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CALL Anxiety and Listening Skills: A Case Study from Lahore

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Abstract

This study comprehensively analyses Computer-Assisted Language Learning (CALL) listening anxiety among second-language learners. Many educational institutions in Pakistan lack access to CALL facilities, which may contribute to students' struggles in acquiring English as a foreign language. The research aims to identify the factors influencing listening anxiety among BS-level students using CALL software in the classroom and to assess the impact of CALL through both qualitative and quantitative approaches. A total of 143 English-major students from Lahore participated in the study, where a modified questionnaire was administered to measure listening anxiety levels, and in-depth interviews were conducted to explore its sources. Findings indicate that while learners are eager to engage with CALL, they face several obstacles and challenges in language acquisition through technology. After evaluating these challenges, this study proposes strategies for effectively integrating CALL into classrooms. Data analysis was conducted through descriptive statistics and cumulative graphical modelling. Additionally, the study incorporates TRA and TAM-TAM2 models to emphasize the role of CALL in language learning, assess its impact on anxiety levels, and explore its potential for future adoption in educational settings.

Keywords: CALL, Listening Skills, TAM, TAM2 & TRA

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1. Introduction

With the increasing integration of technology in education, CALL (Computer-Assisted Language Learning) researchers have emphasized the motivational potential of digital tools in language instruction. However, limited classroom-based development has accompanied this emphasis, particularly in designing practical tools suited to learners' needs. In Pakistan, language learners face unique psychological burdens due to the trilingual academic system. Many students speak two languages before learning English as a third, which introduces considerable stress when engaging in academic tasks delivered entirely in English (Arruabarrena & Herrarte, 2023; Riaz, 2021). Anxiety is further intensified by traditional classroom norms, where students with low English proficiency are often ridiculed or discouraged from participating. The pronunciation issues, speaking publicly, lack of spontaneity, and the fear of grammatical mistakes are the foremost causes of anxiety (Awan et al., 2010).

Moreover, the role of socioeconomic status in shaping English language proficiency is well documented. Students in elite English-medium schools tend to perform better, while others face persistent challenges despite studying English for over a decade (Schofield & Mamuna, 2003; Xiong & Yuan, 2018; Abbas et al., 2021). These systemic challenges exacerbate stress during language learning activities, especially those involving technology-based listening and speaking tasks.

This study examines CALL-related anxiety among BS English students in Lahore, particularly during speaking and listening tasks like class presentations. It aims to assess the prevalence and nature of this anxiety, explore gender-related differences, and identify underlying causes and consequences. A mixed-method approach was adopted: quantitative data were analysed using SPSS v27.0.1, while qualitative insights were drawn from field interviews and observation notes.

Preliminary results indicate that male students report higher levels of anxiety than female students. Contributing factors include language ability, lack of preparation, fear of making mistakes, and comparison with peers. Consequences involve diminished self-confidence, reduced classroom engagement, and reluctance to pursue fluency. Suggestions include revising evaluation strategies and encouraging individual practice methods such as mirror-speaking exercises.

1.1 Literature Review

The frequent use of technologies such as HTML editors, image converters, scanners, emails, and internet tools in CALL classrooms has led to unintended challenges, particularly increased anxiety among learners. This anxiety is obvious when students are engaged in collaborative, technology-based projects such as website creation. A study conducted with German students in an Australian university involved in a three-year Project-Oriented CALL (PrOCALL) initiative highlighted key stressors and proposed methods to reduce anxiety levels. It recommended a strategic framework to manage technology-induced frustration through structured implementation and individual task assignment. Such strategies aim to build critical thinking and reflective habits around digital learning environments (Alison & Steohan, 2000).

Several real-world studies have explored how CALL-based environments influence learners' emotional experiences, particularly anxiety associated with listening comprehension. Researchers have found that technology-mediated tasks, such as audio-visual listening exercises and interactive listening modules, can either reduce or trigger anxiety depending on the learner's self-efficacy and familiarity with the interface (Hanafiah et al., 2022). According to the findings of Hanafiah et al. (2022), researchers have discovered that technology-mediated tasks, such as audio-visual listening exercises and interactive listening modules, have the potential to either alleviate or exacerbate anxiety in learners, depending on the learner's level of self-efficacy and their level of familiarity with the interface.

While students with low levels of digital literacy frequently felt overburdened, those who thought of CALL technologies as helpful, for example, tended to feel less anxious and do better on listening tasks. Although CALL can improve listening skills, its design and learner readiness are important elements that influence the emotional experience, according to this duality. The intricate relationship between motivation and technology anxiety in second language acquisition has been brought to light by recent studies. Sharma (2024) noted that while CALL tools can foster autonomous learning, high-anxiety learners may avoid these platforms despite their potential benefits. Similarly, the "language library" concept introduced by Devi and Sharma (2023) emphasize the importance of contextualizing CALL tools within broader, culturally aware digital environments. Although CALL technologies might promote independent learning, high-anxiety learners may steer clear of these platforms despite their possible advantages, according to a study by Sharma (2024). The significance of placing CALL tools in larger, culturally sensitive digital contexts is further emphasized by Devi and Sharma in 2023.

These findings point toward a need for more learner-centred CALL design that considers emotional factors and integrates flexible, low-pressure listening tasks to improve learner engagement. Evaluating the perspectives of in-service teachers is also critical. A recent study using the Integrated CALL Evaluation Scale (ICES) assessed Pakistani university educators’ views on CALL practices. Findings suggested significant differences based on gender and qualification levels, highlighting the influence of digital literacy and training (Malik et al., 2020). To gauge students' adoption of CALL technologies, the Technology Adoption Model (TAM) and its extensions (TAM2 and TRA) have been widely utilised. According to recent research, learners' behavioural intentions to embrace CALL can be explained by notions like perceived usefulness and perceived simplicity of use (Forum for Linguistic Studies, 2022).

Students who thought that using CALL tools would improve their listening comprehension showed a greater behavioural desire to use them. The supplementary variables of TAM2, including subjective norm and output quality, have effectively elucidated the more intricate attitudes of learners, particularly among university students influenced by peer and institutional expectations. Behaviourist theories of CALL have given way to more integrative and communicative frameworks (Thomas & Reinders, 2012; Liu et al., 2017). Task-based, real-world language learning through digital platforms such as Web 2.0, MOOCs, virtual reality, and social media apps is now the focus of new methodologies (Yan et al., 2024; Fang et al., 2019).

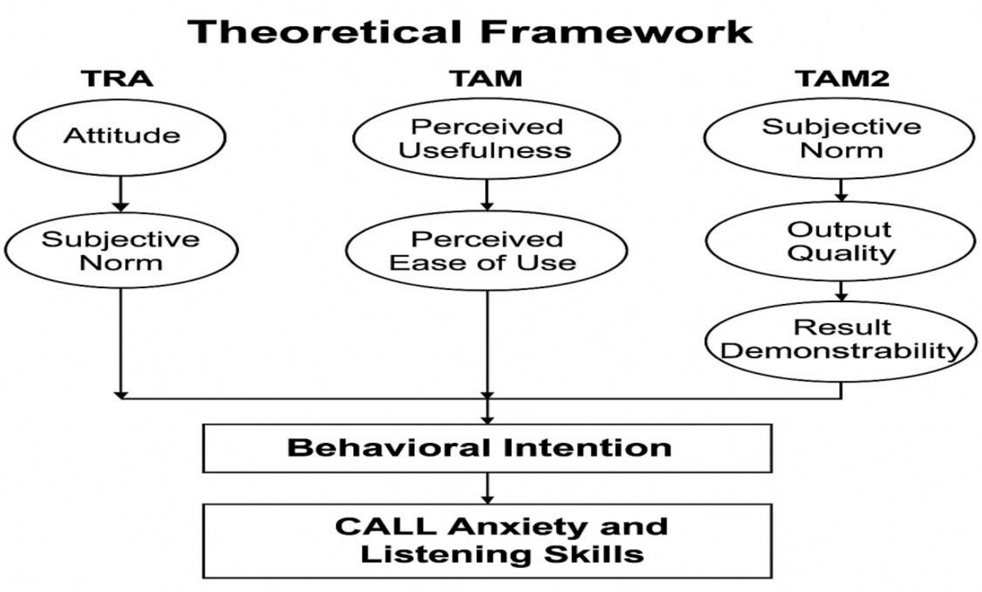
Preliminary results indicate that male students report higher levels of anxiety than female students. Contributing factors include language ability, lack of preparation, fear of making mistakes, and comparison with peers. Consequences involve diminished self-confidence, reduced classroom engagement, and a reluctance to pursue fluency. Suggestions include revising evaluation strategies and encouraging individual practice methods such as mirror-speaking exercises.

1.2 Theoretical Framework

The widely accepted frameworks for assessing user engagement with new technologies, the Technology Acceptance Model (TAM) and its expanded version, TAM2, serve as the foundation for this investigation. Davis (1989) developed the Technology Acceptance Model (TAM), which suggests that two main factors—Perceived Utility (PU) and Perceived Ease of Use (PEOU), have an impact on a person's desire to embrace a technology. In the CALL context, where learners' adoption of digital tools frequently hinges on their perception of the tool's efficacy and usability, these dimensions are especially pertinent.

Venkatesh and Davis's TAM2 is also used in this study better to understand the experiences of learners (2000). Subjective Norm (SN), Image, Output Quality (OQ), and Result Demonstrability (RD) are some of the constructs that this expanded model adds to the original. The impact of institutional and social expectations, pressures that are especially prevalent in academic settings, is captured by these elements. For instance, when using CALL tools, students may feel anxious if they believe that their classmates or teachers are evaluating them, particularly when they are required to respond in real time to listening activities.

To explain how personal beliefs influence attitudes and, in turn, behavioral intentions, the study also makes use of the Theory of Reasoned Action (TRA), which serves as the foundation for TAM. The study aims to systematically investigate the interplay between perceived expectations, technological complexity, and personal confidence levels in the development of CALL anxiety, and how these factors influence the growth of listening skills through the integration of multiple theoretical frameworks.



1.3 Justification of the Study

Second language learning has changed as a result of the increasing use of technology in language instruction. Although computer-assisted language learning (CALL) technologies have demonstrated efficacy in improving speaking, listening, and vocabulary, less is known about the psychological effects of their use, particularly about anxiety. In the context of Pakistan’s multilingual academic setting, where English is taught as a second or third language, learners often face unique stressors that are not adequately addressed in existing CALL frameworks.

This study is particularly justified by the lack of localised research examining the emotional responses of university-level students toward CALL-integrated language tasks. Most existing studies are either conducted in Western or East Asian contexts, with limited relevance to Pakistani learners who grapple with infrastructural constraints, low self-confidence, and cultural attitudes toward English proficiency. By focusing on students in Lahore and exploring the relationship between CALL anxiety and listening skill development, this research addresses a critical educational concern and aims to provide insights for teachers, curriculum developers, and policy makers to design more empathetic, learner-centred digital learning environments

2 Materials and Methods

To examine the impact of CALL-related listening anxiety on second-language learners at the BS level, this study adopted a mixed-methods approach combining quantitative and qualitative tools. The Theory of Reasoned Action (TRA) and the Technology Acceptance Model (TAM and TAM2) were used as the guiding theoretical frameworks to understand learners' behavioural intentions and attitudes toward CALL. Data were gathered through a structured questionnaire and semi-structured interviews.

2.1 Participants and Sampling

A convenience sampling technique was employed to recruit participants. The sample consisted of 143 BS-level students enrolled in CALL-integrated English courses from two private universities in Lahore**.** Of these, 70 were male and 73 were female**,** all aged between 20 and 22 years**.** A total of 150 questionnaires were distributed, and 128 were returned complete and valid, while 22 were discarded due to incomplete information.

2.2 Research Questions

This study seeks to answer the following questions:

1) What is the impact of CALL anxiety on second-language learners at the BS level?
2) In what ways does CALL anxiety affect second-language learners' listening skills?

These questions guided the design of the questionnaire and interviews, allowing for both structured measurement and open-ended exploration of learners' and teachers' experiences.

2.3 Data Collection and Analysis

The primary quantitative tool was **a** closed-ended questionnaire adapted from the Foreign Language Listening Anxiety Scale (FLLAS) developed by Kim (2000). The revised instrument consisted of 49 items categorised into four sections:

- Demographic and self-reported listening ability
- Perceived usefulness and ease of CALL integration
- CALL-related listening anxiety
- Attitudes toward CALL and related TAM constructs

A five-point Likert scale (strongly agree to disagree strongly) was used. The questionnaire was distributed via Google Forms and shared through WhatsApp to ensure ease of access. A pilot test was conducted to validate the instrument's clarity and reliability before full-scale distribution. For the qualitative phase, semi-structured interviews were conducted with 15 BS-level students and one English teacher. Participants were selected randomly from among those who had completed the questionnaire to ensure triangulation of data. Interview questions explored students' experiences, perceptions, and challenges related to CALL use in English listening classes, with particular attention to anxiety triggers. Interviews were conducted via telephone, transcribed, and thematically analysed using a systematic coding procedure to identify recurring patterns and categories relevant to CALL anxiety.

2.4 Ethical Consideration

Before data collection, informed consent was obtained from all participants. They were assured of confidentiality, anonymity, and their right to withdraw at any point. The Institutional Ethics Review Board approved the study by the researchers' affiliated university. All responses were collected in accordance with academic ethical guidelines.

3. Results

A questionnaire was used to gather background information. The self-reported questions were added to assess the students' interest in listening, their engagement in listening, and the factors influencing their listening habits.

3.1 Analysis of Questionnaire

The study reveals that second-language learners face challenges in CALL-based listening, including poor pronunciation (13.1%), limited vocabulary (15.2%), unfamiliar material (29.3%), fast speech (26.3%), and anxiety (16.2%). Despite these issues, 50% of students showed high interest in listening, while only 3% lacked interest. Listening anxiety levels varied, with 57% reporting medium anxiety, 23% low, 19% high, and only 1% very high anxiety. Additionally, 58% rated their listening ability as good, 28% as perfect, while 11% felt poor, and 4% rated it as bad. While CALL supports language learning, it also contributes to anxiety. However, strong student interest suggests that targeted strategies can enhance listening proficiency while mitigating anxiety. These results suggest that while CALL enhances language learning, it also contributes to anxiety among second-language learners. However, most students demonstrate strong interest and confidence in listening skills, indicating the potential for CALL-based strategies to improve listening proficiency if anxiety-related barriers are effectively addressed.

Students' Listening Ability Graph: English Listening Anxiety.

Figure 1

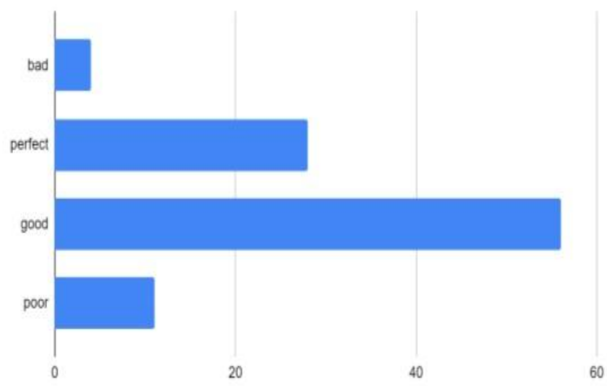
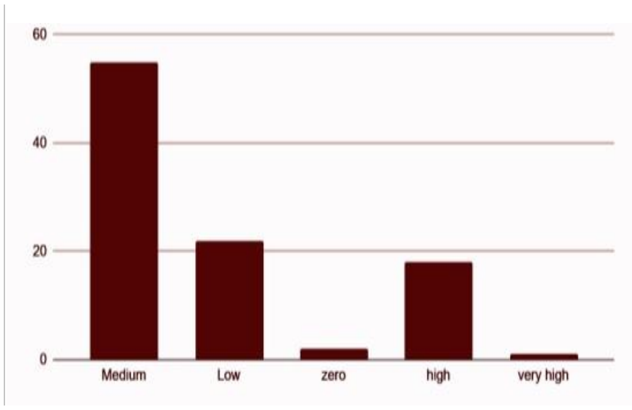


Figure 2



Student interest in listening: Factors affecting your listening

Figure 3

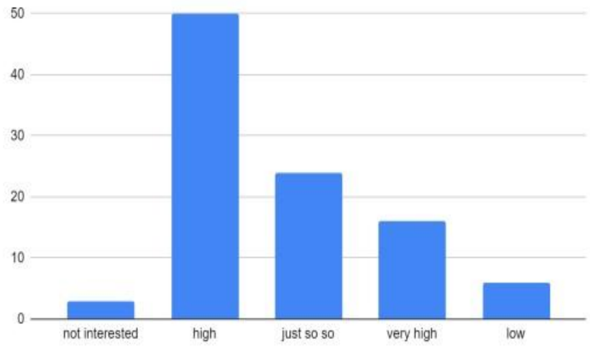
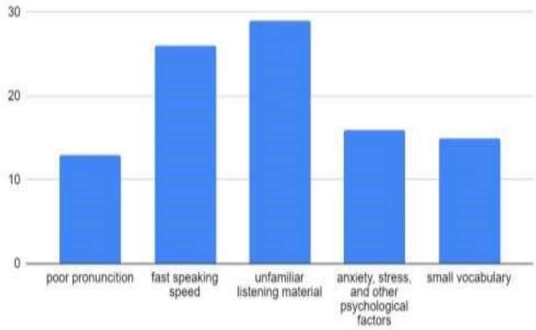
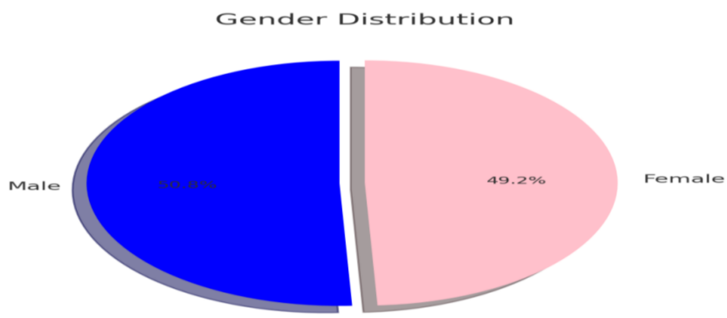


Figure 4



3.2 Gender Differences in Anxiety

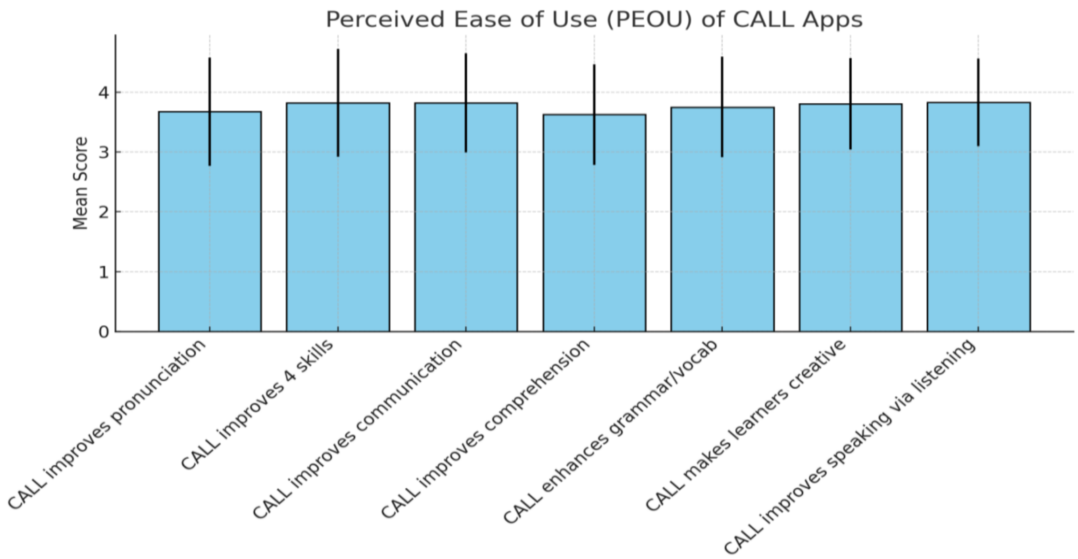
Figure 5



3.3 Perceived Ease of Use

This section comprised seven items related to the perceived ease of use of CALL applications. A significant majority (80–90%) of students agreed that the use of CALL tools facilitates language learning by enhancing academic skills such as reading, writing, listening, and speaking. Along with mentioning that CALL-based games foster creativity, students also claimed gains in vocabulary, grammar, communication, pronunciation, and comprehension. These comments underscore the perceived ease and efficacy of incorporating CALL into classroom environments, affirming its authenticity and utility in language education.

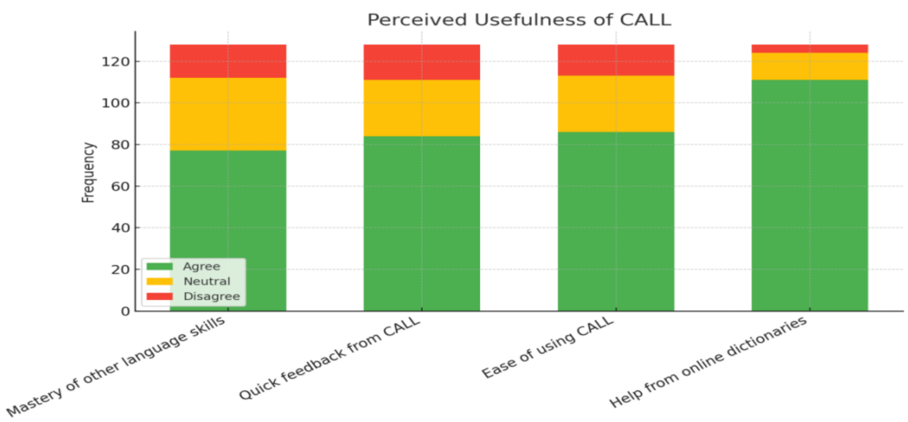
Figure 6



3.4 Perceived Usefulness

To assess students' opinions regarding the value of Computer-Assisted Language Learning (CALL) apps, this part contained four items. Between 80% and 90% of respondents agreed, according to the analysis, that CALL provides easy-to-use solutions, is user-friendly, and makes it easier to understand challenging terminology. Additionally, roughly 60% of students stated that CALL helps them achieve proficiency in linguistic abilities. These findings highlight how beneficial CALL is thought to be as a tool for academic achievement and language learning. The accompanying picture provides a visual representation of the effectiveness of CALL in resolving learners' language difficulties.

Figure 7

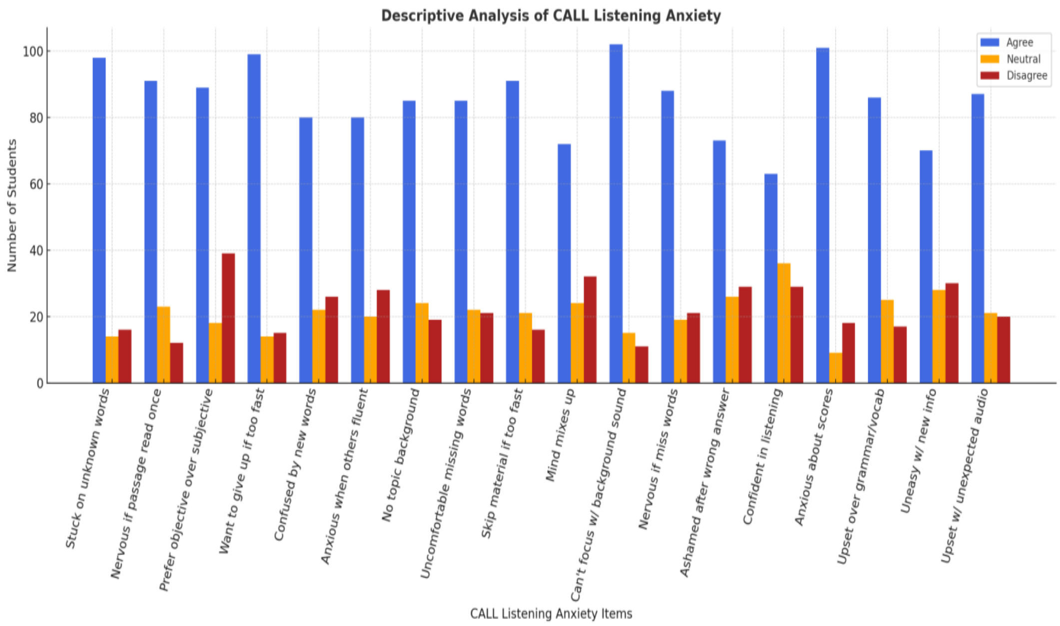


3.5 Statistical Analysis of Listening CALL Anxiety

The questionnaire contained eighteen items designed to explore the elements that contribute to listening anxiety in second language learners. A significant percentage of participants, between 60% and 79%, agreed with statements indicating higher anxiety during English listening exercises, according to the descriptive analysis. Inadequate vocabulary or grammar understanding, unexpected or unfamiliar listening materials, and startling new information all caused respondents to report feeling apprehensive.

A lack of prior knowledge about the subject, fast-paced speech delivery, rapid reading or listening passages, unfamiliar vocabulary, fluent native speakers, difficulty understanding every word, background noise interference, and worry about losing marks were additional anxiety triggers. The data indicate that listening anxiety is a common problem among BS-level students and may considerably impede their listening comprehension and performance. The following picture illustrates the distribution of factors connected to anxiety by providing a visual representation of the student responses.

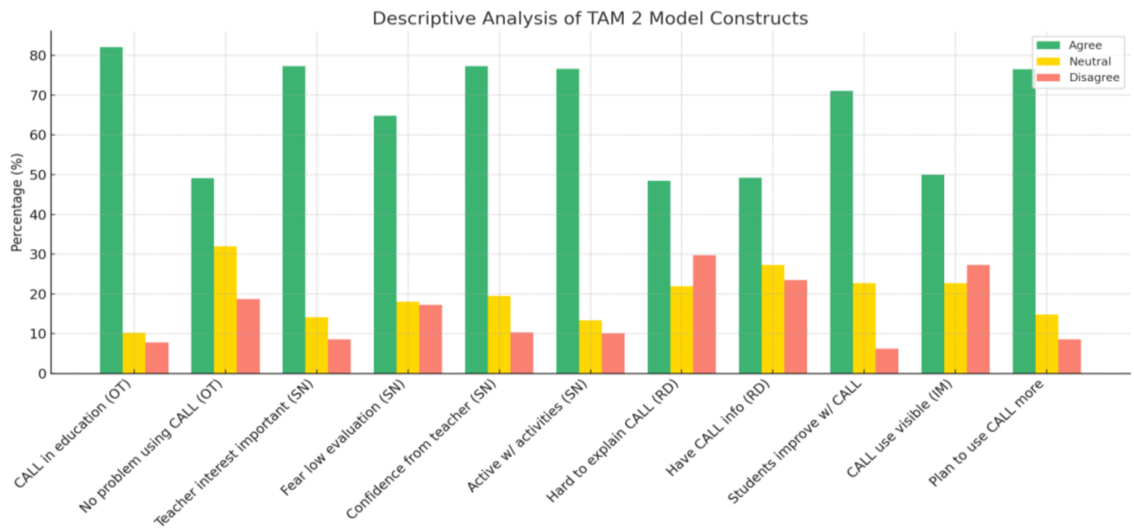
Figure 8



3.6 Behavior, Intention, and Attitude Towards CALL

On their behavioral intention, attitude, and self-efficacy on the use of Computer-Assisted Language Learning (CALL) technologies, specifically for improving listening abilities, BS-level English students' replies are displayed in a bar graph. With student responses divided into three groups—Agree (combining "Strongly Agree" and "Agree"), Neutral, and Disagree (combining "Strongly Disagree" and "Disagree")—each bar in the graph represents a distinct survey item. The graphic depiction gives a clear picture of how motivated, self-assured, and eager students are to use CALL applications as part of their language learning process.

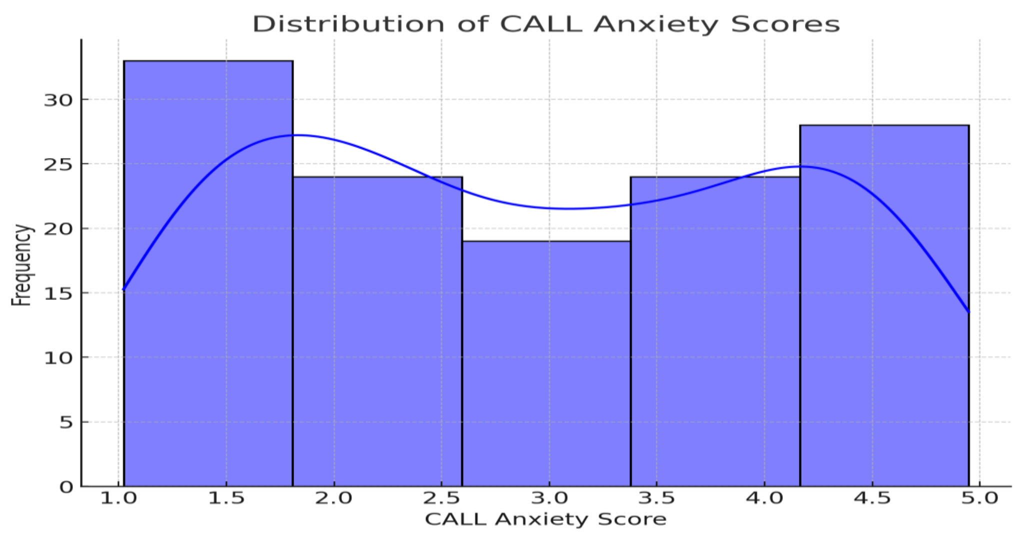
Figure 9



3.7 CALL Anxiety Histogram Distribution

The histogram represents the distribution of CALL Anxiety **Scores** among students. The frequency of responses is displayed for different anxiety levels, ranging from 1 (low anxiety) to 5 (high anxiety). The overlaid blue density curve illustrates the general trend of the data. The distribution appears relatively bimodal, with peaks at lower and higher anxiety levels, suggesting that students experience CALL anxiety at varying degrees. This pattern highlights the diversity in students' anxiety levels when engaging with computer-assisted language learning.

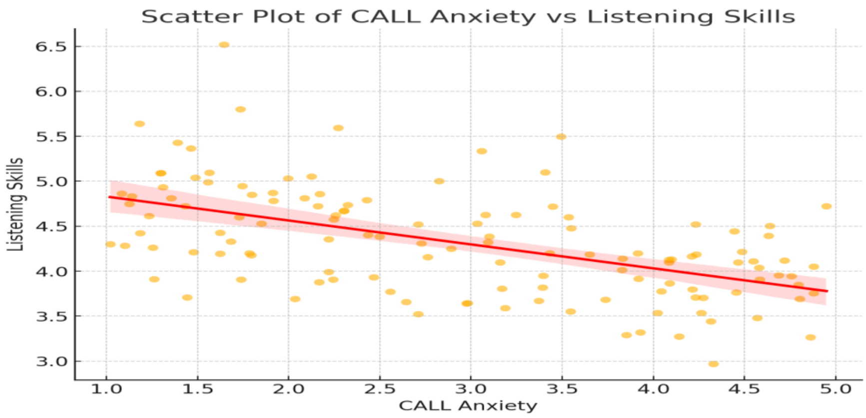
Figure 10



3.8 Correlation between CALL Anxiety and Listening Skills

The scatter plot illustrates the relationship between CALL Anxiety and Listening Skills among second-language learners. Each orange dot represents an individual data point, showing variations in students' listening skills regarding their level of CALL anxiety. A negative trend is evident, as represented by the red regression line. This suggests that an increase in CALL Anxiety correlates with a decline in Listening Skills. The shaded red area surrounding the regression line denotes the confidence interval, indicating a statistically significant negative association. The negative slope of the regression line indicates that increased CALL Anxiety correlates with diminished Listening Skills, so it corroborates the theory that anxiety adversely affects students' capacity to understand spoken English.

Figure 11

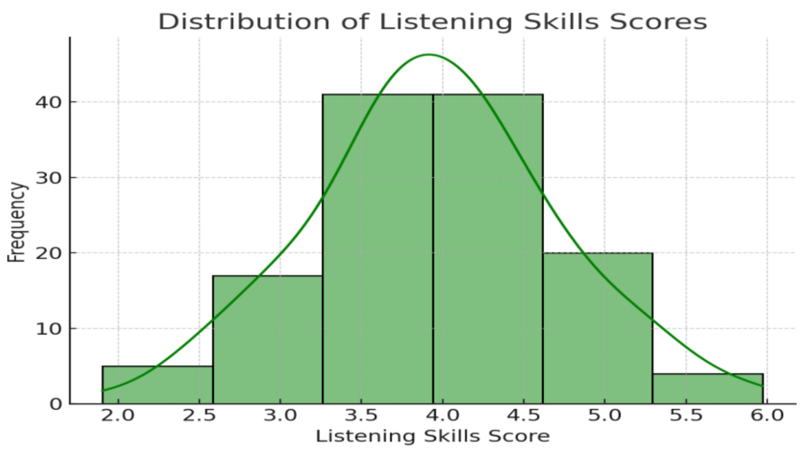


3.9 Impact of Listening Skills Frequency

The graph illustrates the distribution of listening skills ratings among students. The histogram displays a standard distribution curve overlaid, illustrating the distribution of listening skills scores within the sample.

- The x-axis represents the Listening Skills Score, ranging approximately from 2.0 to 6.0.
- The y-axis represents the Frequency, indicating how many students fall within each score range.
- The highest frequency occurs around scores of 3.5 to 4.5, suggesting that most students have moderate listening skills.
- The distribution appears to be approximately normal, with a peak around the middle scores and fewer students at the extremes (low and high scores).
- This visualization helps illustrate the overall listening proficiency of students and highlights the general trend of their performance.

Figure 12

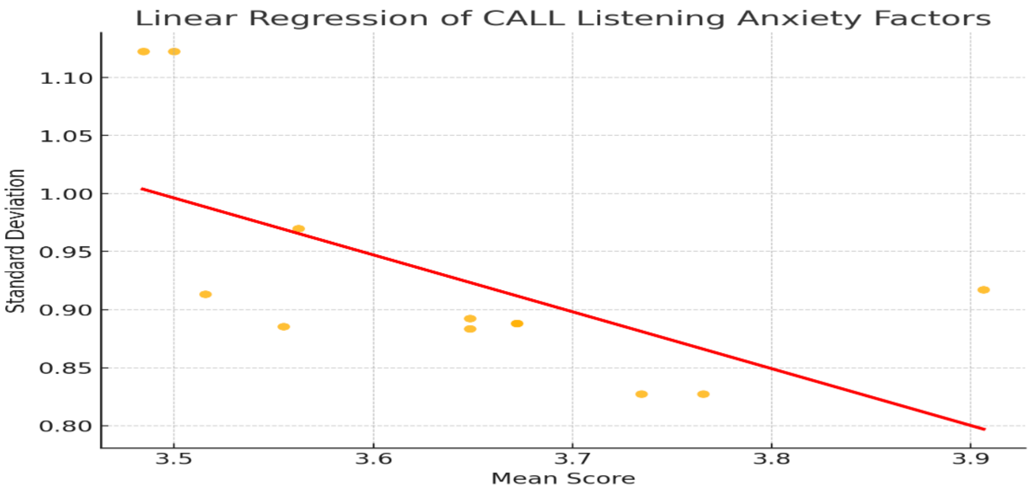


3.1.1 Linear Regression of CALL Listening Anxiety

The linear regression graph visualizes the relationship between the Mean Scores and Standard

Deviations of various CALL Listening Anxiety factors. The x-axis represents the Mean Scores of students' responses, while the y-axis displays the corresponding Standard Deviations. The red regression line indicates the overall trend, showing how variability in anxiety levels correlates with students' reported experiences. A positive slope suggests that as anxiety-related factors increase in intensity, the variability in responses also tends to rise, highlighting diverse perceptions among learners.

Figure 13



3.1.2 Interview Findings

To substantiate the quantitative findings of this study, semi-structured interviews were administered to four BS-level English language learners from a university. The interviews sought to comprehend students' experiences with listening anxiety and their perspectives on the efficacy of Computer-Assisted Language Learning (CALL) in enhancing English language proficiency. All four students acknowledged having varying degrees of anxiety throughout English listening assessments. They identified several reasons, including insufficient vocabulary, poor grammar, rapid-fire speech, challenging pronunciation, unfamiliar subjects, and apprehension about receiving a poor grade from teachers.

These elements made it challenging for students to complete listening assignments successfully. Students recommended regular exposure to English through newspapers and news broadcasts, instructor supervision, and additional listening practice in the classroom as ways to deal with this concern. The interviewees had a positive attitude toward the role of CALL in language learning. They believed that CALL tools helped improve their skills in listening, speaking, reading, and writing. Additionally, they reported that CALL resources supported their learning of pronunciation, grammar, and vocabulary. All students strongly recommended the inclusion of CALL activities in language classrooms, stating that such tools made learning more interesting and valuable.

4. Discussion

The findings of this study indicate that students show a strong interest in CALL-based classroom activities. Descriptive statistics and graphical analyses confirm that students perceive a noticeable improvement in core language skills—reading, writing, listening, and speaking, using the CALL app.

Furthermore, the results suggest that while CALL enhances language learning, it also introduces a mild level of listening-related anxiety, which warrants attention from educators.

This study aimed to explore the sources of anxiety among second language learners, particularly in listening contexts. Quantitative data, supported by interview insights, identified several cognitive and affective factors contributing to listening anxiety. These align with prior studies, such as Teo (2006) and Borrego et al. (2006), which emphasize the role of ICT in promoting engagement, creativity, and cognitive participation in language learning. Similarly, Wright (2008) and Voogat (2008) confirm that integrating technology enhances students' motivation, confidence, and learning autonomy. According to Lee (2000), the use of computers in language instruction encourages experiential learning, contributing to deeper knowledge acquisition.

These findings reinforce that CALL supports:

- Authentic learning experiences
- Personalized instruction
- Enhanced peer and teacher interaction
- Broadened access to language resources
- Greater global understanding

Positive student attitudes toward CALL, as highlighted by Zhang (2011) and TEO (2006), suggest that CALL applications significantly contribute to academic and professional development by supporting autonomous and engaging learning experiences.

4.1 The Role of the Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) has proven to be a reliable predictor of user acceptance in educational technology (Teo, 2009; McCombie et al., 2007). This study employed TAM to evaluate students' attitudes and behavioral intentions toward CALL. The results confirm that students' willingness to adopt CALL is primarily shaped by perceived usefulness and perceived ease of use, consistent with Davis (1989).

Warschauer (1996) outlined how CALL supports language acquisition through:

- Instructional tutoring
- Stimuli for analytical and synthetic reasoning
- Tools for collaborative writing and grammar support

These dimensions are evident in our findings, as students reported that CALL applications provided meaningful learning support with minimal technical complexity.

4.2 The Role of Attitudes and Behavior in CALL Implementation

Afshari et al. (2007) noted that computer-based learning fosters both communicative competence and collaborative learning. This research confirms that positive student attitudes significantly influence CALL adoption. As per Ayres (2002), 80% of students considered CALL suitable for their learning needs, and 66%

wanted to see CALL more widely implemented. Theoretical models like the Theory of Reasoned Action (TRA) and TAM illustrate how behavioral intention is shaped by attitudes and subjective norms (Fishbein & Ajzen, 1980). This study supports those findings, showing that students with favourable perceptions of CALL demonstrate stronger intentions to use it. Further supported by Sivo et al. (2003) and Kim & Moon (2001), the correlation between perceived usefulness and ease of use reinforces the critical role of students' psychological readiness in adopting CALL technologies. TAM remains underutilized in education despite its explanatory strength (Venkatesh, 2000). As suggested by Chang et al. (2012), institutions should incorporate CALL training and improve infrastructure, such as establishing language and computer labs—to foster more effective CALL integration.

4.3 Listening Anxiety: Comparative Analysis

Listening anxiety emerged as a significant issue among second language learners. This study supports findings from Kim (2000), who identified pronunciation difficulty, speaker speed, vocabulary limitations, and peer comparison as key stressors. Zhang (2013) also pointed out that because of the cognitive pressure brought on by new words, pupils frequently overlook later audio segments. These results attest to the reality and prevalence of listening anxiety, which calls for targeted audio input, specific listening instruction, and frequent exposure to English in a variety of contexts.

Similarly, Kimura (2008) identified two dimensions of listening anxiety: task-focused and self-focused apprehension. Fang (2011) emphasized that rapid speech and lack of repetition heighten listening to anxiety, suggesting that strategies like note-taking and structured listening tasks can mitigate its effects. One major problem that has been identified among second language learners is listening to anxiety. This study confirms Kim's (2000) conclusions that the main stresses were peer comparison, speaker speed, vocabulary restrictions, and pronunciation problems.

Likewise, Kimura (2008) distinguished between task-focused and self-focused apprehension as the two components of listening anxiety. Fast speech and insufficient repetition exacerbate listening anxiety, according to Fang (2011), who also suggested that note-taking and systematic listening exercises can help lessen its effects. Zhang (2013) also pointed out that because of the cognitive pressure brought on by new words, pupils frequently overlook later audio segments.

These studies confirm that listening anxiety is both real and widespread, and should be addressed through explicit listening training, strategic audio input, and regular exposure to English in varied formats.

4.4 Recommended Strategies and Interventions

To mitigate CALL-related anxiety and enhance listening proficiency, students need to engage regularly with CALL applications. Frequent practice helps improve comprehension and build confidence. Teachers should foster a relaxed and supportive classroom environment to reduce student stress and promote active participation. According to the results, 86% of students agreed they would pay closer attention in listening classes if teachers implemented engaging activities such as time-limited dictation, retelling exercises, and group competitions. Therefore, integrating these activities can make the learning process more interactive and practical.

Positive teacher-student interaction also plays a key role. 77% of students reported feeling more confident when teachers were encouraging, while 82% agreed that teacher motivation boosts their performance. CALL-based activities and proper teacher training should be prioritized in educational settings due to their significant contribution to student achievement. As Saeed (2013) noted, CALL technology enhances both the creativity and productivity of language learning. Similarly, Whittaker and Warschauer (1998) emphasized the importance of structured planning and teacher involvement in implementing CALL in language classrooms. Our findings support their view that CALL is a powerful tool for accelerating learning, and its use should be expanded across age groups, including early learners.

To address CALL-induced listening anxiety, students should view anxiety as a normal part of the learning process and engage in regular listening practice to build confidence. In addition to anxiety, learners often struggle with poor pronunciation, limited phonetic knowledge, weak memory, minimal grammar and vocabulary, and a lack of interest. These factors also hinder listening comprehension and warrant further investigation in future research.

Conclusion

This study reviewed the impact of CALL-related anxiety among BS-level second language learners. Data were collected through student questionnaires and interviews with English Department CALL students. The findings align with Kenworthy and Underwood's (1989) claim that listening anxiety is often triggered by poor word recognition, limited concentration, weak vocabulary, and rapid speech rates.

The causes of listening anxiety identified in this study are consistent with previous literature. A mixed-methods approach was adopted, using a modified version of the Foreign Language Listening Anxiety Scale (FLLAS) to assess anxiety levels and the impact of CALL. The results indicate that students generally have a positive attitude towards CALL tools, reporting that these applications offer quick feedback, easy accessibility, and valuable resources like online dictionaries, which support the development of listening, speaking, reading, and writing skills. Students acknowledged improvements in pronunciation, comprehension, grammar, vocabulary, and communication skills. However, the study also found that students face considerable anxiety during listening tasks, particularly when encountering unfamiliar material, rapid speech, limited vocabulary, and background noise. Between 60%–79% of students reported experiencing anxiety related to these factors.

Interview findings revealed that many students lack awareness of effective listening strategies, and such techniques are often overlooked in the classroom. Based on these insights, it is recommended that students be trained in coping mechanisms to manage listening anxiety, such as focusing on the general meaning rather than specific words and reducing the fear of incorrect responses. Enhancing CALL-based instruction and strategy training could significantly mitigate listening anxiety and improve learners' confidence and language outcomes.

Acknowledgment

The authors confirm that this work is original, free from plagiarism, and has not involved the use of AI-generated content.

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