

Language Anxiety in Online Learning Settings Among Chinese Graduate Students

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ABSTRACT

This study examined English-language anxiety and online English-learning engagement among Chinese graduate students enrolled in master's and doctoral programs at universities in Beijing during the Second Semester of AY 2025–2026. Using a descriptive–correlational quantitative design, data were collected via a validated online questionnaire that measured four anxiety dimensions (communication apprehension, test and evaluation anxiety, fear of negative evaluation, and technology/environment anxiety) and four engagement dimensions (behavioral, emotional, cognitive, and social). Frequency and percentage described respondent profile; means and standard deviations summarized anxiety and engagement levels; t-tests/ANOVA tested group differences; and Pearson correlation examined associations between variables at $\alpha = .05$. Results showed high anxiety across dimensions, with strong concerns about evaluated performance and being judged in visible online spaces. Despite this, students reported high engagement, indicating sustained participation and investment in online English-mediated learning. Most demographic variables did not significantly differentiate anxiety and engagement; however, fear of negative evaluation differed by graduate program and by prior online learning experience, and communication apprehension differed by years of English study. Engagement differences were most evident by prior online learning experience, where emotional and social engagement varied significantly. Correlation analysis indicated statistically significant but generally weak relationships between anxiety and engagement, suggesting that engagement is influenced by multiple factors beyond anxiety alone. Based on these findings, a targeted online support program is proposed emphasizing anxiety-sensitive speaking scaffolds, assessment transparency, safe feedback practices, technology readiness support, and structured peer interaction to strengthen emotional and social engagement, especially for learners with limited online experience.

Keywords: *English language anxiety, Online English learning engagement, Chinese graduate students, Online learning experience, English-medium instruction (EMI)*

INTRODUCTION

English has become a working language of research, publication, and professional communication in universities around the world. For many Chinese graduate students, enrolling in English-mediated courses is no longer optional but an academic requirement, whether they are majoring in English or using English as the medium of instruction in other disciplines. While this opens doors to international collaboration and mobility, it also brings emotional costs, particularly in the form of English language anxiety. The rapid expansion of online learning during and after the COVID-19 pandemic has reshaped how these students experience English. Synchronous videoconferencing, discussion boards, and digital assessment platforms have

replaced or supplemented face-to-face classrooms. Studies in higher education show that online foreign language learning is often accompanied by mixed emotions—flexibility and convenience on the one hand, but also heightened stress, isolation, and fear of underperforming on a screen on the other (Maican & Cernuscan, 2021).

Statement of the Problem

This study aimed to assess the role of badminton in the cognitive function and psychological well-being of Grade 8 students. It seeks to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 age;
 - 1.2 sex;
 - 1.3 graduate program;
 - 1.4-year level;
 - 1.5 years of English study; and
 - 1.6 prior experience in online learning?
2. What is the level of English language anxiety in online learning settings among Chinese graduate students in terms of:
 - 2.1 communication apprehension in online interaction;
 - 2.2 test and evaluation anxiety in online assessments;
 - 2.3 fear of negative evaluation in virtual classes; and
 - 2.4 technology-related and environment-related anxiety?
3. What is the level of online English learning engagement among Chinese graduate students in terms of:
 - 3.1 behavioral engagement in online learning activities (e.g., attendance, participation, completion of tasks);
 - 3.2 emotional engagement in online English classes (e.g., interest, enjoyment, sense of belonging);
 - 3.3 cognitive engagement in course tasks (e.g., effort to understand, use of learning strategies); and
 - 3.4 social engagement in collaborative online activities (e.g., interaction with classmates and instructors)?
4. Is there a significant difference in the level of English language anxiety in online learning settings when respondents are grouped according to their demographic profile?
5. Is there a significant difference in the level of online English learning engagement when respondents are grouped according to their demographic profile?
6. Is there a significant relationship between English language anxiety in online learning settings and online English learning engagement among Chinese graduate students?
7. Based on the findings, what online support strategies or programs may be proposed to help reduce English language anxiety and enhance online English learning engagement among Chinese graduate students?

Scope and Delimitations

The scope of the study is limited to these Chinese graduate students in the identified universities during AY 2025–2026. The respondents will come from programs that offer at least one core subject in English, delivered via online platforms such as learning management systems and videoconferencing tools. Because participation is voluntary and depends on institutional permission, the sample may not fully represent all Chinese graduate students nationwide. Moreover, the study relies on self-report questionnaires to assess anxiety and engagement, so the responses may be influenced by students' willingness to disclose and by how they interpret the items. Other psychological factors that could shape online learning—such as personality traits, general stress level, or mental health status—are not included. Despite these limitations, the research is expected to provide a focused picture of how English language anxiety and online engagement interact in the everyday online learning experiences of Chinese graduate students in Beijing.

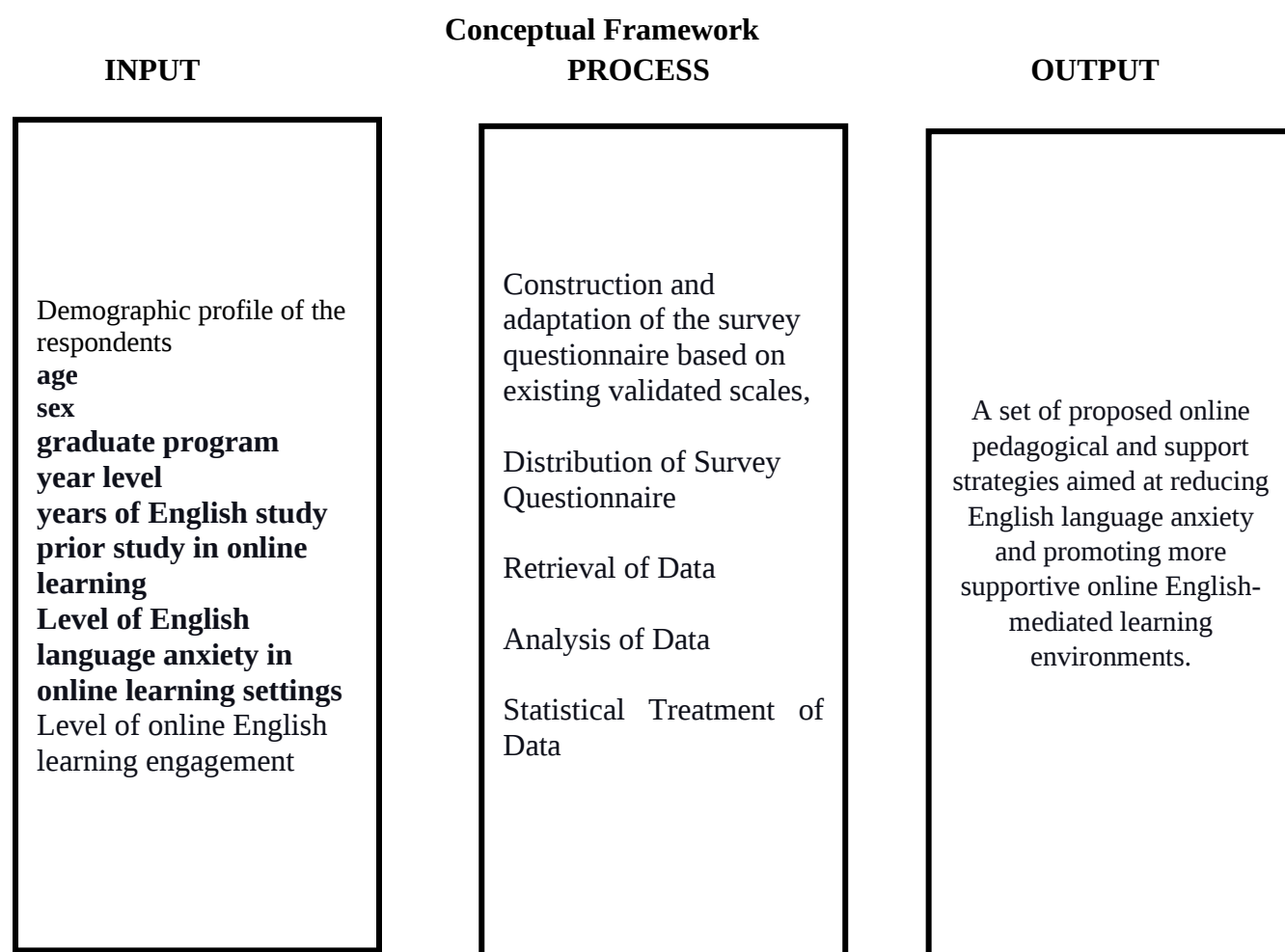
Review of Related Literature

Several studies have explored strategies to reduce language anxiety in digital settings. Pratiwi et al. (2022) examined the effects of e-portfolios on foreign language anxiety in an online speaking course. Their mixed-methods study revealed that students using e-portfolios experienced a significant reduction in anxiety, partly because they could rehearse, revise, and reflect on their performance before sharing it with others. At the same time, Wei (2024) investigated English-learning anxiety, learner engagement, and intervention strategies among Chinese undergraduates and proposed a language-learning program that combines emotional support, explicit strategy training, and collaborative online activities. Higher engagement was associated with lower anxiety and better perceived learning outcomes. Likewise, Alqarni (2021) reported that willingness to communicate in online EFL classes increased when students experienced a supportive climate and opportunities for meaningful interaction, suggesting that anxiety can be mitigated by well-designed tasks and teacher behaviors. Yuan (2023) showed that teacher support and clear instructional design in online English classes were associated with greater enjoyment and lower anxiety, reinforcing control-value theory's claim that perceived control and value shape learners' emotional experiences. Collectively, these studies point to the importance of pedagogical choices, feedback practices, and flexible assessment modes in managing anxiety in online English-mediated environments.

Theoretical Framework

This study is anchored in three complementary perspectives: Control-Value Theory of Achievement Emotions, Social Cognitive Theory with a focus on self-efficacy in language learning, and the Cognitive-Affective-Social Theory of Learning in digital environments. Recent work by Pekrun (2024) extends control-value theory as a general model of emotions in learning, arguing that emotions such as enjoyment, boredom, and anxiety are shaped by learners' perceived control over tasks and the value they attach to them. When students feel that online English tasks are important but outside their control, anxiety is likely to increase. In online English-mediated courses, control appraisals may be influenced not only by language proficiency but also by the efficacy of technology, the clarity of instructions, and access to

support. This study draws on CVT to explain how Chinese graduate students' perceptions of control and value in online English learning relate to their levels of English language anxiety.



METHODOLOGY

This quantitative research study examined English language anxiety and online English learning engagement among Chinese graduate students enrolled in master's and doctoral programs in universities in Beijing during the Second Semester of AY 2025–2026.

Research Design

The study adopted a descriptive–correlational quantitative design. It was descriptive because it aimed to portray the demographic profile of the respondents and to determine their levels of English language anxiety and engagement in online English learning. It was correlational because it examined whether anxiety and engagement differed across groups of students with varying demographic characteristics and whether there was a statistically significant relationship between the two main variables. No experimental manipulation was involved; the study simply described existing conditions and explored how they were related in the actual learning environment of Chinese graduate students.

Research Steps

The survey remained open for a specified period (e.g., two to four weeks) to give students ample time to respond. During this period, gentle reminders were sent through program coordinators or instructors to encourage participation, without exerting pressure or linking participation to grades or course requirements. When the data collection window closed, the researcher downloaded all responses from the online platform and began screening for completeness and consistency. Entries that were clearly incomplete, duplicated, or did not meet the inclusion criteria were removed. The remaining valid responses were then coded and entered into a statistical software program for analysis. Throughout the process, no names or student numbers were collected, and all data were stored in password-protected files to protect respondents' privacy and anonymity.

Data Collection and Sample Selection

The primary data-gathering instrument for this study was a structured online questionnaire composed of three main parts. The first part focused on the respondents' demographic profile and asked about their age, sex, graduate program, year level, years of studying English, and prior experience with online learning, including details such as the number of semesters, how often they took online courses, and the platforms they commonly used.

The second part measured English language anxiety in online learning settings through statements that tapped four dimensions: communication apprehension in online interaction, test and evaluation anxiety in online assessments, fear of negative evaluation in virtual classes, and technology- or environment-related anxiety. These items were adapted and contextualized from established foreign-language anxiety and online language anxiety scales, with wording carefully adjusted to reflect the realities of Chinese graduate students in English-mediated online courses. Responses in this section were rated on a four-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree), where higher scores indicated higher levels of anxiety.

The third part of the questionnaire examined students' engagement in online English learning and asked about their behavioral, emotional, cognitive, and social engagement in online classes. The statements described how often or how strongly they participated in online activities, felt interested or invested in lessons, used learning strategies, and interacted with classmates and teachers. The same four-point Likert scale was used in this section, with higher scores reflecting stronger engagement.

The study's respondents were Chinese graduate students officially enrolled in master's and doctoral programs at selected universities in Beijing, China, during the Second Semester of Academic Year 2025–2026. They were chosen from programs that offered at least one core subject taught in English through fully online or blended learning modes. To be included, students had to be Chinese citizens and have completed at least one full semester of online learning in English so they could meaningfully share their experiences, emotions, and patterns of participation in virtual classes. Those who were exchange students, enrolled only in short-term or non-degree training, or whose courses were conducted entirely in Chinese, were not part of the respondents. Participation was voluntary, and only students who provided informed consent via the online survey platform were considered official respondents in the study.

Data Analysis Methods

Data security measures were implemented to prevent unauthorized access, loss, or misuse of information. Survey responses were downloaded from the online platform and stored in password-protected files, accessible only to the researcher. Back-up copies were kept in secure storage with restricted access. Data cleaning and analysis were conducted using coded datasets, and only anonymized data were used in statistical processing. The study also observed responsible data retention practices: data were kept only for the period necessary to complete the thesis and any related academic outputs, after which electronic files were securely deleted in accordance with institutional research guidelines. Because the topic involved anxiety and engagement, the study recognized that some participants might feel discomfort when reflecting on their experiences in online English learning. The information sheet included a brief statement on potential risks, emphasizing that participants could skip any question they did not wish to answer. It also provided contact details for available counseling or student support services within participating institutions, allowing respondents to seek assistance if participation triggered distress or heightened worry. The survey was designed to minimize harm by using non-judgmental wording and by avoiding intrusive questions that could cause embarrassment or psychological burden.

Research Hypotheses and Validation

Before the questionnaire was formally administered, it underwent a careful validation and reliability testing process to ensure it measured what it intended and that the results were consistent. First, the initial draft of the instrument was submitted to a panel of experts composed of a specialist in English language education, an educational psychologist familiar with anxiety and student engagement, and a research methodologist. They reviewed each item for clarity, relevance, cultural appropriateness, and alignment with the study's objectives and variables—English language anxiety and online English learning engagement. Their comments and suggestions were used to refine the wording of statements, remove ambiguous or overlapping items, and ensure that all sub-dimensions (communication apprehension, test and evaluation anxiety, fear of negative evaluation, technology- or environment-related anxiety, and the four types of engagement) were adequately represented. Where appropriate, a simple content validity index was computed from their ratings to document that the items were judged essential or highly relevant by the panel.

After this expert review, the revised questionnaire was pilot-tested with a small group of Chinese graduate students who shared characteristics similar to the intended respondents but were enrolled at a university not part of the main study. The pilot test helped assess whether the instructions were clear, the items were understandable, and the survey length was manageable. The responses from the pilot group were encoded and analyzed to determine the internal consistency of each subscale using Cronbach's alpha. Coefficient values of 0.70 and above were considered acceptable for research purposes, and subscales that fell below this level were examined closely to identify weak or problematic items. If necessary, items that reduced reliability or were repeatedly reported as confusing were revised or removed before final deployment. Only after passing both expert validation and reliability testing was the instrument used in the study's actual data-gathering phase.

Study Limitations and Ethical Considerations

Data were designed to describe the respondents' characteristics, summarize the levels of the two main variables, and test the differences and relationships required by the research questions. First, frequency counts and percentages were used to present the respondents' demographic profile because these statistics clearly showed how the participants were distributed across categories such as age group, sex, graduate program, year level, years of studying English, and online learning experience. This step provided an overall picture of the sample and served as the basis for grouping respondents in later analyses.

The study observed key ethical principles in educational research and adhered to accepted standards for research involving human participants. Participation was strictly voluntary. Students were informed that they could decline to participate or withdraw from the survey at any time, without penalty and without affecting their grades, course standing, relationship with instructors, or access to university services. To ensure that consent was truly informed, the first page of the online survey presented an information sheet that clearly explained the study's purpose, what participation involved, the approximate time needed to complete the questionnaire, the types of questions included, and the intended use of the findings. Only students who explicitly indicated their agreement through the consent option were allowed to proceed to the survey proper.

RESULTS AND DISCUSSION

SOP 1. What is the demographic profile of the respondents?

The age factor is also significant to the engagement in online learning and language anxiety, as adult learners can bring the experience related to their work, self-regulation, and increased levels of motivation, yet at the same time, they can experience issues with uniting learning and work-related activities (Sun et al., 2020). This balanced gender distribution is useful in studying the potential gender disparity in online English learning involvement and anxiety, but earlier studies revealed that gender disparity in foreign language anxiety and online involvement is potentially not very significant, and affective factors and self-efficacy are more core than the sex factor (Dewaele & MacIntyre, 2016). Broad experience with learning English has been linked to lower levels of communication apprehension and increased self-efficacy in language tasks, which can positively affect cognitive and social performance in online learning environments (Li & Wang, 2022).

According to research, prior experience with online learning is a good predictor of engagement and emotional comfort in virtual learning environments because learners learn to cope with technology, collaborate with others, and manage cognitive load (Kintu et al., 2017).

SOP 2. What is the level of English language anxiety in online learning settings among Chinese graduate students?

The latter results support Schmidt-Fajlik's (2025) conclusion that online learning does not eliminate prior language anxiety but rather introduces new forms of stress. They also lend credence to the need for measurement instruments, such as OWLAS, that can assess technology-specific levels of anxiety (Hongnaphadol, 2023). Hence, the strong presence of technology- and

environment-related anxiety highlights the importance of institutional and pedagogical support in online English programs. Providing technical orientation, offering flexible camera and participation policies, ensuring clear and redundant instructions, and fostering empathy for learners' home learning conditions may help reduce anxiety. In line with the results of Yuan (2023), the perceived control of the learners and the clarity of the instruction may greatly influence the emotional experiences and facilitate positive engagement in the online English-mediated graduate education.

SOP 3. Is there a significant difference in the level of English language anxiety in online learning settings when respondents are grouped according to their demographic profile?

The findings are in line with previous studies, which have shown that general demographic attributes are not always significant or consistent in influencing the level of language anxiety. Piniel and Zolymo (2022) added that age and gender usually do not produce significant differences in the classroom experience of foreign language anxiety; however, in some cases, theoretical frameworks presume possible differences in the affective experience of the group. In a similar way, Pan and Zheng (2024) discovered that although demographic factors such as academic status could be related to online learning anxiety, self-efficacy, motivation, and online learning readiness of learners were stronger predictors of anxiety in comparison with the demographic labels.

SOP 4. Is there a significant difference in the level of online English learning engagement when respondents are grouped according to their demographic profile?

According to Yang et al. (2022), emotional engagement is a desire of learners to become more interested, motivated, and feel emotions about learning activities, behavioral engagement is related to active participation and accomplishment of specific tasks, and cognitive engagement is associated with profound processing of information. The finding that there were no significant age, sex, or years of study differences in the engagement predictors of English study is echoed by findings of other settings with personal characteristics being less proximate predictors of engagement outcomes when the course design, learning environment, and interaction factors are more strongly related to the engagement outcomes (Nowrouzi Kia et al., 2023).

SOP 5. Is there a significant relationship between English language anxiety in online learning settings and online English learning engagement among Chinese graduate students?

The related literature confirms the assumption that such emotions like anxiety can make students more engaged in the process of online language acquisition, but the details of the interconnections may be complicated and contingent. Indicatively, research on psychological predictors of online engagement shows that anxiety and other emotional conditions can positively up to negatively correlate with engagement based on the meaning and response of anxiety by the learners. Academic buoyancy, enjoyment, and anxiety were found to interact in predicting engagement, with the latter negatively predicting overall engagement when factored in with positive emotions in a large study of online foreign language learners (Wang and Hui, 2024).

SOP 6. Based on the findings, what online support strategies or program may be proposed to help reduce English language anxiety and enhance online English learning engagement among Chinese graduate students?

Chinese graduate students experienced high English language anxiety in online learning, particularly in evaluative situations. For example, students strongly agreed that they felt anxious when their English performance was evaluated (highest indicator $M = 3.60$) and showed an overall test and evaluation anxiety mean of 3.49 (Strongly Agree). This pattern suggests that even academically capable graduate learners continue to feel threatened by online assessment conditions, time pressure, and the risk of misunderstanding English instructions, which can trigger sustained tension during online participation.

SUMMARY

The descriptive–correlational quantitative design study among adult Chinese graduate students that many had long exposure to English study (with the biggest group reporting 11–15 years), and nearly half had four or more semesters of prior online learning experience. Despite high anxiety, respondents demonstrated high engagement across all engagement dimensions. Behavioral engagement was Strongly Agree overall, indicating that students generally maintained participation, task completion, and compliance with online requirements. Post-hoc results further indicated that students with longer English study (e.g., 4 years and above) showed significantly higher communication apprehension than some shorter-exposure groups. A practical output can be framed as an Online English Learning Support Program for Chinese Graduate Students that targets (1) reducing anxiety triggers (communication, evaluation, visibility, and technology stress) while (2) strengthening emotional and social engagement—especially for learners with limited online experience.

CONCLUSIONS

Using a descriptive–correlational quantitative design, the respondents were largely adult Chinese graduate students, with most belonging to the 31–40 age group and slightly more females than males. English language anxiety remained high among Chinese graduate students in online English-mediated learning. Despite the high levels of anxiety reported, the study concluded that respondents demonstrated strong online engagement across all dimensions. Post-hoc results showed that students with longer online experience demonstrated stronger emotional engagement compared with those with only one year of experience. The study supports proposing an online support program that targets: (a) assessment-related anxiety, (b) fear of negative evaluation in visible/recorded online settings, and (c) engagement-building support, especially for less-experienced online learners. This aligns with the document’s proposed CALM–ENGAGE Online Support Program, which explicitly links anxiety-reduction strategies to engagement-enhancement goals. Overall, anxiety explains only a small portion of engagement behavior, indicating that engagement is shaped by multiple factors beyond anxiety alone.

RECOMMENDATIONS

Based on the findings and conclusions, suggestions were drawn:

Based on the results of this research on the English language anxiety and online English learning engagement among Chinese graduate students enrolled in master's and doctoral programs in universities in Beijing during the Second Semester of AY 2025–2026 using a descriptive–correlational quantitative design it is recommended that universities adopt a structured support package (e.g., CALM–ENGAGE) combining: (1) online orientation and tech confidence support, (2) anxiety-sensitive speaking scaffolds, (3) assessment transparency measures (rubrics, practice tasks, clearer instructions), and (4) social engagement supports (peer buddy system, stable small-group work). This program aligns with the study's purpose of reducing anxiety while strengthening engagement in online English-mediated learning.

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AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

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