

Foreign Language Listening Comprehension and Listening Anxiety

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Abstract

Listening comprehension plays a pivotal role in second language (L2) acquisition, but the process of listening is complex. L2 learners' listening ability is influenced by both cognitive and affective factors. Among the latter, anxiety is one of the most commonly studied variables in the field of education (Horwitz, 2001); however, its impact on learners' listening performance is inconsistent in previous research and there have been contradictory findings

regarding whether anxiety levels differed significantly according to gender. To address these limitations, this study investigated the effect of gender and foreign language listening anxiety (FLLA) on listening comprehension among 187 university students in China. In addition, it explored whether there were significant differences in FLLA levels between genders. Data sources included the FLLA scale and the Oxford Online Listening Level Test to measure FLLA and L2 listening comprehension, respectively. Results from between-groups analysis of variance showed that listeners with low anxiety listened significantly better than listeners with moderate and high levels of anxiety. Gender differences were examined in two aspects of listening: listening comprehension and FLLA. Specifically, females performed better than males in listening comprehension, and females had a higher level of FLLA compared to males. These results provide implications for teaching L2 listening considering the role of anxiety and gender.

Keywords: foreign language listening comprehension, listening anxiety, gender differences

Listening is one of the most critical skills to develop in foreign language learning, but it is a challenge for learners because the listening process is complex. According to Vandergrift and Goh (2012), listening comprehension is a problem-solving activity in which listeners use linguistic knowledge, pragmatic knowledge, prior knowledge, and discourse knowledge to process what they hear, thereby understanding spoken input. Vandergrift and Goh also suggested that listening results are also influenced by affective factors because these variables decide whether learners can maximize efforts in processing listening texts. Affective factors refer to emotional variables, including anxiety, self-efficacy, and motivation. These emotionally relevant factors influence how learners respond to tasks, therefore resulting in different listening outcomes. Of the three affective variables, anxiety seems to be extremely important for listening comprehension (Zhang, 2013). It is also included as an important category in Krashen's (1982) Affective Filter Hypothesis. Listening is highly anxiety provoking (Krashen, 1985), which in turn prevents learners from comprehending input (Krashen, 1982). In the L2 listening process, anxiety is caused by several factors, such as learners' low level of self-confidence (Chang, 2008; Zhai, 2015), worry and discomfort over listening (Kimura, 2008), unfamiliar topics (Kim & Cha, 2013), and process-related factors (e.g., the way students handle the listening process, like distinguishing among words in speech; Marzec-Staw, 2013; Vogely, 1998).

Much research has studied the relation between anxiety and foreign language listening; however, there have been inconsistencies reported about the relationship (positive, negative, or non-significant relationships; Zhang, 2013). Research has also aimed to determine if levels of listening anxiety may differ according to gender (e.g., Bekleyen, 2009; Campbell & Shaw, 1994; Elkhafai, 2005; Golchi, 2012), but it too has shown inconsistent results. Given the theoretical importance of listening anxiety in listening comprehension and inconsistent

empirical findings, the current study explored the relation between anxiety and listening proficiency, and differences in anxiety and listening performance according to gender.

Literature Review

Listening Comprehension

Listening is a complex process that Buck (2001) defines as the ability to:

- a) process extended samples of realistic spoken language, automatically and in real time;
- b) understand the linguistic information that is unequivocally included in the text; and,
- c) make whatever inferences that are unambiguously implicated by the content of the passage. (p. 114)

Based on his definition, listening is regarded as a process in which listeners achieve comprehension by using linguistic information provided in speech to understand the input and make inferences beyond the literal meaning. However, this competence-based definition does not account for individual differences in listeners' characteristics that may affect performance. The empirical literature has consistently shown that comprehension is affected by individual differences in vocabulary knowledge (Bonk, 2000; Cheng & Matthews, 2018; Du & Man, 2022; Stæhr, 2009; Wallace, 2021), listening strategies (Bozorgian et al., 2021; Graham et al., 2010), working memory (Shipstead et al., 2014), and listening anxiety (Elkhafafi, 2005; Kim, 2002; Vogely, 1998; Wang & Cha, 2019). Despite this volume of literature, the number of theoretical models accounting for individual differences has been limited (Vandergrift & Goh, 2012).

To address this limitation, Vandergrift and Goh (2012) built on Imhof and Janusik's (2006) L1 listening comprehension framework and developed a theoretical model for L2 listening comprehension that includes these individual characteristics. The model identifies two categories of individual variables that affect comprehension: cognitive factors (e.g., linguistic knowledge, pragmatic knowledge, prior knowledge, metacognitive knowledge, sound discrimination ability, working memory capacity, and L1 listening ability) and affective factors (e.g., anxiety, self-efficacy, and motivation). It would be impractical to examine all the factors in the model, so the current study will focus on the role of anxiety in listening comprehension since it influences greatly whether language learners can maximize their comprehension efforts (Vandergrift & Goh, 2012).

Foreign Language Listening Anxiety (FLLA)

Listening has long been established as a source of anxiety for L2 learners, leading Vandergrift and Goh (2012) to state that learners usually feel anxious when they are listening to a foreign language. But why does listening cause anxiety for L2 learners? MacIntyre (1995) explains that L2 learners worry about misunderstanding or misinterpreting the content of the speech, which makes them feel embarrassed, and this negative feeling would cause anxiety. Attempting to identify the specific causes of listening anxiety, Vogely (1998) collected descriptive data

from 140 participants and identified several main factors that evoked anxiety among listeners, such as listening process (e.g., inappropriate strategies, lack of processing time) and personal characteristics (e.g., fear of failure, nervousness). The study, however, does not include inferential statistics, so the findings could not be generalized. Marzec-Stawiarska (2013) expanded the scope of inquiry into FLLA research by using mixed methods to establish the relation between FLLA and listening. She added a knowledge-related factor (e.g., unfamiliar words or topics) to those established by Vogely. These sources of listening anxiety have the potential to adversely affect students' listening performance. Therefore, the questionnaire used in this study to measure FLLA also includes these sources.

FLLA, Gender and Listening Comprehension

There is a long-standing debate about the relationship between FLLA level and listening performance (Zhang & Shen, 2022). Some studies have found that FLLA negatively influences foreign language learners' listening performance. For example, Zhang (2013) reported that FLLA negatively affected performance on the listening section of the IELTS test among 300 Chinese university English majors. FLLA was operationalized as a two-dimensional construct, involving listening anxiety (feelings of concern about listening) and self-belief (confidence in one's listening ability). Using structural equation modeling, Zhang showed that listening performance was worse if learners experienced higher anxiety, but if anxiety levels decreased, then listening performance improved. Similar findings were reported by Elkhafai (2005), who found a strong negative correlation between listening anxiety (operationalized as listening anxiety and self-belief) and course grades for a listening comprehension course ($r = -.70, p < .01$) for Iranian language learners of Arabic. His findings also showed that students studying in their third year had significantly less anxiety than first- or second-year students. This latter finding suggests that having greater experience with and/or language proficiency in with the target language may reduce how much anxiety learners feel, and subsequently, how strongly anxiety may affect performance.

Examining this, Kim (2002) developed a 33-item scale to measure FLLA (also operationalized as anxiety and self-confidence) based on interviews with 253 college EFL learners in Korea. Results showed a low negative correlation between FLLA and scores on the listening section of the TOEFL test ($r = -.364, p < .01$), which means that when listeners experienced a higher level of anxiety, they achieved a lower listening score. Kim also reported that lack of confidence was the most important predictor of listening proficiency, explaining 14.4% of the variance. Similar results were reported more recently by Wang and Cha (2019), who found that listening-anxiety ($r = -.227, p < .05$) and self-belief ($r = -.279, p < .01$), respectively, shared a weak correlation with listening performance for 78 Chinese university English majors. When the sample was divided by proficiency level, listening performance was correlated with only listening anxiety for the low-level group ($r = -.480, p < .05$) and only self-belief for the high-level group ($r = -.519, p < .05$). Altogether, the results from these empirical studies suggest that as foreign language listening anxiety increases, listeners' listening performance will be worse.

Though much evidence indicates that FLLA can play a detrimental role in listening comprehension, particularly for low-level listeners, it has also been reported that anxiety may be beneficial for listening or may have no impact at all. For example, Kim and Cha (2013) conducted a semester-long study among 27 Korean university students to examine students' listening anxiety. Based on participants' weekly listening logs, they observed that FLLA served as a source of motivation to encourage students to learn more. However, Liu (2016) reported that for 1160 Chinese university students, listening anxiety level was not predictive of students' listening performance for high- or low-level proficiency groups. Liu attributed this result to the test environment, where the participants completed the listening tasks independently without being questioned by their teacher. Had there been an interaction, Liu asserts that anxiety levels would have been higher, causing them to exert influence on listening performance. Due to the inconsistencies of whether FLLA shares a positive, negative, or has no relationship with comprehension, the present study focused on the role of anxiety in listening competence among a single cohort of Chinese students.

The issue of whether or not gender affects listening comprehension also remains unresolved. Several studies have investigated this topic, with some scholars (e.g., Alamdari & Bozorgian, 2022) suggesting that males exhibited weaker performance than females in second language listening tasks. However, other studies, including those conducted by Wolfgramm et al. (2016) and Aryadoust et al. (2022), found no significant gender differences in listening comprehension. Given the inconsistencies regarding the impact of gender on listening and the limited number of studies in this area (Aryadoust et al., 2022), it is imperative to investigate the role of gender in listening.

FLLA and Gender

It has been claimed that compared to men, female students experience a higher level of anxiety in a test situation. According to this view, women are expected by their parents to have better academic performance, so they are under greater pressure and worry about failing a test (Núñez-Peña et al., 2016). However, research examining gender differences in listening anxiety has shown inconsistent results. Some studies have shown that there are significant differences in FLLA between genders (Golchi, 2012; Liu & Thondhlana, 2015). For example, Golchi (2012) found that female Iranian IELTS learners had significantly higher levels of anxiety than males. Golchi did not offer an explanation for this difference, but it may have been due to males being more reluctant to admit that they feel anxiety (Williams, 1996). In contrast, Liu and Thondhlana (2015) showed that for 1702 Chinese university students, males ($M = 2.91/5.0$) felt significantly more anxiety than females ($M = 2.80/5.0$) when completing listening activities. Liu and Thondhlana attributed these results to differences in general English proficiency, self-beliefs (confidence in themselves as listeners), and prior English listening experiences between the gender groups, so they called for future research on gender differences in FLLA.

It has also been reported that there is no significant difference between gender and listening anxiety (Bekleyen, 2009; Chen & Ren, 2021; Elkhafaifi, 2005; Kimura, 2008; Ko, 2010). For example, Elkhafaifi (2005) reported no significant effect of gender on listening anxiety for

Arabic foreign language learners. His finding was supported by Bekleyen (2009), who also reported no statistical difference between genders, despite the fact that women had higher levels of foreign language listening anxiety on average than men. Taken altogether, there does not seem to be a consensus on whether there are significant differences between genders for listening anxiety, and therefore, further examination is needed.

Due to the purported theoretical importance of FLLA on listening comprehension and the inconsistencies in research literature identified above, the current study will answer the following three research questions:

RQ1: What are the listening anxiety levels for the Chinese university students?

RQ2: Does FL listening comprehension differ according to anxiety level and gender?

RQ3: Do learners' levels of FLLA differ across genders?

Methodology

Participants

After receiving ethical clearance to conduct the study, we utilized a convenience sampling method to recruit 187 students (76 males, 111 females) from a university in Macau. The first language of the participants was Chinese. The sample consisted of first to fourth year undergraduate students across the university. To recruit them, we posted a link to the study's instruments on a popular social media platform that students in this university frequently use (*WeChat*).

At this university, English is the language of instruction, which means that classes are taught in English. There is a wide range of English language proficiency levels among the students in the university, from low beginner to advanced English language users. Upon entry in first year, students complete a language proficiency test, the result of which determines if they are required to complete courses in an English Language Center while they are completing their undergraduate coursework. Successful progression through the language center program is typically achieved after two years, at which time the students are estimated to be at the intermediate-level of proficiency (i.e., Common European Framework of Reference for Languages B2).

Instruments

Oxford Online Listening Level Test. To measure participants' listening proficiency, Oxford Online Listening Level Test, a free online practice listening test, was adopted. The purpose of using it was to determine students' listening comprehension ability and to stimulate their levels of anxiety when listening to English. The test was divided into six sections. In each section, participants listened to a conversation about daily life and then answered four multiple choice questions. Each multiple choice question had only one right answer. Students were required to listen to the materials only once, and they were expected to finish all the questions in 5 minutes.

The listening topics involved every day, social situations, but the audio input and the language increased in length and complexity as the sections progressed from Section 1 to Section 6. Two listening sub-skills, listening for details (14 items) and for making inferences (10 items), were tested. If participants need to understand the explicit specific information to answer the question, the item is identified as listening for details. However, items requiring listeners to apply their ability to understand implied meaning across the materials are marked as listening for making inferences (Sawaki et al., 2009).

The Oxford Online Listening Test has a possible score range of 0 to 24. Correct answers were given one point each. Participants' English listening level was measured by the total number of correct answers (See Table 1).

Table 1. Number of Correct Answers and English Listening Level

Correct Answers	English Listening Level
0-9	Elementary
10-14	Pre-intermediate
15-19	Intermediate
20-23	Upper-intermediate
24	Advanced

Foreign language listening anxiety scale (FLLA scale). Kim's (2002) FLLA scale was adopted as the measurement of participants' anxiety levels. It consisted of 33 items describing worry or concern about listening in English. Participants responded using a 5-point Likert-scale of agreement, ranging from strongly disagree (1) to strongly agree (5; see Appendix). Four items (3, 19, 28, 32) were negatively worded, meaning they indicated no worry or concern about listening, to ensure the participants carefully responded. These items were reverse-coded in the analysis to ensure they were on the same scale as the remaining 29 items. The more anxious a respondent was, the higher the score. According to Kim (2002), the scale had high internal consistency (0.90) and test-retest reliability (0.84), which showed that the FLLA scale was quite reliable to measure the level of anxiety. Versions of it have been applied in previous studies (Bekleyen, 2009; Kim, 2005; Marzec-Stawiarska, 2013), and results showed that this scale was suited for measuring EFL learners' anxiety.

Data Collection Procedure

Prior to completing the online survey, all participants had to sign an informed consent form according to the university's policies. Electronic versions of the QR code or link and specifications about how to perform the online survey were provided. Participants firstly provided demographic information (e.g., gender and year of study) before clicking the link of the listening test. Next, the listening recording and questions were shown on the screen and participants finished the listening questions within 10 minutes. In the next stage, they

completed the FLLA questionnaire. The entire procedure lasted about 15-20 minutes.

Data Analysis

The data were analyzed with SPSS version 26 (IBM, 2019). The internal consistency reliability was first examined for the listening tests items and items in the FLLA questionnaire overall. Cronbach's alpha values above 0.70 would suggest an acceptable level of reliability (Taber, 2018). Six composite variables were then created by totaling the scores of the listening questions and by averaging the scores of the items for the FLLA scale for the sample overall and for male and female participants. Descriptive statistics of mean, standard deviation, 95% confidence intervals, skewness, and kurtosis were calculated for each variable.

To answer research question one, the descriptive statistics were inspected. To answer research question two, a between-groups analysis of variance was calculated with Listening Test as the dependent variable and Gender and Anxiety Level variables as the fixed factors. The Anxiety Level variable was created by assigning values based on cut-scores on the anxiety questionnaire. Scores up to 3.42 were assigned a value of '1,' indicating low to moderate anxiety level ($n = 105$). Scores above 3.45 were assigned a value of '2,' indicating higher anxiety level ($n = 82$). Prior to conducting the analysis, the data was confirmed to meet the assumptions underlying two-way analysis of variance. This included a normally distributed dependent variable on a continuous scale (Listening Test), two independent categorical variables (Gender and Anxiety Level), absence of significant outliers, independence of observations, and homogeneity of variance (non-significant Levene's Test). If an interaction effect was detected in the results, then independent-samples t -tests for Gender and Anxiety Level variables (e.g., compare listening performance between anxiety levels for male and female participants, respectively) would be conducted to detect means differences between the two interaction variables. If no interaction effect was detected, the main effects of the two variables were inspected. To answer research question three, an independent samples t -test was used to examine for differences between gender variables on the FLLA scale.

Results

Table 2 shows the descriptive statistics and internal consistency reliability estimates of the FLLA questionnaire and listening test. For the FLLA questionnaire, the Cronbach's Alpha of the 33 items was 0.932, indicating high internal consistency. The overall mean for participants' listening anxiety level was 3.26 ($SD = 0.53$). The mean was 3.17 ($SD = 0.46$) for the males, 3.32 ($SD = 0.57$) for the females, 2.90 ($SD = 0.41$) for participants with low-to-moderate anxiety levels, and 3.71 ($SD = 0.24$) for the participants with higher anxiety levels. In terms of listening test scores, the Cronbach's Alpha for the listening test was also good, at 0.775. Overall, participants scored 16.77 out of 24 on the listening test on average ($SD = 4.14$); females scored 17.08 ($SD = 4.05$), males scored 16.30 ($SD = 4.26$), participants with low-to-moderate anxiety levels scored 17.89 ($SD = 3.95$), and the participants with higher anxiety levels scored 15.33 ($SD = 3.95$).

Table 2. Descriptive Statistics and Reliability Estimates for FLLA and Listening Test Score for the Sample Overall (N = 187), Males (n = 76), Females (n = 111), Low-to-Moderate Anxiety Levels (N = 105), and Higher Anxiety Levels (N = 82)

Variable (# items)	Mean (SD)	95% CI	Skewness	Kurtosis	Alpha
FLLA level (33)	3.26 (0.53)	3.18, 3.34	-0.626	6.33	0.932
Males	3.17 (0.46)	3.07, 3.28	-0.808	0.530	0.920
Females	3.32 (0.57)	3.21, 3.43	-0.687	0.693	0.936
Low-to-moderate anxiety	2.90 (0.41)	2.82, 2.98	-1.165	1.329	0.883
Higher anxiety	3.71 (0.24)	3.66, 3.77	1.332	1.376	0.690
Listening Test Score (24)	16.77 (4.14)	16.17, 17.36	-0.877	0.405	0.775
Males	16.30 (4.26)	15.33, 17.28	-0.765	0.282	0.781
Females	17.08 (4.05)	16.32, 17.84	-0.973	0.615	0.771
Low-to-moderate anxiety	17.89 (3.95)	17.12, 18.65	-1.338	1.965	0.775
Higher anxiety	15.33 (3.95)	14.46, 16.20	-0.607	-0.149	0.728

Note. FLLA = Foreign Language Listening Anxiety scale

The results of the between-groups analysis of variance showed no significant interaction effect between Gender and Anxiety Level variables for the Listening Test Score variable. The Gender variable had a weaker main effect ($p < .05$, $\eta p^2 = .022$) on the Listening Test Score variable than the Anxiety Level variable ($p < .001$, $\eta p^2 = .111$). This means that on the listening test, females scored significantly higher than males and listeners with low-to-moderate anxiety scored significantly higher than listeners with higher anxiety.

For research question three, the results from an independent-samples t -test showed no significant differences between genders on the anxiety scale, $t(185) = -1.868$, $p = .063$, 95% CI [-.303, .008].

Discussion and Implications

Overall, the sample did not experience a very high degree of anxiety ($M = 3.26$, $SD = 0.53$), with the means within the medium-range of anxiety. This result may be largely explained by environmental factors regarding the listening test and participant learning conditions. The listening test was conducted online, giving participants the flexibility to decide the time, location, and pacing of the test. This level of agency may have contributed to lower anxiety levels and supports Vogely's (1998) findings that one source of FLLA is the test conditions when students cannot control the pace of listening. Because our participants could control when to take the test, where to take it, and how quickly to proceed through the test, they may have felt more at ease.

The broader learning environment of our participants may also explain their lower anxiety levels. Our participants had studied English since elementary school and were attending university classes that were delivered in English. It is likely that this familiarity with the target language, having years of experience with it, explains the listening anxiety levels. Our results coincide with both Wang and Cha (2019) and Liu (2016), who showed that listening anxiety levels (below 3.5 on the same scale) were not very high for university students from mainland China. Of the two studies, our findings more closely aligned with Wang and Cha. This may have been due to the frequency with which the participants encountered the target language. Our participants studied in a target-language environment, meaning that every class was conducted in English. Wang and Cha's participants were English majors, who likely encountered English in class very frequently. In contrast, Liu's participants were non-English majors, whose exposure to the target language was restricted to language courses (though this information is not provided in the article). Anxiety levels in Liu's study were reportedly below 3.0 on the anxiety scale, suggesting that they may have been less anxious than ours and Wang and Cha's participants. An explanation for this may be that Liu's participants did not need to use their English listening comprehension to succeed in their university courses like ours and Wang and Cha's participants. The higher stakes (i.e., successful learning of class content in order to graduate) may have contributed to the slightly higher anxiety levels.

FLLA, Gender and Listening Performance

The second research question focused on the effect of anxiety and gender on FL listening proficiency. Based on the results, both FLLA and gender had influence on listening test scores. First, the result that listeners with less anxiety performed better than listeners with moderate and high anxiety was expected because, as Krashen's (1982) Affective Filter Hypothesis suggests, affective factors like anxiety may lead to "mental block" which can impede the understanding of language input. This notion was unsupported by results in Kim and Cha (2013) who showed that higher levels of listening anxiety motivated learners to listen more. However, our results showed that higher anxiety was detrimental to listening comprehension, supporting Krashen's view. Our results also reinforce the importance of anxiety in Vandergrift and Goh's (2012) Systems Model of L2 listening. Anxiety is an important affective variable contributing to L2 listening performance, and our findings support this.

Our results generally align with those reported by Elkhafaihi (2005), Golchi (2012), Kim (2002), Liu and Thondhlana (2015), and Zhang (2013), who also showed that when students experienced a higher level of anxiety, their performance in completing listening comprehension tasks suffered. However, the strength of anxiety's effect on comprehension in our study is more in line with Kim's (2002) and Wang and Cha's (2019) correlational findings and weaker than Elkhafaihi's (2005). This difference may have been due to the listening comprehension measurement across the studies. Elkhafaihi used grades for a listening course as the measurement, while the other studies used performance on a listening test (e.g., TOEFL). Interpreting these results together, listening anxiety may have less of a negative influence on a single listening performance, but a more pronounced effect on ongoing listening tasks, like

those completed throughout a course. More research is needed to confirm this, however, because only Elkhafaifi examined listening performance over time.

The present study has also yielded findings indicating that there were gender differences in listening performance, and female participants exhibited better listening performance than their male counterparts. This aligns with previous research by Alamdari and Bozorgian (2022), which also reported gender differences in listening skills. Mills et al. (2006) suggested that cultural norms around language learning may contribute to these differences. Specifically, in some cultures, men may view language acquisition as a feminine pursuit, which can make them feel uncomfortable in language learning settings. In China, where Macau is located, gender-specific beliefs about academic aptitude and achievement are prevalent (Li & McLellan, 2021). For example, male undergraduates in language programs may be criticized for lacking masculinity, as language learning is not typically associated with masculinity in Chinese society (Yao, 2011). Li and McLellan (2021) suggested that such stereotyping may create a threat effect for males in language learning domains, which could explain the poorer listening performance of male participants in the current study.

FLLA and Gender

In terms of the effect of gender on FLLA, the present study showed that female students were significantly more anxious than male students. This result aligns with that reported by Golchi (2012), who also reported that females had higher anxiety levels than males. Higher anxiety for females can be attributed to the differences in the social roles of the two genders. Female students have been shown to be under heavier stress at school than males since more pressure is placed on their academic performance (Núñez-Peña et al., 2016; Rezazadeh & Tavakoli, 2009). This may lead to feelings of fear or concern about their performance. The other explanation is that both studies were conducted in a male-dominant socio-cultural background, in which males tend to be too defensive to admit their anxiety, as this poses a threat on their male image (Rezazadeh & Tavakoli, 2009).

Pedagogical Implications

The results of the current study provide some implications for pedagogy. Since FLLA level has a negative influence on students' listening performance, it is essential for teachers to deal with students' listening anxiety, especially for female students. Firstly, teachers can ensure students have consistent exposure to authentic listening materials and encounter English speech in different contexts. Due to the development of the Internet, various online resources, such as videos, formal lectures, and academic open courses, can be easily accessed for classroom use (Wang & Cha, 2019). During class time, instructors should also encourage students to use English when speaking. This would be another way to increase the amount of exposure to spoken English with the aim of reducing listening anxiety. Additionally, to decrease participants' apprehension level, teachers can pre-teach students vocabulary and equip them with topic knowledge. When participants can become more familiar with the words and topics, their level of anxiety may be eased (Vogely, 1998). Finally, teachers may consider incorporating

the instruction of emotion regulation strategies into their courses. These strategies aid listeners in reducing anxiety and maintaining a positive perspective on listening. Supporting this recommendation are preliminary results from studies examining metacognition and L2 listening have shown that anxiety regulation strategies (operationalized as the Person Knowledge variable on the Metacognitive Awareness Listening Questionnaire) may explain some unique variance in listening performance above linguistic knowledge (Wallace, 2021).

Conclusion and Limitations

This study contributes to the existing literature on the influence of gender and FLLA on listening comprehension. Moreover, it investigates gender differences in FLLA levels. The findings suggest that gender has a significant impact on listening comprehension, with females performing better than males. Anxiety level was also found to affect listening scores. Participants with lower levels of anxiety had better listening performance than those with moderate and high levels of anxiety. Additionally, the study reveals that females had higher levels of anxiety than males when engaging in listening tasks. The study's findings support the idea that FLLA negatively affects listening scores, so it should be taken into consideration in teaching practice.

The study is not without its limitations. One limitation is that when finding participants, a convenient sampling method was used. Therefore, all participants were from the same university, which means that the findings of this study may not be generalized. Future studies may involve participants from different universities. Secondly, as it is difficult to measure anxiety and students self-reported their level of anxiety, they may not reflect an accurate negative feeling while filling the questionnaire. In the future, different data-collection techniques (e.g., interviews or diaries) could be applied to measure their FLLA level. The last drawback is that because the listening test was taken online, the conditions under which the participants completed the listening test were different. For example, though they were instructed to find a quiet place to complete the test, it is still possible that the environment they chose was less ideal for taking a listening test. Despite these limitations, the current study contributes to understanding the impact of individual factors on listening comprehension and therefore, providing pedagogical implications for teachers to deal with issues related to students' listening anxiety.

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Appendix

Foreign Language Listening Anxiety Scale

After reading each statement listed below, choose the number (1-5) that applies to you using the scale provided. Please note that there are no right or wrong answers to the statements in this scale. 閱讀每一句陳述，選出相對應的數字（1-5）。請注意此問卷沒有標準答案。

Five numbers (1-5) follow each statement, and each number means the following: 五點量值（1-5）分別代表：

- 1 – Strongly disagree 非常不同意
- 2 – Disagree 不同意
- 3 – Undecided 不確定
- 4 – Agree 同意
- 5 – Strongly agree 非常同意

1. When listening to English, I tend to get stuck with one or two unknown words. 聽英語時我常常因為一兩個生詞而陷入困境。	1	2	3	4	5
2. I am nervous when I'm listening to English if I am not familiar with the topic. 如果聽一個我不熟悉的話題，我會很緊張。	1	2	3	4	5
3. It is easy to guess about the parts that I miss while listening to English. 我很容易猜測出聽力錯過的內容。	1	2	3	4	5
4. If I let my mind drift even a little bit while listening to English, I worry that I will miss important ideas. 如果聽的時候我稍微走一下神，我就擔心會錯過重要的部分。	1	2	3	4	5
5. During English listening tests, I get nervous and confused when I don't understand every word. 在聽力考試中，當我不理解每個單詞時，會感到緊張和困惑。	1	2	3	4	5
6. I fear I have inadequate background knowledge of some topics when listening in English. 聽英語時我擔心我對某些話題了解得不夠充分。	1	2	3	4	5
7. Listening to new information in English makes me uneasy. 用英語聽新的信息會讓我感到不安。	1	2	3	4	5
8. I get annoyed when I come across words that I don't understand while listening to English. 聽英語時碰到一些我不理解的詞，我會感到煩惱。	1	2	3	4	5
9. I get nervous if a listening passage is read only once during listening tests. 英語聽力測試時如果只讀一遍我便很緊張。	1	2	3	4	5
10. When someone pronounces words differently from the way I pronounce them, I find it difficult to understand. 當某人的發音與我的發音不同時，我會覺得很難理解。	1	2	3	4	5

11. When a person speaks English very fast, I worry that I might not understand all of it. 當別人英語說得很快時，我會擔心不能完全聽懂。	1	2	3	4	5
12. When I am listening to English, I am worried when I can't watch the lips or facial expressions of the person who is speaking. 聽英語的時候如果我看不到說話人的嘴唇或面部表情，我會感到擔心。	1	2	3	4	5
13. When listening to English, it is difficult to differentiate the words from one another. 聽英語時，很難把單詞彼此區分開來。	1	2	3	4	5
14. I feel uncomfortable in class when listening to English without the written text. 課堂上聽英語如果沒有文字材料我會感覺很不舒服。	1	2	3	4	5
15. When I'm listening to English, I usually end up translating word by word without understanding the contents. 聽英語的時候我常常最後在沒有理解內容的情況下進行逐字翻譯。	1	2	3	4	5
16. When listening to English I often understand the words but still can't quite understand the speaker's meaning. 聽英語時我常常能幾乎聽懂每一個單詞的意義，但是依然不能很好的理解說話者所說的內容。	1	2	3	4	5
17. I have difficulty understanding oral instructions given to me in English. 我很難理解用英語給我的口頭指示。	1	2	3	4	5
18. It is hard to concentrate on what English speakers are saying unless I know them well. 除非我很了解講英語的人，否則很難集中精力聽他們說什麼。	1	2	3	4	5
19. I feel confident when I am listening in English. 聽英語的時候我感到自信。	1	2	3	4	5
20. When I am listening to English, I often get so confused I can't remember what I have heard. 聽英語時我常常非常慌亂以致於記不得所聽的內容。	1	2	3	4	5
21. My thoughts become jumbled and confused when listening to important information in English. 當我聽英語中的重要信息時，我的思緒常常很亂。	1	2	3	4	5
22. I get worried when I have little time to think about what I hear in English. 聽力考試時因為我幾乎沒有時間思考我所聽到的內容，所以很擔心。	1	2	3	4	5
23. I would rather not have to listen to people speak English at all. 我寧願不聽別人說英語。	1	2	3	4	5
24. I get worried when I can't listen to English at my own pace. 當我不能按照自己的節奏聽英語時，我會擔心。	1	2	3	4	5
25. I keep thinking that everyone else except me understands very well what an English speaker is saying. 我一直認為除了我，別人都非常理解聽力的內容。	1	2	3	4	5

26. I get upset when I'm not sure whether I understand what I am listening to in English. 當我不確定我是否理解我所聽到的內容時，我會感到不安。	1	2	3	4	5
27. If a person speaks English very quietly, I am worried about understanding. 如果一個人講英語的時候很平靜，我就擔心理解的問題。	1	2	3	4	5
28. I have no fear of listening in English as a member of the audience. 作為聽眾時，我不怕聽英語。	1	2	3	4	5
29. I am nervous when listening to an English speaker on the phone or when imagining a situation where I listen to an English speaker on the phone. 當我在電話裏聽一個說英語的人說話或者想象我在電話裏聽一個說英語的人說話的情景時，我會感到緊張。	1	2	3	4	5
30. I feel tense when listening to English as a member of social gathering or imagining a situation where I listen to English as a member of a social gathering. 當我作為社交聚會的一員聽英語時，或者想象我作為社交聚會的一員聽英語時，我會感到緊張。	1	2	3	4	5
31. It is difficult for me to listen to English when there is even a little bit of background noise. 當有一些背景噪音我就很難聽懂英語。	1	2	3	4	5
32. English stress and intonation seem familiar to me. 我似乎對英語的重音和語調很熟悉。	1	2	3	4	5
33. It frightens me when I cannot catch a key word of an English listening passage. 當我聽不懂英語聽力文章的一個關鍵詞時，我感到害怕。	1	2	3	4	5

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