MPCs) can improve listening comprehension among Chinese students learning English, although they do not necessarily enhance listening self-efficacy (Pei et al., 2023). Tsang & Yeung (2024), by contrast, found that self-efficacy significantly predicts all dimensions of EFL competence, while task value predicts only vocabulary and word reading. Self-efficacy also mediates the relationship between task value and certain competence areas, showing greater predictive power for lower-order skills

such as vocabulary and word reading than for reading comprehension (Tsang & Yeung 2024).

Other studies in China's EFL context report similarly relevant results. Teaching methods based on strategy instruction or self-regulated learning can positively affect listening self-efficacy, particularly when listening strategies are involved (Xu et al., 2021). Anxiety has also been identified as a factor that negatively affects self-efficacy, especially in listening comprehension tasks (Teng & Ma, 2024). Related difficulties often stem from speech rate, accent, vocabulary, and insufficient listening training (Wang et al., 2021).

The deepening of cultural, academic, and economic ties between China and Spanish-speaking countries, driven by the Belt and Road Initiative, makes training Chinese professionals in Spanish a growing priority (Guanche, 2022). Strong listening comprehension skills are central to this goal. In today's China, these efforts increasingly intersect with artificial intelligence, as intelligent virtual learning environments introduce new variables into language education (Kittredge et al., 2025). This study aims to support the development of students better prepared for intercultural communication, while strengthening cultural ties and mutual understanding between both regions.

Self-efficacy refers to individuals' beliefs in their own capacity to organize and execute the actions needed to achieve specific goals (Bandura, 1997). It is considered one of the strongest predictors of motivation, self-regulation, and academic performance (Schunk, 2021). Higher self-efficacy has been linked to greater academic performance, effort, persistence in the face of difficulty, and better emotional adjustment (Hong & Phan, 2020; Zhou, 2022). These effects extend to foreign language learning contexts and are associated with task engagement (Yamazaki & Hiver, 2025). Studies with university students have further demonstrated the transversal role of self-efficacy in wellbeing and personal achievement (Fryer et al., 2025).

Xu et al. (2021) and Goetze & Driver (2022) found that self-efficacy correlates significantly with listening performance and is associated with the metacognitive strategies of planning and monitoring that learners use in second language acquisition, which in turn affects their performance.

Listening comprehension in ELE requires real-time processing of both segmental and suprasegmental signals in order to extract overall meaning and relevant detail. This ephemeral nature increases attentional load and vulnerability to anxiety and low self-efficacy (Goetze & Driver, 2022). For Chinese-speaking students, prosodic differences between Mandarin, a tonal language, and Spanish, a stress-based language, add further challenges, distorting comprehension and generating anxiety (Shang & Elvira-García, 2022). Chinese students also tend not to perceive lexical stress consistently (Ding & Wang, 2023), and Spanish sentence intonation remains less stable for them (Shang et al., 2024a). This can significantly affect both comprehension and the interpretation of communicative intentions, such as sentence modality and information focus (Shang et al., 2024c).

These differences from the mother tongue matter for listening comprehension. Intonation and the placement of final syllable stress, for instance, may play a decisive role in how learners discriminate sentence type based on utterance length and comprehension. Shang confirms the existence of a complex integration mechanism in cross-linguistic intonation perception, one that weighs multiple prosodic cues simultaneously, and in which both listeners' linguistic background and the prosodic configuration of the stimuli must be considered when assessing non-native listening performance (Shang et al., 2024b).

Shang et al. (2024c) further show that Chinese students display differential patterns when interpreting intonation contours and sentence modalities in Spanish. These patterns vary by individual and by region within China. Difficulty perceiving tonal and prosodic structures, essential for identifying overall message intent, adds further complexity to the task (Shang & Elvira-García, 2022). In some Chinese regions, speakers are also unfamiliar with the sounds /t/, /d/, and /r/, which reinforces the need to account for individual differences when designing explicit didactic interventions.

Wei (2021), working with A2-level learners, found that the type of listening task, whether global, detailed, or inferential, can modulate processing and performance. This finding supports the design of gradual input sequences and strategic classroom support. Separately, a study of 1,340 EFL students across four Chinese universities found that learners report high achievement needs alongside low self-efficacy (Wang et al., 2024).

According to Siegel et al. (2025), instruction can shape students' comprehension in EMI contexts, and self-efficacy has been shown to predict oral comprehension difficulties better than language competence itself (Pei et al., 2023). Traditional teaching methods, which still prioritize grammar and memorization over active listening, limit authentic exposure to spoken Spanish and tend to heighten anxiety in listening tasks (Wang et al., 2021).

Bandura (1997) argues that self-efficacy directly influences motivation, persistence, and the adaptive use of strategies (Schunk, 2021). Other work points to a lack of integration between self-efficacy research and validated SLA theories (Fryer et al., 2025), which slows progress in understanding how effective learning happens and which socio-psychological factors, such as self-efficacy, can support it.

Following Tusianah et al. (2021), several factors tend to foster self-efficacy: a sense of fairness, well-organized activities, manageable stress levels, balanced workload, positive expectations, and satisfying learning experiences. Others tend to reduce it, including discrimination, persistent obstacles, lack of support, and overcrowded learning environments.

Students with higher self-efficacy in L2 listening tend to engage more readily with challenging and stimulating tasks (Xu et al., 2021). As their belief in achieving the task grows, anxiety tends to decrease, and they become better able to apply effective metacognitive strategies, which in turn helps them adapt to the learning environment and classroom activities (Pei et al., 2023).

Pei et al. (2023) argue that online listening practice centered on metacognitive strategies can meaningfully improve listening comprehension, even when it does not always raise self-efficacy directly. This suggests that intervention design plays a decisive role in activating the construct. Rezai et al. (2023), using metacognitive strategies as mediators in listening instruction, found a significant relationship between improved comprehension and learners' self-regulation. They argue that such practices help students build awareness of their own listening process and adjust more effectively when tasks become difficult.

Self-efficacy appears to grow as students successfully complete specific tasks using effective strategies, consolidating a cycle of competence, confidence, and outcome (Zhou & Thompson, 2023). Anxiety, however, remains an important factor in listening tasks specifically. Wang et al. (2021) found that Chinese students with high anxiety levels often experience reduced confidence in their linguistic abilities, which lowers their willingness to engage with tasks.

Taken together, the literature points to a clear need to understand the relationship between perceived self-efficacy and language skills (Sulca Quispe, 2024), particularly in second and third language learning, where contextual variables can shape how meaning is understood (Siegel et al., 2025). This raises the question of how self-efficacy may relate to listening comprehension performance in ELE specifically (Fan & Cui, 2024).

State the Problem and Hypothesis Setting

There is also a lack of validated instruments for measuring self-efficacy in ELE listening comprehension. Existing general EFL listening scales highlight how self-efficacy shapes performance (Harris, 2022), but instruments adapted specifically for Spanish and for the Chinese university context remain scarce.

From this analysis emerges the research problem addressed here: the lack of scientific evidence relating perceived self-efficacy to listening comprehension performance among Chinese university students learning Spanish.

1. Research Hypotheses

H1: Perceived self-efficacy is positively associated with listening comprehension performance in ELE.

H0: Perceived self-efficacy is not significantly associated with listening comprehension performance in ELE.

2. General Objective

To determine the relationship between perceived self-efficacy and listening comprehension performance in ELE among Chinese university students.

3. Specific Objectives

First. To design the Self-Efficacy in ELE Questionnaire, based on the Foreign Language Self-Efficacy Scale (FLSES) (Wang & Sun, 2024), English Self-Efficacy (QESE) Wang et al. (2014) and to analyze its reliability and internal consistency in the Chinese university ELE context.

Second. To determine students' listening comprehension performance in ELE

through the application of the Instituto Cervantes' global listening comprehension test, adapted to the online modality.

Third. To examine the association between perceived self-efficacy and listening comprehension performance across proficiency levels (A1, A2, and B1).

3. Research Methods

This research adopted a cross-sectional correlational-descriptive design with a quasi-experimental approach (Hernández-Sampieri, 2018). It was conducted between January and July 2025 at Hebei Normal University of Science and Technology (Qinhuangdao, China). The population consisted of 104 undergraduate students majoring in Spanish. From this population, an intentional sample of 97 participants was selected according to Hunsberger et al.'s (2022) criteria. Inclusion criteria required students to be enrolled in the first, second, or third year of the degree program, and to hold a Spanish proficiency level of A1, A2, or B1, as defined by the Common European Framework of Reference for Languages (CEFR). Since the sample was drawn from a single institution, this study is best understood as a pilot and pioneering initiative in its context, which is an acceptable approach according to Bujang (2024).

Perceived self-efficacy was assessed through a Spanish-adapted version of the Questionnaire of English Self-Efficacy (QESE) Wang et al. (2014). The instrument has demonstrated solid validity and reliability across listening, speaking, reading, and writing domains among foreign second language learners (Wang & Sun, 2024). The original 32-item QESE was adapted into an 11 item Spanish language version covering the four skills (listening comprehension (CA): items 1 - 4; reading comprehension (CL): items 5 - 7; oral production (PO): items 8 - 9; writing production (PE): items 10 - 11) for use with Chinese university students learning Spanish as a foreign language (ELE).

Perceived self-efficacy was assessed through an adaptation of the Foreign Language Self-Efficacy Scale (FLSES), an instrument that has shown solid validity and reliability in recent research on Romance languages (Wang & Sun, 2024). The instrument was designed around four theoretical subdimensions: listening comprehension (CA), reading comprehension (CL), oral production (PO), and written production (PE). The adapted version, contextualized for Spanish as a Foreign Language (ELE), was named the Self-Efficacy in ELE Questionnaire. Internal reliability was examined using Cronbach's alpha coefficient (Cronbach, 1951), along with mean frequencies, exploratory factor analysis, and Kendall's and Pearson's correlation coefficients.

For the implementation phase, participants were organized into three groups, differentiated by year of study and proficiency level. This grouping allowed the evaluation to be tailored to each group's linguistic competencies. Group A1 included first-year students at A1 level. Group A2 included second-year students at A2 level. Group B1 included third-year students at B1 level (see Table 1). The groups were homogeneous with respect to prior Spanish studies and exposure to

the language outside the classroom, as no participant reported previous formal instruction or regular contact with the language outside the university setting. This homogeneity allows the differences observed across groups to be attributed to the variable of interest (linguistic proficiency) rather than to unequal language exposure before or during the study. Mean age increased progressively across groups (19, 20, and 21 years for Group A1, A2, and B1, respectively), mirroring their organization by year of study. Data collection was carried out in compliance with international ethical standards for handling personal information.

Table 1. Sample characteristics regarding age, gender, prior Spanish studies, and exposure to the language outside the classroom.

Language Level by Academic Year	Total per Level	Age Mean	Female	Male	Previous Spanish Studies	Language Exposure Outside the Classroom
A1	32	19	27	5	None	None
A2	32	20	28	4	None	None
B1	33	21	27	6	None	None

Note. The sample consisted of Chinese students with no prior formal instruction in Spanish. For some participants, Spanish represents an L3, as they are proficient in English in addition to their native language. Language level in this table reflects students' academic year, grade placement (N = 97).

Listening comprehension performance was measured using standardized DELE tests (Instituto Cervantes, 2020). The initial task, which evaluates global comprehension, was selected for its relevance in identifying the main idea and communicative intent of a message. The test was administered on the Edupuzzle platform, chosen for its ability to integrate images and audio and to simulate an online exam environment.

Listening comprehension performance was measured using standardized DELE tests (Instituto Cervantes, 2020). The initial task was selected because it evaluates global comprehension. This makes it particularly relevant for identifying the main idea and communicative intent of a message. Specifically, Task 1 of the Listening Comprehension test (Prueba 2) was used, drawn from the official DELE exam models for levels A1, A2, and B1. At the A1 and A2 levels, this task consisted of five short conversations, each played twice. Every conversation was linked to a question with three image-based response options (A, B, C). At the B1 level, the task consisted of six short announcements, also played twice. Each announcement was linked to a question with three text-based response options (a, b, c), in line with the original design of this task at that level.

The test was administered on the Edupuzzle platform. This platform was chosen for its ability to integrate images and audio, and to simulate an online exam environment. Since the original DELE materials are distributed as a PDF booklet with separate audio files, some adaptation was needed for online use. The audio files and corresponding images for each item were extracted from the official materials. Then, they were uploaded to Edupuzzle to build an interactive quiz for each level (A1, A2, and B1). Each quiz combined the original audio with the response options, images

for A1/A2, text for B1, in a single self-administered multiple-choice questionnaire. Scoring followed a 100-point scale, calculated automatically by the platform based on the number of correct answers out of the total items in Task 1. Students completed the test individually. The researcher imposed no time limit. Even so, platform logs showed that all participants completed the task without long pauses between responses, which suggests disciplined, uninterrupted administration.

Spearman's correlation coefficient, appropriate for nonparametric samples (Bujang, 2024), was used to examine the association between perceived self-efficacy and global listening comprehension performance, in order to test the study's hypotheses.

The Self-Efficacy in ELE Questionnaire, adapted from the Foreign Language Self-Efficacy Scale (FLSES) (Wang & Sun, 2024) English Self-Efficacy (QESE) Wang et al. (2014), used a five-point Likert scale (1 - 5) to assess four constructs: listening comprehension, reading comprehension, oral production, and written production. Interpretation ranges were as follows: 1.00 - 1.99, very low self-efficacy; 2.00 - 2.99, low; 3.00 - 3.99, moderate; 4.00 - 4.49, high; and 4.50 - 5.00, very high. Items 1 - 4 assessed listening comprehension (CA1 - CA4), items 5 - 7 assessed reading comprehension (CL5 - CL7), items 8 - 9 assessed oral production (PO8 - PO9), and items 10 - 11 assessed written production (PE10 - PE11).

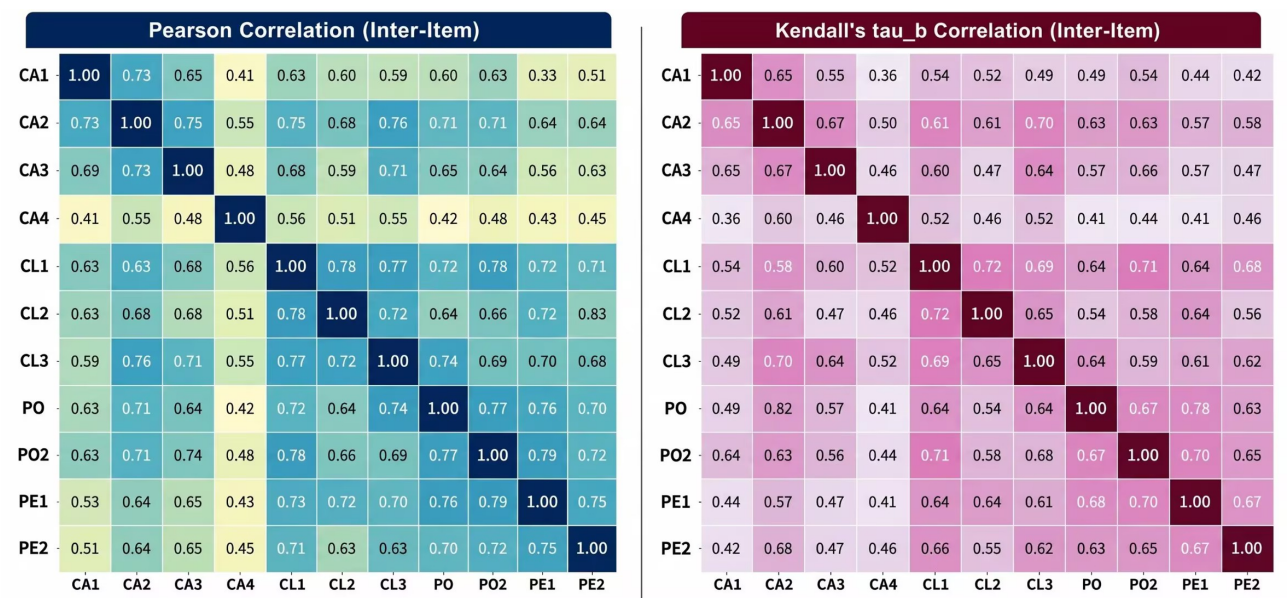
4. Discussion

Descriptive statistics and internal consistency were analyzed using the Statistical Package for the Social Sciences (SPSS). The questionnaire achieved a Cronbach's alpha of $\alpha = 0.951$, indicating excellent internal reliability according to George's (2003) criteria, which classify $\alpha \geq 0.90$ as excellent. This points to strong inter-item correlations and confirms the adequacy of the instrument for measuring self-efficacy in ELE as a unified construct. The obtained coefficient is close to that reported by Wang et al. (2014) for QESE ($\alpha = 0.97$) by Mills et al. (2007) for the FLSES ($\alpha = 0.91$; Wang & Sun, 2024), and is comparable to that of Wang et al. (2024) with Chinese learners of English ($\alpha = 0.92$). It also exceeds Magogwe & Oliver's (2007) findings in Botswana ($\alpha = 0.88$), further supporting the high reliability of the instrument in this research context. The standard deviations of the scale's dimensions ranged from 0.82 to 0.94, indicating moderate variability without extreme values (see Table 2).

Table 2. Descriptive statistics and interpretation of self-efficacy by dimension.

Dimension Assessed	Items	Mean (M)	SD	Item with Highest Mean	Interpretive Range (1 - 5)	Self-Efficacy Level
Listening Comprehension	1 - 4	3.26	0.82 - 0.94	CA1 (M = 3.55)	3.00 - 3.99	Moderate
Reading Comprehension	5 - 7	3.33	0.82 - 0.94	CL2 (M = 3.39)	3.00 - 3.99	Moderate
Oral Production	8 - 9	3.38	0.82 - 0.94	PO2 (M = 3.44)	3.00 - 3.99	Moderate
Written Production	10 - 11	3.45	0.82 - 0.94	--	3.00 - 3.99	Moderate

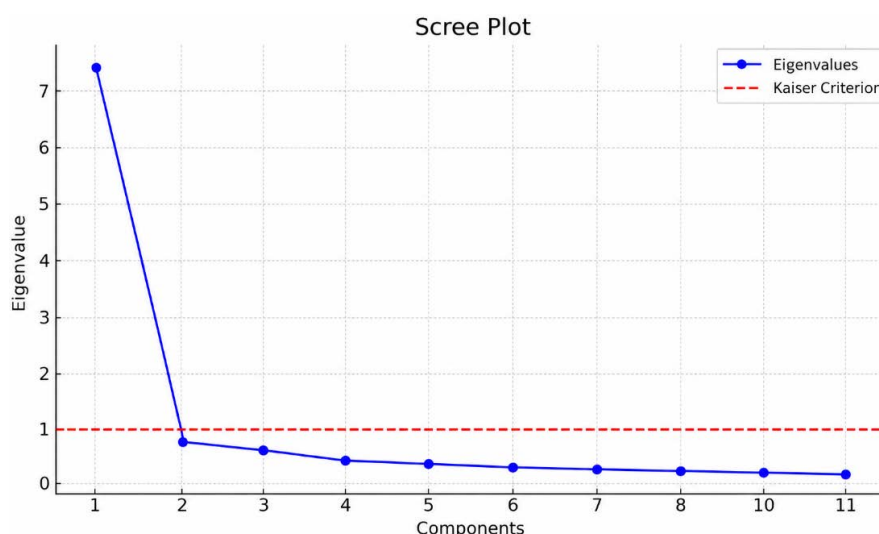
Inter-item correlations (Pearson and Kendall), following Bujang’s (2024) criteria, revealed strong internal coherence ($p < 0.01$), with significant associations both within and across dimensions: CA2 - CA3, $r = 0.747$; CL1 - CL2, $r = 0.780$; PO1 - PO2, $r = 0.768$; as well as cross-dimension links such as PO2 - PE1, $r = 0.788$, and CL1 - PO2, $r = 0.780$. These results support an integrated perception of linguistic self-efficacy, consistent with Bandura (1997) and Wang et al. (2024), who emphasize the tendency toward moderate self-evaluation, particularly in contexts with limited exposure to the target language outside the classroom (see Figure 1).



Note: Variable codes. CA1-CA4: Listening Comprehension (4 items) CL1-CL3: reading Comprehension (3 items). PO-PO2: Oral Production (2items). PE1-PE2: Written Production (2 items). Person correlation coefficient (left) reflects linear relation between items. Kendall’s tau_b coefficients (right) reflect ordinal associations between items. Value ranges from -1 to +1, higher values indicate stronger positive associations.

Figure 1. Intra-item Pearson correlation and Kendall’s nonparametric coefficient for the self-efficacy in ELE questionnaire.

The results of the analysis demonstrate an adequate alignment between the questionnaire items and the theoretical constructs, with high consistency across the subscales. This coherence supports the existence of a general factor of linguistic self-efficacy, in line with Mills et al. (2007), who reported strong correlations among different language skills. The exploratory factor analysis, based on principal components, confirmed a unidimensional structure that explained 68.19% of the total variance, with eigenvalues greater than 1 (Kaiser, 1960), communalities ranging from 0.392 to 0.807, and factor loadings between 0.626 and 0.898. Significant correlations among items ($p < 0.01$), both intra- and inter-dimensional, such as CA2-CA3, $r = 0.747$, and OP-WP1, $r = 0.788$, further reinforce the internal validity of the instrument, consistent with previous findings by Wang and Sun (2024) (see Graphic 1).



Graphic 1. Factor analysis: descriptive statistics of the Spanish as a foreign language self-efficacy questionnaire.

The exploratory factor analysis revealed a different pattern. Based on principal components, it confirmed a unidimensional structure. Only the first component exceeded the Kaiser criterion of 1 (Kaiser, 1960), with an eigenvalue of 7.501. This single component explained 68.19% of the total variance. Communalities ranged from 0.392 to 0.807, and factor loadings ranged from 0.626 to 0.898. The scree plot supports this finding. It shows a clear elbow after the first component, followed by a sharp drop and a flat trajectory across the remaining components (see **Graphic 1**). Significant correlations among items ($p < 0.01$) reinforce this pattern. These correlations appear both within and across the proposed dimensions. For example, CA2 - CA3 ($r = 0.747$) and PO-PE1 ($r = 0.788$) show similarly strong associations, despite belonging to different theoretical subdimensions. Taken together, these results indicate that, empirically, the scale measures a single, coherent construct of general self-efficacy, rather than four separable skill-specific factors. This is consistent with previous findings by Wang et al (2014).

Given this unidimensional behavior, the four listening comprehension items (CA1 - CA4) were used as the specific self-efficacy measure to test the main hypothesis (H1). Which links listening self-efficacy directly to listening comprehension performance. Two reasons support this choice. First, all four CA items loaded consistently onto the general factor (loadings between 0.626 and 0.874). This confirms they are valid indicators of the same underlying construct as the rest of the scale, not an isolated or spurious subdimension. Second reasons, focusing on the items that specifically ask about students' confidence in understanding spoken Spanish ensures conceptual and content alignment between the predictor (listening self-efficacy) and the criterion (listening comprehension score). Using the total scale score instead, which includes items unrelated to the skill tested in H1, would have diluted this specific relationship.

To examine the listening comprehension performance test, descriptive statistics

(means and standard deviations) were calculated using the combined scores of the A1, A2, and B1 levels. This global approach was adopted to address the limitations of small sample sizes within each level (see **Table 3**).

Table 3. Descriptive statistics of the listening comprehension performance test.

Listening Comprehension	N	Minimum	Maximum	Mean	Std. Deviation
A1 level	20	50.00	100.00	89.1000	14.57431
A2 level	29	17.00	100.00	68.4138	22.77611
B1 level	19	17.00	83.00	57.0000	22.36565
CA general	68	17.00	100.00	71.9118	23.88763
Valid N (listwise)	59				

Note. N corresponds to the number of students who completed the DELE listening comprehension test and were consequently classified into a CEFR level (A1, A2, B1) based on their performance ($n = 68$). This is a subsample of the total $N = 97$ students who completed the self-efficacy questionnaire, as not all students enrolled at each academic year level took the listening comprehension test. Valid N (listwise) = 59 reflects students with complete data across all variables considered in this analysis.

The descriptive results for the listening comprehension test showed a progressive decline in mean performance from A1 ($M = 89.10$, $SD = 14.57$), through A2 ($M = 68.41$, $SD = 22.78$), to B1 ($M = 57.00$, $SD = 22.37$). Interindividual variability was also higher at the upper levels. This suggests that listening comprehension becomes more demanding and more dependent on individual factors as proficiency increases. It should be noted that, given the parallel increase in mean age and academic level (19, 20, and 21 years for A1, A2, and B1). The proficiency level and age/academic year are partially confounded in this cross-sectional design. This implies that the observed decline in listening comprehension performance may reflect not only differences in linguistic proficiency but also factors associated with cognitive maturation or the accumulation of general academic experience typical of higher-level courses. Additionally, the marked gender imbalance (female majority across all three levels) precludes assessing whether sex acts as a moderating variable in this relationship. Results should therefore be interpreted as characteristic of a predominantly female sample. This pattern of greater variability at intermediate and advanced levels aligns with findings in the L2 acquisition literature. Individual differences, including linguistic knowledge such as vocabulary and other cognitive factors, have been shown to explain a substantial portion of the variance in listening comprehension. They also contribute to heterogeneous performance among learners. For instance, vocabulary knowledge and other individual factors play a key role in explaining variation in listening skills. The author consider that lower-proficiency students tend to be less affected by external factors and perceptual challenges than higher-proficiency students do. This is consistent with the lower dispersion observed at A1 compared to A2 and B1.

The Spearman correlation analysis (El-Hashash & Shiekh, 2022), conducted to examine the association between perceived self-efficacy (CA1 - CA4) and listening comprehension performance at levels A1, A2, and B1, revealed that no statistically significant correlations were found at any level, failing to support H1. For instance, at A1, a moderate negative correlation was observed for CA1, $\rho = -0.388$, $p = 0.091$, whereas at A2 and B1 the correlations were low or close to zero.

Nevertheless, the self-efficacy items showed high inter-item correlations, such as CA1 - CA2, $\rho = 0.716$, $p < 0.001$, which indicates adequate internal coherence within the subscale. These results suggest that, although self-efficacy is a consistent construct, its relationship with performance may be mediated by contextual factors, such as anxiety (Goetze & Driver, 2022), familiarity with the test format, or prior experience (Bandura, 1997) (see Table 3).

The Spearman correlation analysis (El-Hashash & Shiekh, 2022), conducted to examine the association between perceived self-efficacy (CA1 - CA4) and listening comprehension performance at levels A1, A2, and B1. This analysis revealed that no statistically significant correlations were found at any level, failing to support H1. Correlation coefficients ranged from weak to moderate ($\rho = -0.388$ to 0.040) across all three levels. The 95% confidence intervals for all twelve correlations included zero, confirming the absence of a reliable association at any proficiency level (see Table 4).

Table 4. Spearman correlations between listening self-efficacy items questionnaire (CA1 - CA4) and listening comprehension by proficiency level.

Level	N (level)	Item	N (total)	ρ	p	95% CI
A1	20	CA1	97	-0.388	0.091	[-0.723, 0.094]
A1	20	CA2	97	-0.239	0.311	[-0.634, 0.254]
A1	20	CA3	97	-0.262	0.264	[-0.648, 0.231]
A1	20	CA4	97	-0.261	0.266	[-0.648, 0.232]
A2	29	CA1	97	-0.035	0.858	[-0.416, 0.356]
A2	29	CA2	97	-0.013	0.946	[-0.397, 0.375]
A2	29	CA3	97	0.040	0.836	[-0.352, 0.420]
A2	29	CA4	97	0.038	0.844	[-0.353, 0.418]
B1	19	CA1	97	-0.196	0.421	[-0.616, 0.310]
B1	19	CA2	97	0.016	0.948	[-0.465, 0.489]
B1	19	CA3	97	0.194	0.425	[-0.312, 0.614]
B1	19	CA4	97	0.166	0.497	[-0.338, 0.596]

Note: N (level) = number of participants per level used to compute each correlation. N (total) = total sample that completed the self-efficacy questionnaire (CA1 - CA4). 95% CIs were computed using the Fisher r-to-z transformation with the Spearman-specific standard error correction ($SE = 1.06/\sqrt{(N - 3)}$). No correlation was statistically significant at the $\alpha = 0.05$ level; all confidence intervals include zero.

The analysis by self-efficacy levels (high, moderate, low) in relation to listening comprehension performance (good, fair, poor) showed the following results. The correlation between high self-efficacy and good comprehension was positive but weak, $\rho = 0.185$, $p = 0.434$. The correlation between moderate self-efficacy and fair comprehension was positive but negligible, $\rho = 0.106$, $p = 0.687$. The correlation between low self-efficacy and poor comprehension was negative but weak, $\rho = -0.170$, $p = 0.530$. In all three cases, no statistically significant relationship was found, a result likely influenced by the small sample size within each subgroup.

Overall, the results suggest that self-efficacy levels do not exhibit a meaningful association with listening comprehension outcomes.

These null results, however, do not necessarily undermine the value of self-efficacy as a construct. Rather, they suggest that self-efficacy and actual performance may operate as partially independent systems. Bandura (1997) himself argued that self-efficacy predicts performance most reliably when the two are matched in specificity. In this study, the FLSES Self-Efficacy ELE questionnaire captures a general perception of listening ability, while the performance test measures execution on a single, time-bound task. This mismatch in specificity may help explain why the expected association did not emerge. It is also worth noting that self-efficacy is theorized to shape effort, persistence, and willingness to engage with a task, rather than technical execution at a given moment. Seen this way, a weak or absent correlation does not indicate that self-efficacy is irrelevant. It indicates that self-efficacy and performance are shaped by different underlying mechanisms, and that improving one does not automatically improve the other.

This interpretation is further supported by the pattern observed across skills. Listening comprehension showed the lowest self-efficacy scores among the four skills assessed (Wang et al., 2024), despite performance data showing that just over half of the students scored well or very well. This gap between self-perception and actual outcomes points to listening as a uniquely demanding skill from a psychological standpoint. Unlike reading or writing, listening does not allow for rereading or self-paced revision. It unfolds in real time, and this may heighten anxiety and lower confidence regardless of actual ability. This pattern is consistent with prior research on language anxiety (Goetze & Driver, 2022) and with studies on metacognitive calibration in L2 listening, which have repeatedly found that learners tend to misjudge their own listening ability more than other skills. Taken together, these findings suggest that contextual and affective factors, rather than perceived competence alone, play a central role in shaping listening outcomes. This has direct pedagogical implications. Interventions aimed at reducing listening anxiety and improving self-efficacy calibration may be valuable in their own right, independent of any immediate gains in test performance.

5. Conclusion

Overall, this study found that Chinese university students learning Spanish as a foreign language report moderate levels of self-efficacy across all four skills, with

writing rated highest and listening comprehension rated lowest. Performance data partially mirrored this pattern, since only about half of the students achieved good or very good scores in the listening test, while the rest scored fair or poor. However, no statistically significant correlation was found between self-efficacy and listening comprehension performance at any proficiency level. This indicates that, in this sample, students' beliefs about their own ability do not directly predict how well they actually perform on a listening task.

This lack of correlation should not be read as a weakness in the self-efficacy construct itself. Instead, it points to self-efficacy and performance as related but distinct dimensions of language learning, each shaped by different factors. Performance appears to depend more on linguistic knowledge, cognitive processing, and task-specific conditions, while self-efficacy seems to be shaped by prior experience, anxiety, and general confidence in the language. This distinction matters pedagogically. Interventions that focus only on improving listening skills may leave the anxiety and low self-perception surrounding this skill untouched. A more effective approach would likely combine skill-based instruction with strategies aimed at building learners' confidence, particularly around listening, given its uniquely demanding and real-time nature. Future research with larger samples per proficiency level would help clarify whether these patterns hold more broadly, and whether specific factors, such as test anxiety or exposure outside the classroom, mediate the relationship between self-efficacy and performance.

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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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