

## International Theory and Practice in Humanities and Social Sciences



2025 Volume2, Issue3 ISSN 3078-4387

# Unraveling Online Chinese Language Learning Anxiety Among South American Learners: Exploring the Influencing Factors

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#### **Article Info**

Accepted:21 January 2025

#### Keywords:

Anxiety; Chinese language learning; South America; Online teaching

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http://doi.org/10.70693/itphss.v2i3.314

#### Abstract

**Purpose:** This study aims to uncover the primary factors contributing to online Chinese language learning anxiety among learners in South America, investigate how anxiety differs across groups with varying backgrounds, and provide empirical evidence to inform the optimization of Chinese language teaching strategies and cross-cultural instructional practices.

**Methodology:** Data were gathered via an online questionnaire, yielding 182 valid responses. Descriptive statistical analysis, correlation analysis, and multiple linear regression models were employed, complemented by subsample regression analyses to assess the impact of key variables on Chinese language learning anxiety.

**Results:** The findings indicate that perceived learning ability and age each exert a significant positive impact on anxiety, whereas higher perceived learning achievement and perceived importance can effectively alleviate it. Further subsample regression analysis shows that learners with Chinese heritage differ from those without such heritage in terms of what drives their anxiety, especially with regard to age, perceived difficulty, and perceived importance.

**Conclusion:** Emphasizing real-world applications of Chinese, systematically addressing challenges related to tones and characters, and enhancing interactive engagement are all crucial steps to alleviate anxiety and foster more positive learning experiences in online settings.

## 1. Introduction

In recent years, the deepening of globalization has substantially heightened the visibility of Chinese in international communication and collaboration. On the one hand, China's expanding influence in the global economic and political arenas has spurred a rising global demand for learning Chinese. In South America—an emerging market whose ties with China in trade, investment, and infrastructure are growing annually—the need for personnel proficient in Chinese has likewise surged (Nowak, 2021). Consequently, an increasing number of South American learners have embarked on the study of Chinese, regarding it both as a means to enhance personal competitiveness and as a bridge to deepen intercultural engagement.

Simultaneously, since the onset of the COVID-19 pandemic, online teaching methods have been adopted more widely and rapidly than ever before. Although online courses, virtual

classrooms, and multimedia-based learning offer flexible formats unrestricted by time or location, they also impose fresh challenges and pressures. Frequent technical glitches, unstable internet service, and reduced face-to-face interactions can all intensify learners' feelings of anxiety and uncertainty. Even as pandemic-related restrictions have eased in many areas, educational institutions worldwide continue to deploy and expand these online modalities, given the convenience and global reach that virtual platforms provide. This situation is especially pronounced in South America, where disparities in digital infrastructure and educational resources render the online Chinese learning experience more diverse and variable for individual learners.

Within the broader research on foreign language education, "Foreign Language Anxiety" (FLA) has consistently drawn high levels of attention. A substantial volume of research indicates that language learners frequently experience communication apprehension, fear of negative evaluation, and test anxiety, all of which may trigger tension, silence, or avoidance in class. These emotional responses can hinder cognitive processes, lower learning efficiency, and erode learners' self-confidence on social and emotional levels (Horwitz et al., 2010; Luo, 2013; Luo, 2018). The Foreign Language Classroom Anxiety Scale (FLCAS) has been extensively utilized to measure anxiety (Piniel & Zólyomi, 2022; Khreisat, 2024; Zhang, 2024; Rama et al., 2024). Nevertheless, some researchers question whether applying FLCAS directly to Chinese learners can capture the added pressures posed by Chinese's tonal system and logographic script. It has been suggested that mastering tones and characters is often a primary challenge for Chinese learners; hence, a scale that does not incorporate these unique elements might underestimate or misrepresent real anxiety levels (Luo, 2014).

Meanwhile, although foreign language anxiety is now a major topic in second language acquisition and foreign language pedagogy, studies focusing specifically on anxiety in Chinese language learning have only recently started to increase, primarily concentrating on student populations in North America, Europe, or Asia (Hurd, 2007; Er, 2015; Sung & Ko-Yin, 2019). In South America, with its culturally heterogeneous settings and intricate linguistic environment, there remains a dearth of systematic analyses on the anxiety that learners encounter when studying Chinese. Because South American students often possess multiple first or second languages (such as Spanish, Portuguese, or various indigenous languages), the difficulties they face in pronunciation, writing, and cultural adaptation may diverge from those in other regions. Moreover, inconsistencies in internet infrastructure, availability of online teaching resources, and the level of instructional expertise across South American countries can further complicate and destabilize online Chinese teaching, thus influencing learners' anxiety levels and its underlying factors in profound ways.

Against this backdrop, investigating online Chinese language learning anxiety in South America has multiple benefits: it not only addresses gaps in the scholarly literature regarding geographic and demographic contexts but also delivers targeted insights for local and international Chinese instruction. Such research can further enrich the theoretical framework of foreign language anxiety and assess or refine the reliability of established instruments within the context of Chinese pedagogy. Due to the increasingly close economic relationship between South America and China, and the resultant need for professionals competent in Chinese, coupled with the enduring prevalence of online education, examining the anxiety of Chinese learners in this region and clarifying the variables that influence it has become a pressing task. Therefore, this study focuses on Chinese learners in multiple South American countries, employs a measurement instrument attuned to Chinese-specific teaching nuances, and seeks to identify the main antecedents of online Chinese language learning anxiety, highlighting distinctions between

## 2. Literature Review

#### 2.1 Foreign Language Anxiety

Anxiety is a prototypical emotional condition often characterized by restlessness, worry, and unease regarding possible future threats. Unlike fear—which is linked to immediate or imminent threats—anxiety tends to target what lies ahead and remains uncertain. It frequently manifests through physical and psychological responses such as muscle tension, irritability, breathing difficulties, nausea, and challenges with focus (Julian, 2011; Craske et al., 2017; Crocq, 2015).

Horwitz et al. (1986) initially introduced the notion of foreign language anxiety, describing it as a negative emotional reaction that language learners exhibit in particular learning situations, touching on their self-image, beliefs, affect, and behaviors. They further broke it down into three categories: communication apprehension, fear of negative evaluation, and test anxiety, to aid researchers and educators in recognizing and interpreting diverse forms of anxiety. In order to quantify foreign language anxiety, they developed the now widely used instrument known as the Foreign Language Classroom Anxiety Scale (FLCAS). This and other related scales have been applied extensively across multiple empirical investigations (Piniel & Zólyomi, 2022; Khreisat, 2024; Zhang, 2024; Rama et al., 2024).

Nevertheless, the universal applicability of FLCAS has been questioned by some. Luo (2014) suggests that FLCAS does not adequately integrate the unique attributes of different target languages; hence, employing it directly for Chinese learners might fail to account for the anxiety generated by Chinese's distinctive tonal system and its script, which unifies character form, sound, and meaning. In response, Luo has begun developing anxiety scales specifically for students of Mandarin or Chinese as a foreign language, aiming to achieve a more accurate reflection of learners' psychological experiences with Chinese.

From an empirical standpoint, anxiety can induce tension, fear, and worry in foreign language learning, expressed through signs like classroom reticence, increased heart rate, and physical discomfort (Argaman & Abu-Rabia, 2002). Such anxiety can dampen learners' self-confidence, impede their learning productivity, and detrimentally impact academic performance, cognitive processes, social engagement, and emotional well-being (Horwitz et al., 2010; Luo, 2013; Luo, 2018). In second- and foreign-language learning, anxiety has consistently been recognized as one of the principal impediments, drawing sustained scholarly attention over the past thirty years.

In relation to Chinese language instruction, features like tonal distinctions and a logographic character system place additional demands on those accustomed to alphabetic scripts or educational systems wherein English prevails (Luo, 2011). Consequently, empirical studies specifically addressing anxiety among Chinese language learners have gained traction recently, focusing on how the particularities of Chinese may heighten different kinds of anxiety (Luo, 2018; Yao et al., 2022). Nevertheless, the overall quantity of relevant research remains modest, limiting our deeper, more organized understanding of how anxiety unfolds among Chinese learners in various cultural and geographical contexts.

It should also be noted that a significant body of work (Huang et al., 2024; Almotiary, 2022; Zambak, 2016; Umisara et al., 2021; Ali & Anwar, 2021) reveals that foreign language anxiety is prevalent across a wide range of linguistic settings, learner age groups, and proficiency levels, with approximately one-third of language learners encountering moderate or high anxiety (Horwitz, 2001). Consequently, exploring anxiety in different language contexts and learning phases is both broadly relevant and highly instructive for practices in specific linguistic fields.

## 2.2 Potential Influencing Factors of Foreign Language Anxiety

Anxiety in foreign language contexts can emerge from an array of factors, encompassing individual attributes as well as broader environmental and societal dimensions. This section synthesizes existing scholarship on the main contributors to foreign language anxiety.

#### 2.2.1 Motivation

Motivation is widely regarded as an essential psychological element influencing language-learning outcomes; it also correlates strongly with anxiety (Phillips, 1992). Liu and Huang (2011) identified a pronounced negative correlation between motivation and anxiety, revealing that learners with high motivation and strong determination to learn are more apt to experience reduced anxiety. In work on Japanese university students, Carreira (2006) found analogous results: learners driven by practical needs who gain cognitive fulfillment in their studies tend to exhibit lower levels of language anxiety. Yan and Horwitz (2008) stress that the intricate interplay between motivation and anxiety warrants deeper examination, especially in Chinese language contexts where sociocultural demands could have varied implications for anxiety.

#### 2.2.2 Age

Some inquiries into the nexus between age and language anxiety suggest that as learners mature, their anxiety levels rise during language tests or in the classroom (Er, 2015). Research in Turkey revealed that younger children typically confront less foreign language anxiety, whereas older pupils present higher degrees of stress and apprehension, possibly stemming from adults' expanded social obligations, academic or job pressures, and heightened self-standards (Lileikienė & Danilevičienė, 2016).

## 2.2.3 Perceived Learning Achievement

Considerable evidence shows that learners' subjective views of how well they are performing provide greater explanatory power for forecasting anxiety than their objective test scores or language proficiency levels (Cheng, 2002). MacIntyre et al. (1997) observed that learners who rate their own language skills favorably show lower anxiety. By contrast, a learner might struggle with high anxiety if they adopt a negative perception of their abilities, even if their objective achievements are by no means subpar.

## 2.2.4 Perceived Difficulty

Students' impressions of how challenging a target language is can substantially affect their emotional states in the learning process. Research has found that anxiety levels differ depending on how difficult learners perceive a language to be (Le, 2004). Saito et al. (1999) compared reading-related anxiety among students of Japanese, Russian, and French, concluding that anxiety was highest for Japanese, then French, and lowest for Russian. In Chinese language settings, the multifaceted demands of tonal accuracy and character writing may accentuate anxiety (Le, 2004).

## 2.2.5 Perceived Learning Ability

Work by Ganschow and Sparks (1991) points to students' appraisals of their own aptitude for language learning as an integral determinant of their anxiety. Luo (2018) also showed a significant negative link between this self-perceived capacity and foreign language anxiety, reinforcing the idea that learners with a dimmer view of their language-learning talents are more

prone to experiencing intense anxiety.

## 2.2.6 Perceived Importance and Self Expectation

The degree to which learners acknowledge the significance of the target language, alongside their self-imposed achievement goals, can also deeply shape anxiety (Luo, 2011). If a learner believes Chinese will be critical for their personal or professional growth, or if their performance benchmarks far surpass their current achievements, they may become more vulnerable to anxiety.

## 2.2.7 Additional Contributing Factors

Beyond the central factors of motivation, age, self-belief, and language difficulty, other determinants—ranging from teacher behaviors and classroom culture to broader social and cultural influences—can heighten or moderate anxiety.

For example, if instructors maintain a harsh or aloof demeanor, or if peer interactions are unsupportive, learners may experience elevated levels of tension (Weda & Sakti, 2018; Effiong, 2016). Peer mockery, class composition (including gender ratios), and familiarity with classmates can also influence how learners feel and behave in class (Zhang & Lai, 2024; Fındıklı & Büyükkarcı, 2023). Societal and cultural contexts merit consideration as well: Almotiary (2022) found that Saudi women studying abroad in the United States felt heightened levels of insecurity and anxiety in light of their distinctive cultural backgrounds. Another study by Baroi et al. (2020) in Bangladesh showed that family environments and social status can strongly affect language learning anxiety.

Likewise, anxiety may derive from identity issues or cultural clashes, such as fears that adopting the new language will detract from one's original sense of self. Tanveer (2007) highlights that language anxiety can stem from either personal self-awareness or from broader social and cultural divergences, such as power imbalances in communication. A meta-analysis by Zhou et al. (2023) of 37 studies encompassing 26,589 students discovered a significant negative correlation between foreign language anxiety and self-efficacy across a variety of learning conditions. Chen (2024) also posits that "expectancies" and "task value" are inextricably associated with foreign language anxiety.

#### 2.3 Online Foreign Language Learning Anxiety

With technological integration on the rise in education, online instruction has evolved into an indispensable medium for foreign language learning. Nonetheless, as it differs from face-to-face teaching in terms of interactive patterns, learning atmosphere, and teacher-student rapport, it inevitably influences learners' emotional health (Zhang, 2024). Online anxiety can be viewed as "environment-based anxiety," frequently connected to excess information, technological malfunctions, and unpredictable interactions online (Wang & Zhang, 2021).

Even before the pandemic, digital learning frameworks had garnered attention, although they were not yet widely adopted. The widespread expansion of remote learning in the post-pandemic era has magnified psychological challenges in language learning, including loneliness, frustration with technology, and decreased synchronous engagement. Through a longitudinal examination of distance learners at the UK Open University, Hurd (2007) noted that while these individuals share anxiety-related traits with their in-person counterparts, the paucity of in-person collaboration may intensify anxiety for some students. In a study of English as a Foreign Language learners in China, Peng et al. (2024) identified a positive link between anxiety and factors like weak learning drive, isolation from teachers and peers, and technical hurdles, whereas insufficient mutual communication had a negative link with anxiety.

Therefore, although online language instruction facilitates more flexible scheduling and a wider array of resources, it also poses new anxiety triggers, including internet connectivity issues, communication breakdowns, unfamiliarity with digital platforms, and the necessity for heightened self-regulation. These new challenges can accumulate atop traditional anxiety triggers, creating difficulties that impact learners' cognition, emotions, and behaviors.

From the body of existing research, it is clear that foreign language anxiety heavily burdens learning efficacy and personal satisfaction, while also intersecting with factors such as motivation, age, and self-assessments. Although the foreign language classroom anxiety scale has been extensively used, its direct application to Chinese learners remains a point of debate. Chinese's tonal and character-based features may accentuate adverse emotional responses that standardized scales might not sufficiently represent.

On another note, although studies about Chinese language anxiety have gained momentum, most still concentrate on learners in North America, Europe, or Asia. Investigation of South American Chinese learners—a group distinguished by its multilingual background—remains sporadic. These learners might display patterns of anxiety that differ from those of their counterparts in other regions. Consequently, they warrant close study.

At the same time, little literature has explored how these learners' anxiety might be influenced by online instruction. Technological and pedagogical factors in online learning may exacerbate or alleviate anxiety, but research examining these dynamics in a South American context is sparse. Hence, pursuing an in-depth look into South American Chinese language learners is vital for refining both anxiety-related theory and cross-cultural teaching practices, as well as for providing evidence-based insights into designing and optimizing online Chinese pedagogy.

## 3. Methodology

## 3.1 Data Sources

This study targeted Chinese learners in a number of South American nations (including Brazil, Peru, Colombia, Ecuador, etc). An online survey was conducted to encompass learners from varied educational backgrounds and stages, with both convenience and snowball sampling employed to recruit participants. The questionnaire was administered via WenJuanXin, a professional online platform widely used by enterprises and individuals for its user-friendly interface, data collection functionality, and cost-effectiveness. We distributed the survey link through social media channels (e.g., Facebook, WhatsApp) and email contacts at local educational institutions, encouraging respondents to circulate the link among peers who met the inclusion criteria. We acknowledges that relying on convenience and snowball sampling may affect the generalizability of our findings. Nonetheless, given the exploratory nature of this research and the resource constraints in South American contexts, this approach is suitable for gaining preliminary insights into online Chinese learning anxiety. Prior to completing the questionnaire, participants received a brief electronic statement explaining the study's purpose, the anonymous nature of the survey, and their voluntary participation and right to withdraw at any time. Only the research team had access to the raw data, which were stored and analyzed using anonymous identifiers to safeguard confidentiality. Furthermore, this study adhered to relevant international research ethics guidelines, including the basic principles found in documents such as the Declaration of Helsinki, thereby ensuring integrity in data collection.

#### 3.2 Variable Specification

The dependent variable is Chinese language learning anxiety, which was measured using Luo's

(2014) "Chinese Language Learning Anxiety Scale." This 16-item tool focuses on the anxiety experienced in listening, speaking, reading, and writing components of Chinese. Each item uses a five-point Likert scale (1 = "strongly disagree," 5 = "strongly agree"). Total scores range from 16 to 80, where higher scores reflect stronger Chinese language learning anxiety. Earlier studies have verified the high reliability and validity of this scale (Luo, 2014), with an internal consistency coefficient (Cronbach's alpha) reaching 0.90.

Building on the literature review and the specifics of online teaching, as well as drawing on Luo's (2014) conceptual framework, the study defines eight independent variables. Apart from age, which was measured as a continuous variable in years, the remaining variables were captured via five-point Likert scales:

- (1) Age: measured in years.
- (2) Motivation: gauges how strongly participants wish to learn Chinese.
- (3) Perceived learning achievement: captures learners' own assessments of their progress in Chinese.
- (4) Perceived difficulty: reflects learners' subjective sense of how challenging they find Chinese to be.
- (5) Perceived learning ability: measures how learners perceive their capability in studying Chinese.
- (6) Perceived importance: assesses respondents' perspectives on how critical Chinese learning is to them.
  - (7) Self expectation: represents students' aspirations regarding their mastery of Chinese.
- (8) Proficiency in online tools: indicates respondents' competence in operating online teaching platforms or applications.

#### 3.3 Data Analysis Methods

To thoroughly investigate the extent of Chinese language learning anxiety among South American learners and its potential antecedents, we first performed descriptive analysis to summarize the characteristics of the sample. Next, correlation analysis was conducted to identify the direction and intensity of the relationships between anxiety and each factor, which helps in understanding linear interactions before multiple regression. Because the dependent variable (Chinese language learning anxiety) is continuous, Ordinary Least Squares (OLS) multiple linear regression was utilized to simultaneously evaluate the impact of the eight independent variables. Considering that a sizeable portion of our sample consists of individuals with Chinese heritage, separate regression models were run for those with and without such heritage to see if the factors influencing anxiety differ significantly across subgroups. This subsample approach enhances our grasp of how cultural settings can shape the roots of anxiety and paves the way for tailored teaching interventions.

## 4. Results Analysis

#### 4.1 Descriptive Statistics

As depicted in Table 1, the dataset encompasses 182 Chinese learners from diverse South American countries. They have a mean age of 17.588, indicating a fairly youthful group. Their average motivation score is 4.159, suggesting robust enthusiasm for studying Chinese. Regarding perceived learning achievement, the mean score stands at 3.984 (SD=1.134), implying a moderately high level of confidence with considerable individual discrepancies. Similarly, the mean perceived difficulty score is 3.066 (SD=1.054), illustrating that while certain respondents

find Chinese notably challenging, the overall perception does not lean strongly towards extreme difficulty. Meanwhile, the mean for perceived learning ability is 4.027 (SD=1.134). Participants' perceived importance of Chinese was 4.093 on average (SD=0.962), revealing a widespread acknowledgment of Chinese's relevance to personal or career development. Likewise, their self expectation (4.214, SD=1.099) is relatively high, indicating that some respondents hold strong convictions and hope about mastering Chinese.

Furthermore, the average score for proficiency in online tools is 3.736 (SD=1.121), suggesting that many learners possess an intermediate to advanced competence in digital platforms, though age and technology access likely account for any individual differences in skill level. We also introduced a dummy variable denoting Chinese heritage, with a mean of 0.615 (SD=0.488), indicating that about 61.5% of the sample can claim full or partial Chinese ancestry. This trait may bear on their approach to language learning and cultural integration. Meanwhile, the dependent variable—Chinese language learning anxiety—ranges from 16 to 73, averaging 32.731 (SD=9.775). This implies a slightly below-midpoint anxiety level overall, with a subset of participants clustering at a higher anxiety range. These descriptive data offer preliminary insights into the profile of South American Chinese learners.

Table 1: Descriptive Statistical Analysis

Variables	Mean	S.D.	Min	Max	Obs
Age	17.588	9.049	8	46	182
Motivation	4.159	1.108	1	5	182
Perceived Learning Achievement	3.984	1.134	1	5	182
Perceived Difficulty	3.066	1.054	1	5	182
Perceived Learning Ability	4.027	1.134	1	5	182
Perceived Importance	4.093	0.962	1	5	182
Self Expectation	4.214	1.099	1	5	182
<b>Proficiency Online Tools</b>	3.736	1.121	1	5	182
Chinese Descent	0.615	0.488	0	1	182
Chinese Language Learning Anxiety	32.731	9.775	16	73	182

#### 4.2 Correlation Analysis

To delve deeper into the relationship between each independent variable and learners' Chinese language anxiety, Pearson correlation coefficients were computed (see Table 2). Notably, age correlates positively (r=0.310, p<0.01) with anxiety, implying that older participants might be more prone to greater anxiety in Chinese learning. Motivation is negatively associated (r=-0.213, p<0.01), underscoring that learners with stronger determination typically report less anxiety. Perceived learning achievement (r=-0.204, p<0.01) and perceived learning ability (r=-0.182, p<0.05) also reveal significant negative correlations with anxiety, indicating that students who give themselves higher marks on proficiency levels or learning progress are generally less anxious. By contrast, perceived difficulty (r=0.597, p<0.01) shows a strong positive link, hinting that individuals who see Chinese as very difficult are especially susceptible to elevated anxiety. Perceived importance (r=-0.318, p<0.01) similarly demonstrates a negative correlation, suggesting that acknowledging the utility of Chinese may lessen anxiety. Self expectation (r=-0.197, p<0.01) is likewise negatively correlated, whereas proficiency in online tools (r=-0.183, p<0.05) is marginally yet significantly negative, pointing to the potential value of digital fluency in alleviating or preventing anxiety.

Table 2: Correlation with Chinese Language Learning Anxiety

Variables	Corr.	Sig.
Age	0.310***	< 0.001
Motivation	-0.213***	0.004
Perceived Learning Achievement	-0.204***	0.006
Perceived Difficulty	0.597***	< 0.001
Perceived Learning Ability	-0.182**	0.014
Perceived Importance	-0.318***	< 0.001
Self Expectation	-0.197***	0.008
Proficiency Online Tools	-0.183**	0.013

<sup>\*</sup> *p* < .1, \*\* *p* < .05, \*\*\* *p* < .01

## 4.3 Regression Analysis

In the full-sample regression, the model exhibits a strong explanatory capacity (R<sup>2</sup>=0.522), meaning over half of the variance in Chinese language learning anxiety can be accounted for by these independent variables. The coefficient for age (Coef.=0.337, p<0.01) reaffirms that as individuals get older, they tend to report higher anxiety levels. Regarding negative predictors, perceived learning achievement and perceived importance display notable buffering effects against anxiety. Their coefficients, -1.003 (p<0.05) and -1.869 (p<0.01), respectively, show that individuals who hold more favorable opinions of their Chinese language progress or believe Chinese holds substantial importance for their personal endeavors report lower anxiety. Of special note, perceived difficulty has a large positive coefficient (Coef.=4.688, p<0.01), indicating that a stronger sense of difficulty can substantially heighten anxiety. Conversely, motivation, perceived learning ability, self expectation, and proficiency in online tools all yield negative but non-significant coefficients, suggesting that once the other factors are included, their independent effects on anxiety fail to reach statistical significance in this model (Table 3).

Table 3: Regression Results of Factors Affecting Chinese Language Learning Anxiety

Variables	Coef.	S.E.	Sig.
Age	0.337***	0.057	<0.001
Motivation	-0.471	0.490	0.338
Perceived Learning Achievement	-1.003**	0.464	0.032
Perceived Difficulty	4.688***	0.524	< 0.001
Perceived Learning Ability	-0.514	0.491	0.297
Perceived Importance	-1.869***	0.567	0.001
Self Expectation	-0.576	0.512	0.262
Proficiency Online Tools	-0.311	0.478	0.516
Cons	31.692***	4.790	< 0.001
N	182		
R-square	0.522		

<sup>\*</sup> *p* < .1, \*\* *p* < .05, \*\*\* *p* < .01

## 4.4 Subsample Regression Results

Further, we ran subsample regressions to compare those with Chinese heritage to those without (see Table 4). In the Chinese-heritage subgroup, perceived difficulty remains strongly significant (Coef.=4.159, p<0.01): learners who perceive Chinese as more complex also exhibit much higher

anxiety. Meanwhile, perceived importance takes on a significant negative coefficient (Coef.=-2.082, p<0.01), meaning that emphasizing the potential advantages of Chinese can temper anxiety for learners of Chinese descent. In this subgroup, no other factors were statistically significant. In contrast, among learners without Chinese ancestry, age (Coef.=0.317, p<0.05) and perceived difficulty (Coef.=4.960, p<0.01) stand out. This result confirms that older individuals in this group are more anxious and that perceiving Chinese as particularly tough remains a significant anxiety trigger. Although perceived importance is negatively signed, it was not statistically significant for non-Chinese participants; likewise, no other variables attained significance in this subgroup.

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Table 4: Regre		4 a	a are d N are (	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
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Variables	Chinese Descendant		Non-Chinese Descendant		
v arrables	Coef.	S.E.	Coef.	S.E.	
Age	0.283	0.238	0.317**	0.128	
Motivation	-0.586	0.610	-0.295	0.927	
Perceived Learning Achievement	-0.464	0.629	-1.281	0.903	
Perceived Difficulty	4.159***	0.643	4.960***	1.082	
Perceived Learning Ability	0.012	0.604	-1.097	0.929	
Perceived Importance	-2.082***	0.643	-1.887	1.273	
Self Expectation	-0.583	0.623	-0.841	0.992	
Proficiency Online Tools	-0.622	0.567	-0.003	0.995	
Cons	31.984***	5.477	34.193***	10.774	
N	112		70		
R-square	0.502		0.451		

p < .1, \*\* p < .05, \*\*\* p < .01

#### 5. Discussion

Drawing on survey data from several South American countries, this research tested how age, perceived difficulty, self-perceived learning achievement, and perceived importance contribute to anxiety in online Chinese language learning, while also evaluating whether Chinese heritage alters these dynamics. The results indicate that both age and perceived difficulty spur anxiety substantially, whereas self-perceived achievement and perceived importance hold back anxiety in the full-sample model. By contrast, once the model controls for the other variables, motivation, perceived learning ability, self expectation, and proficiency in online tools do not exhibit significant impacts. These findings are in line with Horwitz et al. (1986), who theorized that foreign language anxiety stems from multiple interwoven causes, and they also confirm Luo's (2014) viewpoint that learners' personal judgments and value orientations are pivotal drivers of foreign language anxiety—especially for languages like Chinese that lie far from learners' first-language experiences both linguistically and culturally.

Specifically, age correlates strongly and positively with anxiety for non-Chinese-heritage learners, potentially reflecting the greater external burdens adult students face, leading to a heavier anxiety load. This echoes Er (2015), who reported a similar connection in Turkish contexts, suggesting that a positive association between age and anxiety may extend across cultural domains. Additionally, perceived difficulty emerged as the most potent positive predictor, aligning with prior conclusions that Chinese's distinctive characters and tones pose formidable

challenges (Saito, 1999; Le, 2004). The online modality—where immediate feedback and immersive exposure are less readily available—may further intensify learners' impressions that characters and pronunciation constitute nearly insurmountable obstacles, elevating anxiety.

On the other hand, self-perceived learning achievement and perceived importance reduced anxiety in significant ways, consistent with MacIntyre et al. (1997). Learners who feel confident in their progress or who recognize the substantial worth of Chinese in their personal or professional spheres appear more resilient to anxiety. The subsample analysis additionally clarifies that, among individuals of Chinese descent, perceived difficulty and perceived importance drive anxiety in opposite directions. However, for non-Chinese participants, age and perceived difficulty remain dominant factors, whereas perceived importance is not strong enough to offset the anxiety linked to language complexity. This pattern dovetails with findings from Almotiary (2022) and Baroi et al. (2020), highlighting the unique imprint cultural backgrounds have on the roots of foreign language anxiety.

It is also worth noting that motivation, perceived learning ability, self expectation, and digital proficiency did not reach traditional significance thresholds, contrasting with certain prior studies (Liu & Huang, 2011; Carreira, 2006; Ganschow & Sparks, 1991). One plausible reason is that when learners perceive the distance between Chinese and their native language as large—both in linguistic structure and cultural context—they may focus predominantly on how tough they find the language and on tangible learning outcomes. Another explanation could be that online instruction may lack sufficient interactivity and individualized support, indirectly dampening the direct influence of motivation or online skills on anxiety. These insights open avenues for further exploration of cross-lingual and cross-cultural applications of foreign language anxiety theory, as well as point to a need for future inquiries into how motivation and digital competence evolve during the learning process.

#### 6. Conclusion

Focusing on Chinese learners in multiple South American countries, this study applied descriptive and correlational analyses, along with multiple linear regression (including subgroup-specific regressions), to examine the impacts of age, perceived difficulty, self-perceived learning achievement, and perceived importance on anxiety in online Chinese language learning. The findings confirm that age and perceived difficulty serve as notable positive drivers of anxiety, while self-perceived achievement and perceived importance provide clear inhibitory effects. Subgroup analyses reveal that learners with Chinese ancestry differ from those without it in terms of which factors matter most: among the former, perceived difficulty and perceived importance are decisive, whereas in the latter group, age and perceived difficulty play the leading roles.

Drawing on these results, we propose several strategies aimed at alleviating online Chinese language learning anxiety and enhancing overall educational outcomes. Addressing perceived difficulty is essential, given the centrality of tones and characters in shaping learners' negative perceptions of the language. Systematic, tiered training that gradually builds competence in these areas, combined with interactive digital games or online quizzes, can reduce the fear associated with pronunciation and writing. Real-time assistance through small-group or teacher-student Q&A sessions further ensures timely feedback and fosters a more supportive online environment. Equally important is highlighting the practical value of Chinese, as learners who recognize its broad applications for career development and global collaboration are less likely to experience anxiety. Instructors can embed real-world scenarios into the curriculum, invite professionals to share firsthand experiences, or showcase successful cross-cultural projects, thereby reinforcing

learners' sense of purpose and investment in mastering Chinese. Moreover, older adult learners, who may have work or family commitments, can benefit from flexible schedules, self-paced modules, or weekend catch-up sessions that ease potential conflicts between study and personal responsibilities. Offering basic technical training at the outset can help these learners navigate online platforms without undue stress, and peer-support communities can mitigate isolation by enabling participants to exchange coping strategies for digital challenges. To cultivate self-efficacy among all learners, subdividing broader course objectives into smaller milestones and systematically tracking progress can bolster feelings of achievement. Online dashboards illustrating improvements or completing lesson milestones reinforce learners' confidence and motivation, thereby diminishing the anxiety that stems from uncertainty about personal growth. By adapting these interventions according to learners' cultural backgrounds, whether they are of Chinese ancestry or not, instructors can more accurately address the diverse anxiety triggers that characterize online Chinese language learning in South America. This research thus contributes to a deeper understanding of the intersection between foreign language anxiety and online instructional contexts, while offering empirical support for implementing region-specific and interculturally informed teaching strategies. Nonetheless, certain limitations remain. The data rely on convenience and snowball sampling, potentially restricting the representativeness of our findings, and the cross-sectional design precludes capturing changes in anxiety over time. Future research could employ longitudinal or cross-national comparative studies, incorporating experimental teaching interventions, to further refine our understanding of these anxiety mechanisms and facilitate the allocation of resources toward targeted pedagogical improvements.

## Acknowledgments

The author(s) sincerely thank all the respondents who participated in the survey.

#### **Funding**

This research did not receive any funding from institutions or individuals.

#### **Conflict of Interest**

The author(s) declare no conflicts of interest.

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