A Study of Chinese University EFL Learners’ Online English Classroom Anxiety and Listening Anxiety

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Abstract
The present study examined Chinese university EFL (English as a foreign language) undergraduates’ classroom anxiety and listening anxiety in online English language classrooms. 261 freshmen from a Chinese state-owned university answered a 56-item questionnaire on their English language classroom and listening anxiety. Findings from the survey data were as follows: (1) the participants were slightly higher than intermediate level in both overall English classroom anxiety and overall English listening anxiety; (2) gender does not play a significant role in differentiating undergraduates’ overall English classroom anxiety, overall English listening anxiety, and their subscales; (3) the ELCAS and its subscales were significantly positively intercorrelated and correlated with the ELLAS and its subscales; (4) students’ classroom anxiety and listening anxiety predicts each other. The results of the study add to the limited number of studies on foreign language anxiety in online learning environment and can offer teachers pedagogical suggestions inclusive of providing more opportunities for students to practice spoken English, relieving students’ fear of the new instruction technology by changing task assignment, and endeavoring to help students with technical problems.

Keywords
Foreign language listening anxiety, foreign language classroom anxiety, online English language classroom

1 Introduction

Research on foreign language anxiety (FLA) has burgeoned in the last few decades because of its pervasiveness both inside and outside the classroom, which has already become an impediment to language learning (Skehan, 1991; Yan & Horwitz, 2008). Krashen (1982) attributed anxiety to the three current teaching practices: insistence on early production of the target language, over-emphasis on error correction, and exposure of the student to incomprehensible target language input. Since foreign

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language learning and teaching in the classroom is mostly accomplished through verbal communication between students and teachers, listening is the second most anxiety-provoking language skill ensuing speaking (Gkonou, 2013; Horwitz et al., 1986), while research on listening in class is far less than that of speaking in class. In linguistic education, gender difference is an important factor influencing the design of curriculum, teaching method, instructional strategy, and students’ learning processes (Lai & Kuo, 2007). Therefore, the present study attempts to explore the levels of and gender differences in foreign language classroom anxiety and listening anxiety, as well as the relationship between these two types of anxiety among Chinese university EFL (English as a foreign language) students.

While FLA is a well-researched aspect in offline classroom contexts, only a few studies have specifically examined it in the online learning context (Baez-Holley, 2013; Bollinger, 2017; Chang & Lin, 2019; Donahoe, 2010; Pichette, 2009; Russell, 2020; Wang & Zhan, 2020). Thus whether FLA in online learning differs from that in offline setting remains an open question. The lack of adequate research on FLA in online learning contexts makes worthwhile for further research foreign language learners’ classroom anxiety and listening anxiety in online learning context under the COVID-19 situation, which is just the present study’s research object.

2 Literature Review

2.1 Situational foreign language anxiety

Foreign language anxiety is a complex, multidimensional phenomenon (Dewaele, 2007) and MacIntyre et al. (1998) defined it as “the worry and negative emotional reaction aroused when learning or using a second language”. More specifically in classroom learning situations, the original definition of foreign language classroom anxiety (FLCA) hints at the complexity unique to the language learning process in classrooms (Horwitz et al., 1986). As opposed to trait anxiety (an animic state of some individuals to feel anxious in any situation) or state anxiety (apprehension experienced at a particular moment in time) (Spielberger et al., 1983), foreign language anxiety is a specific kind of anxiety induced by situational factors (Horwitz et al., 1986; MacIntyre & Gardner, 1989), since it concerns “the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning” (MacIntyre & Gardner, 1994, p.284).

To measure general FL classroom anxiety, Horwitz et al. (1986) designed the FL classroom anxiety scale (FLCAS) in the 1980s, which consisted of 33 items and covered three constructs: communication apprehension, fear of negative evaluation, and test anxiety. However, since the FLCAS has a strong focus on oral speaking (Aida, 1994), a number of language-skill-specific FL anxiety scales were developed in the late 1990s which measured the anxiety commonly found in FL writing (FLCAS, Cheng et al., 1999), reading (FLRAS, Saito et al., 1999), and listening (FLLAS, Elkhafaifi, 2005; Kim, 2000). These skill-specific anxiety scales indicated that FL anxiety can arise from various FL learning contexts and studies found negative correlations between skill-specific anxiety and skill-specific performance consistently (Horwitz, 2001). Research has confirmed that different types of FLA produces negative experiences and reactions, including tension, dread, forgetfulness, concentration difficulties, worry, lower grades, etc (Aida, 1994; Gregersen, 2007; Horwitz et al., 1986).

2.2 Gender differences in foreign language classroom anxiety and language-skill-specific anxiety

It remains controversial whether classroom anxiety differs across gender. Most studies exhibit females’ higher level of classroom anxiety (Ali & Fei, 2016; Dordinejad & Ahmadabad, 2014; Park & French, 2013) or no significant gender differences (Amengual-Pizarro, 2018; Yashima et al., 2009), despite
the exception of females’ lower classroom anxiety revealed by Azher et al. (2010). Moreover, gender differences have been widely examined on all four types of language-skill-specific anxiety, and results are divided into two streams: one is that no significant gender differences on listening anxiety (Capan & Karaca, 2013; Kimura, 2008), reading anxiety (Capan & Karaca, 2013; Joo & Damron, 2015), speaking anxiety (Batiha et al., 2016; Debreli & Demirkan, 2015) or writing anxiety (Anggraini, 2016); the other is that females are greater than their male counterparts on reading (Lien, 2011; Sabti et al., 2016), speaking anxiety (Çağatay, 2015; Mahmoodzadeh, 2012), while males exhibit a higher level of writing anxiety (Liu & Ni, 2015) or listening anxiety (Liu & Thondhlana, 2015), and Shi and Liu (2006) reveals greater reading anxiety among male students. In particular, Marzec-Stawiaska (2014), who delves into speaking anxiety, vacillates between the two views, as he reports different patterns of gender differences in different speaking tasks.

Research on foreign language learning context in Chinese context is still rare despite that of Liu and Thondhlana (2015), and gender differences in two strategies coping with anxiety, namely peer seeking and positive thinking, suggested by Kao et al. (2017) might be an explanation for gender differences in listening anxiety. Online settings prove to be an obstacle for peer seeking in foreign language learning, and may even shape students’ view towards language. Most previous research demonstrates gender differences in online learning, with regard to learners’ motivation, strategies, cognitive loads, usage and feeling of e-learning (Hilao & Wichadee, 2017; Lai & Kuo, 2007; Morante et al., 2017; Sullivan, 2001; Yu, 2019), as well as the effects of social influence and self-management of learning on the inclination for online learning (Wang et al., 2009). With regard to scarcity of relevant research, exploration into gender differences in language-skill-specific anxiety, especially listening anxiety, is needed in the context of online language learning.

2.3 Foreign language anxiety (FLA) in online learning

Online learning refers to the form of education that takes place over the Internet, where students engage with instructors and other students at their convenient time and place. This sets up a new learning environment compared to traditional classroom anxiety. According to Wang (2005), there are many advantages of online learning, especially in the instruction of foreign language, because it allows educators to take a more constructivist approach in which the student becomes an active learner and the teacher a facilitator. However, partially due to different learning tasks involved in the research, previous studies on FLA in online learning environment were not very successful because they generated contradictory and biased results. Pichette (2009) found no differences in anxiety profiles between classroom and distance learners in the case of French-speaking language learners. Côté and Gaffney (2018) indicated that compared with traditional classrooms, the participants felt significantly less anxious and produced more conversation turns and words in the online learning context, whereas Kaisar and Chowdhury (2020) reached the opposite conclusion that most students felt more comfortable in face-to-face classrooms than in virtual classrooms, since virtual study lacks opportunities for interactive activities, and factors such as fear of being disconnected, fear of being isolated, lack of interaction with teachers and peers, and network problems also contributed to their anxiety. However, despite the increasing attention on online learning, relevant research is still relatively inadequate.

2.4 Relationships between foreign language listening anxiety (FLLA) and classroom anxiety (FLCA)

FLLA and general foreign language anxiety, though completely distinct, are positively correlated with each other, and current literature has also revealed a significantly negative association of FLLA with foreign language listening performance (Elkhafaifi, 2005; Kim, 2002). For example, Elkhafaifi (2005)
examined the effects of general foreign language learning anxiety and FLLA of 233 post-secondary students of Arabic as a foreign language on their final grades and listening comprehension scores. The results showed that both types of anxiety negatively affected students’ listening comprehension and final grades. Gkonou (2013) attributed FLCA to the class-oriented inauthentic listening activities, suggesting the relationship between classroom anxiety and listening.

Few studies dealt with the relationship between FLCA and FLLA, let alone those concerning that in online settings, except for Liu and Yuan’s (2021) study which discovered the highly positive correlation between these two types of anxiety in online English class. Given the importance of listening in classrooms and scarcity of relevant research, more studies on the relationship between FLCA and FLLA are of vital necessity.

2.5 Rationale for the Present Study

Numerous as they are on FLA in traditional classrooms as reviewed above, available studies are far fewer on FLA in online teaching and learning contexts. Since the outbreak of COVID-19 in late 2019, schools at all levels in many countries have had to resort to online teaching and learning. Given the prevailing online English language classrooms, the present study aims to investigate Chinese university EFL students’ foreign language classroom anxiety and listening anxiety in online foreign language classrooms in details, by answering the following questions:

1. What are students’ levels of English language classroom anxiety and listening anxiety in the online learning context?
2. Does gender play a role in affecting students’ classroom anxiety and listening anxiety in the online learning context?
3. How are the students’ English language classroom anxiety and listening anxiety related to each other in the online learning context?
4. Do English language classroom anxiety and listening anxiety predict each other?

3 Methods

3.1 Participants

261 freshmen (205 males and 56 females) from Beijing University of Posts and Telecommunications participated in the present survey. They had to take online classes for the spring semester of their first year of university study due to the COVID-19 pandemic. With an average age of 18.19 (SD=0.662) and an age range of 17 to 21, these students came from various disciplines, including Information and Communication Engineering, Electronic Engineering, Computer Science, Automation, Software Engineering, Economics and Management, Humanities, Cyberspace Security and Artificial Intelligence.

3.2 Instruments

Data in the present study were collected through both background questions on students’ gender, age and discipline and a 56-item questionnaire on FLLA and FLCA. The first 36 items of this questionnaire was adapted from the 36-item English Language Classroom Anxiety Scale (ELCAS) employed by Liu and Li (2019) who adapted the classical questionnaire developed by Horwitz et al. (1986) into one targeted for Chinese undergraduates. The wording of English classes was changed into online English classes to better suit the online learning situation. The other 20 items came from the 20-item Foreign Language Listening Anxiety Scale adopted by Liu and Thondhlana (2015) aiming to measure undergraduates’ English language listening anxiety. The 36-item ELCAS scales aimed at tapping into students’ anxiety...
in online English classroom from numerous aspects, and examples were “It frightens me when I don’t understand what the teacher is saying in English” and “I get tense and nervous when I have to discuss things unfamiliar to me.” The 20-item Foreign Language Listening Anxiety Scale, which was specified in our study as English Language Listening Anxiety Scale (ELLAS), measured learners’ anxiety in English listening, and examples were “I get upset when I’m not sure whether I understand what I’m hearing in English” and “When I listen to English, I often understand the words but still can’t quite understand what the speaker is saying”. Both these two questionnaires were on a 5-point Likert scale, with each item containing 5 alternatives ranging from “Strongly Disagree” to “Strongly Agree”, values of 1–5 assigned to the descriptors respectively.

3.3 Data collection procedure and analysis

Participants volunteered to fill out the questionnaires assigned to them at the end of the semester of online learning according to their feelings towards the online English classroom. The questionnaires were issued online and distributed to the participants by means of the Internet.

Before computing scores and conducting statistical analysis on SPSS 26, the researchers adjusted the values assigned to different alternatives of items 2, 5, 8, 11, 14, 18, 22, 28, 32, 48-50, 54 which expressed confidence in English class or listening English. For these items, the response “Strongly Disagree” was recoded as 5, the response “Strongly Agree” as 1. Thus, the mean score of the ELLAS revealed the respondent’s overall anxiety in English class, and the mean score of the ELLAS reflects the respondent’s overall anxiety in listening English. It was the same with their components.

This paper categorized the ELCAS scales based on Liu and Li’s (2019) factor analysis, with the ELCAS1 demonstrating one’s fear of speech communication in English (item 1, 3, 9, 13, 14, 18, 20, 24, 27, 32-35); the ELCAS2 being reflective of one’s worry about the English class (item 5, 6, 10-12, 16, 17, 22, 25, 26, 28); the ELCAS3 representing one’s worry about his or her own classroom performance (item 2, 4, 15, 19, 29-31, 36); the ELCAS4 indicating one’s worry about peers’ classroom performance (item 7, 23); the ELCAS5 demonstrating one’s worry about tests in English (item 8, 21). Moreover, with reference to Liu and Thondlana’s (2015) study, the ELLAS items include three categories in our study: the ELLAS1 (item 37, 40-42, 44) revealed a student’s listening anxiety; the ELLAS2 (item 48, 49, 54), demonstrated a student’s confidence in his or her own English proficiency, with high scores suggesting a student’s greater shortage of confidence; the ELLAS3, (item 39, 45, 46), reflected a student’s listening decoding skills, with high scores indicating that a student was less proficient in listening.

Data were analyzed through the following steps to address the research questions. Firstly, Cronbach a was calculated for the overall classroom anxiety, overall listening anxiety and their subscales to examine the reliability. Secondly, levels of classroom anxiety and listening anxiety were calculated, and gender differences are manifested in the t-test. Thirdly, correlation analysis was conducted on the overall classroom anxiety, overall listening anxiety and their subscales. Finally, with OLS regression analysis, an exploration was made into the possible prediction of ELCAS2-4 on ELCAS1 and ELCAS5.

4 Results

Prior to any statistical analysis, the reliability of both the ELCAS scales and the ELLAS scales were examined. Table 1 shows the medium to high reliability of the whole ELCAS (Cronbach a = 0.577 ~ 0.951), different factors of ELCAS (Cronbach a = 0.577 ~ 0.883), the whole ELLAS (Cronbach a = 0.896) and different factors of ELLAS (Cronbach a = 0.703 ~ 0.855), and therefore the reliability of both the ELCAS and the ELLAS are guaranteed.
Table 1

*Characteristics of Instruments (N = 261)*

<table>
<thead>
<tr>
<th>Measures</th>
<th>No. of items</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCAS</td>
<td>36</td>
<td>0.951</td>
</tr>
<tr>
<td>ELCAS1</td>
<td>13</td>
<td>0.856</td>
</tr>
<tr>
<td>ELCAS2</td>
<td>11</td>
<td>0.768</td>
</tr>
<tr>
<td>ELCAS3</td>
<td>8</td>
<td>0.816</td>
</tr>
<tr>
<td>ELCAS4</td>
<td>2</td>
<td>0.883</td>
</tr>
<tr>
<td>ELCAS5</td>
<td>2</td>
<td>0.577</td>
</tr>
<tr>
<td>ELLAS</td>
<td>20</td>
<td>0.896</td>
</tr>
<tr>
<td>ELLAS1</td>
<td>5</td>
<td>0.855</td>
</tr>
<tr>
<td>ELLAS2</td>
<td>3</td>
<td>0.703</td>
</tr>
<tr>
<td>ELLAS3</td>
<td>3</td>
<td>0.709</td>
</tr>
</tbody>
</table>

4.1 Levels of English language classroom anxiety and listening anxiety

Both the mean score and the standard deviation of the overall ELCAS, the overall ELLAS and different ELCAS and ELLAS factors were shown in Table 2. With respect to the standard adopted by Liu and Thondhlana (2015), a mean score of 4-5, 3-4, and below 3 on each scale meant strong agreement, moderate agreement and weak agreement respectively. As for the ELCAS, students were found to be moderate in their overall anxiety in English classes (ELCAS). They were moderately anxious about oral communication in English (ELCAS1), the English class itself (ELCAS2), and both their own and their classmates’ performance (ELCAS3 & ELCAS4). However, their test anxiety (ELCAS5) was rather weak. Speaking of the ELLAS, a moderate level was found in both students’ overall listening anxiety (ELLAS) and their self-belief in their own English proficiency (ELLAS2), while a rather weak level was discovered in their anxiety about listening activities (ELLAS1) and English listening proficiency (ELLAS3).

Table 2

*Descriptive Statistics of ELCAS, ELLAS and Different Categories of Both These Two Questionnaires (N = 261)*

<table>
<thead>
<tr>
<th>ELLAS1</th>
<th>ELLAS2</th>
<th>ELLAS3</th>
<th>ELLAS</th>
<th>ELCAS1</th>
<th>ELCAS2</th>
<th>ELCAS3</th>
<th>ELCAS4</th>
<th>ELCAS5</th>
<th>ELCAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.97</td>
<td>3.33</td>
<td>2.71</td>
<td>3</td>
<td>3.23</td>
<td>3.13</td>
<td>3.04</td>
<td>3.5</td>
<td>2.98</td>
</tr>
<tr>
<td>SD</td>
<td>0.84</td>
<td>0.77</td>
<td>0.87</td>
<td>0.34</td>
<td>0.65</td>
<td>0.66</td>
<td>0.71</td>
<td>1.06</td>
<td>0.88</td>
</tr>
</tbody>
</table>

A two-tailed t-test were run to examine the general pattern of the ELCAS and ELLAS levels across different genders, and results (Table 3) indicated the similarities and differences of these levels across different genders. Both male and female students were above the midpoint 3 in their overall ELCAS, ELCAS1, ELCAS2, ELCAS4 and ELLAS2 and were below the midpoint in their ELLAS3. However, differences were displayed across different genders in that male students were moderate in their ELCAS3, overall ELLAS and ELLAS1 while female students were low in these dimensions, and these two groups exhibited the opposite pattern in their ELLAS5. However, these differences were not statistically significant. This suggests that students of different genders did not vary a lot and were rather moderate in their listening anxiety and their English class anxiety levels.
Table 3

Independent Samples T-test Results of Gender Difference in Both the ELCAS And the ELLAS and Its Components (N = 261)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>T</th>
<th>p</th>
<th>Mean difference</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELLAS1</td>
<td>3.01</td>
<td>2.80</td>
<td>1.672</td>
<td>0.096</td>
<td>0.211</td>
<td>0.21</td>
</tr>
<tr>
<td>ELLAS2</td>
<td>3.36</td>
<td>3.25</td>
<td>0.828</td>
<td>0.354</td>
<td>0.018</td>
<td>0.12</td>
</tr>
<tr>
<td>ELLAS3</td>
<td>2.71</td>
<td>2.74</td>
<td>-0.234</td>
<td>0.815</td>
<td>-0.031</td>
<td>0.03</td>
</tr>
<tr>
<td>ELAS</td>
<td>3.03</td>
<td>2.93</td>
<td>1.885</td>
<td>0.061</td>
<td>0.096</td>
<td>0.23</td>
</tr>
<tr>
<td>ELCAS1</td>
<td>3.23</td>
<td>3.23</td>
<td>-0.023</td>
<td>0.982</td>
<td>-0.002</td>
<td>0</td>
</tr>
<tr>
<td>ELCAS2</td>
<td>3.15</td>
<td>3.03</td>
<td>1.276</td>
<td>0.203</td>
<td>0.127</td>
<td>0.16</td>
</tr>
<tr>
<td>ELCAS3</td>
<td>3.08</td>
<td>2.89</td>
<td>1.801</td>
<td>0.073</td>
<td>0.192</td>
<td>0.22</td>
</tr>
<tr>
<td>ELCAS4</td>
<td>3.50</td>
<td>3.60</td>
<td>-0.600</td>
<td>0.549</td>
<td>-0.096</td>
<td>0.07</td>
</tr>
<tr>
<td>ELCAS5</td>
<td>2.96</td>
<td>3.03</td>
<td>-0.494</td>
<td>0.622</td>
<td>-0.066</td>
<td>0.06</td>
</tr>
<tr>
<td>ELCAS</td>
<td>3.19</td>
<td>3.16</td>
<td>0.303</td>
<td>0.762</td>
<td>0.031</td>
<td>0.04</td>
</tr>
</tbody>
</table>

4.2 Correlations within and between ELCAS and ELLAS scales

Table 4 showed that all pairs among overall and different types of ELCAS and ELLAS were correlated, except for overall ELLAS and ELLAS3 (p = 0.598) which were, to be exact, marginally significantly correlated. Among all other pairs, ELLAS3 were significantly negatively correlated with the overall ELCAS, all categories of ELCAS, ELLAS1 and ELLAS2 (r = -0.652~-.0461, p < 0.001), and the rest pairs demonstrated significant positive correlations (r = 0.357~ 0.856, p < 0.001). Namely, the overall listening anxiety did not bear much relationship with their listening proficiency; students who were more anxious in English classes were more anxious in speaking situation in English, the English classes itself, their own and their peers’ performance in class and English tests, had greater anxiety in listening, were more lack of confidence in their own listening proficiency, but were more proficient in English listening.

Table 4

Correlations among the Measured Variables (N = 261)

<table>
<thead>
<tr>
<th></th>
<th>ELLAS1</th>
<th>ELLAS2</th>
<th>ELLAS3</th>
<th>ELLAS4</th>
<th>ELLAS5</th>
<th>ELCAS1</th>
<th>ELCAS2</th>
<th>ELCAS3</th>
<th>ELCAS4</th>
<th>ELCAS5</th>
<th>ELCAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELLAS1</td>
<td>1</td>
<td>-0.652</td>
<td>0.590</td>
<td>0.615</td>
<td>0.643</td>
<td>0.745</td>
<td>0.518</td>
<td>0.512</td>
<td>0.696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELLAS2</td>
<td>1</td>
<td>0.433</td>
<td>0.715</td>
<td>0.553</td>
<td>0.636</td>
<td>0.524</td>
<td>0.516</td>
<td>0.508</td>
<td>0.634</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELLAS3</td>
<td>1</td>
<td>-0.033</td>
<td>-0.568</td>
<td>-0.633</td>
<td>-0.641</td>
<td>-0.509</td>
<td>-0.527</td>
<td>-0.663</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELAS</td>
<td>1</td>
<td>0.441</td>
<td>0.471</td>
<td>0.464</td>
<td>0.383</td>
<td>0.357</td>
<td>0.487</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELCAS1</td>
<td>1</td>
<td>0.733</td>
<td>0.743</td>
<td>0.643</td>
<td>0.597</td>
<td>0.856</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELCAS2</td>
<td>1</td>
<td>0.767</td>
<td>0.685</td>
<td>0.720</td>
<td>0.907</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ELCAS3</td>
<td>1</td>
<td>0.581</td>
<td>0.635</td>
<td>0.850</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELCAS4</td>
<td>1</td>
<td>0.580</td>
<td>0.843</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELCAS5</td>
<td>1</td>
<td>0.831</td>
<td></td>
<td></td>
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</tbody>
</table>

Notes: **=p≤.01; *=p≤.05

4.3 Predictors of English language classroom anxiety and English listening anxiety

Correlation analysis merely suggested bivariate relationships. Therefore, to explore the interaction between English listening anxiety and English class anxiety, stepwise regression analysis of overall ELLAS was done on different dimensions of English class anxiety, namely ELCAS1-5, followed by a stepwise regression analysis of overall ELCAS on different dimensions of English listening anxiety, namely ELLAS1-3.

The results of the regression analysis of the overall ELLAS on ELCAS 1-5 were reported in Table 5.
Only two models were derived with the change in \( R^2 \) being significant for the overall ELLAS: 0.222 for model 1 (ELCAS2) and 0.025 for model 2 (ELCAS2 and ELCAS3). Of the two variables included in model 2, ELCAS2 (\( b = 0.144, \ t = 3.335 \)) was a more powerful positive predictor than ELCAS3 (\( b = 0.119, \ t = 2.953 \)), with effect sizes being all medium (Cohen \( f^2 = 0.033–0.042 \)).

Table 6 displayed the results of the regression analysis of the overall ELCAS on ELLAS1-3, where three models were derived with change in \( R^2 \) being significant for overall ELCAS: 0.484 for model 1 (ELLAS1), 0.139 for model 2 (ELLAS1 and ELLAS2), and 0.034 for model 3 (ELLAS1, ELLAS2 and ELLAS3). Of all the three variables included in model 3, ELLAS1 (\( b = 0.380, \ t = 7.732 \)) was the most powerful predictor, followed by ELLAS2 (\( b = 0.356, \ t = 8.493 \)) and ELLAS3 (\( b = -0.252, \ t = -5.027 \)), with a small to medium effect size (Cohen \( f^2 = 0.097–0.276 \)).

Table 5

<table>
<thead>
<tr>
<th>( \beta )</th>
<th>ELCAS2</th>
<th>ELCAS3</th>
</tr>
</thead>
<tbody>
<tr>
<td>( t )</td>
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<td>2.953</td>
</tr>
<tr>
<td>( p )</td>
<td>0.001</td>
<td>0.003</td>
</tr>
<tr>
<td>VIF</td>
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<td>2.427</td>
</tr>
<tr>
<td>Cohen's ( f^2 )</td>
<td>0.042</td>
<td>0.033</td>
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Table 6

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<th>( \beta )</th>
<th>ELLAS1</th>
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<th>ELLAS3</th>
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<td>( t )</td>
<td>7.732</td>
<td>8.493</td>
<td>-5.027</td>
</tr>
<tr>
<td>( p )</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0.276</td>
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5 Discussion

5.1 Levels of English language classroom anxiety and listening anxiety

Similar to previous findings of overall anxiety in offline English classes (Kim, 2000; Liu, 2019; Thompson & Lee, 2014), statistical analysis in this study showed that students’ anxiety level was slightly higher than medium in both online English classes. However, their overall English listening anxiety was moderate under the context of online learning, slightly lower than that in the offline classroom as reported by Kim (2000) and Han (2015). The former result echoed while the latter result contradicted with Baez-Holley (2013) and Pichette’s (2009) conclusion that foreign language anxiety level did not vary between offline and online environment. According to Dohl (2012), this gap might be due to the fact that compared with classroom anxiety, listening anxiety does not involve oral performance anxiety or speaking anxiety that could be alleviated by more practices in offline classrooms. Online learning students were more controllable in the volume and clarity of listening, which might lead to weaker listening anxiety.

When it comes to subscales of English anxiety in online classroom, students display a pattern of moderate anxiety in English communication, English class activities (ELCAS2), both their own and their peers’ class performance in English classes, while their test anxiety was low. This pattern only differed
from that in offline classroom (Liu & Li, 2019) in that students learning English in offline classroom are low in anxiety of their own class performance, which vindicated the discussion above that online classroom increases students’ anxiety for lack of practice.

Findings in the comparison between English listening anxiety in online settings and that in offline settings are more complex. In the present study, learners’ self-belief in their own English proficiency was moderate in the online settings, which was consistent with Liu and Thondhlana (2015) and Wang’s (2016) findings in the context of offline English classroom. However, they were low in their anxiety about listening activities, relied less on memory, attention or understanding-related strategies, and were rather proficient in English, which was consistent with Liu and Thondhlana’s (2015) but contradicted with Wang’s (2016) findings in the offline context. This might be attributed to the fact that the present study as well as that of Liu and Thondhlana’s (2015) were based on the sample of undergraduate students while Wang’s (2016) study was based on the sample of graduate students. Preliminary findings suggested that listening subscales did not differ between online and offline settings, and future research is still needed to delve into the difference in subscales of English listening anxiety between undergraduates and graduates.

Moreover, the present study found no difference on neither classroom anxiety nor listening anxiety in offline settings between different gender groups. Compared with previous studies on gender difference in English class or listening anxiety between different genders, findings from the present study agreed with some previous findings on classroom anxiety (Semmar, 2010) and listening anxiety (Capan & Karaca, 2013; Elkhafafi, 2005; Yan, 1998) but contradicted with some results from both the studies discovering that men were more anxious than women in English class (Awan et al., 2010; Wang, 2011) or English listening activities (Du & Liu, 2009; Liu & Thondhlana, 2015) and the study revealing higher anxiety in females than that in males (Park & French, 2013). For lack of agreement, gender difference in English class or listening anxiety between different genders should be further explored in both offline and online learning settings.

5.2 The relationship between English language classroom anxiety and listening anxiety

The results of the present study demonstrated that one who was more anxious in English classes tended to be higher in English listening anxiety in online classroom settings, which was the same picture as that in offline classes (Kim, 2000; Vogely, 1998). The intra-correlations among subscales of ELCAS in the present study are all positive under the context of online learning, echoing with Liu and Li’s (2019) results in offline settings. Thus, different context of learning does not make a difference in both the inter-relation between overall ELLAS and overall ELCAS and intra-relation among subscales of ELCAS. As for intra-relation among subscales of ELLAS, the present study found that students who were higher in anxiety and tension in listening and more lacking in confidence in listening proficiency were more likely to become proficient in English listening in online classroom, contrary to Han’s (2015), Liu and Thondhlana (2015) and Wang’s (2016) results on the significantly negative correlation between listening proficiency and listening anxiety in offline classroom. As pointed out by Russell (2020), the use of new instruction technology could add to the anxiety in online classroom, and therefore the contradiction in the relationship between English listening proficiency and listening anxiety in different classroom settings might be explained by the fact that students with greater proficiency were more anxious that the technical aspects of online classes could impede their classroom performance.

Most previous studies examining the relationship between foreign language classroom anxiety and listening anxiety have focused on the bivariate correlation between FLCAS and its subscales and FLLAS and its subscales in offline classrooms, thus ignoring the interaction effect between English classroom anxiety and English listening anxiety. The present study found that in online settings, fear of the English class itself as well as worry about one’s own class performance contributed to the prediction of English listening anxiety, while anxiety over listening, confidence in one’s own listening proficiency and one’s
listening proficiency predicted English classroom anxiety. Therefore, classroom anxiety and listening anxiety interacted with each other for online English learners, which proved to be a step forward on the basis of Pae’s (2013) findings that listening anxiety contributed to the prediction of classroom anxiety in offline context. The greatest predicting power of worry about the English class itself and worry about listening demonstrated the main sources of students’ English classroom anxiety and listening in online English classes.

6 Conclusion

Against the backdrop of online learning, the present study examined students’ profile of English language classroom anxiety and English language listening anxiety, the relationship between both the overall scale and the subscales of these two types of anxiety, the predicting power of the subscales of English language classroom anxiety over overall English language listening anxiety, as well as the predicting power of the subscales of English language listening anxiety over overall English language classroom anxiety. The study revealed the following major findings:

(1) Students were slightly higher than intermediate level in both overall English classroom anxiety and overall English listening anxiety. Besides, they displayed a medium level in English oral communication, English class activities, their own and their peers’ performance in English classes, and confidence in their own English listening proficiency, while they were low in anxiety in listening activities, test anxiety, and were rather proficient in English listening. Gender causes no significant differences in the overall English classroom anxiety level, the overall English listening anxiety level, and all subscales of English classroom anxiety and English listening anxiety in online learning context.

(2) All factors of classroom anxiety and the overall classroom anxiety were significantly positively correlated with each other, and all of them were significantly positively correlated with the overall listening anxiety, anxiety in listening activities and lack of confidence in listening proficiency. The overall English listening anxiety, anxiety in listening activities and lack of confidence in listening proficiency were significantly positively correlated with each other, and one’s lack of proficiency in English listening were significantly negatively correlated with his anxiety in listening activities and lack of confidence in listening proficiency. One’s lack of proficiency in English listening is only marginally correlated with the overall English listening anxiety.

(3) English listening anxiety and English classroom anxiety interacted with each other. On one hand, both the anxiety in class activities and the anxiety in one’s own class performance strongly predicted the overall listening anxiety, with the anxiety in class activities being more powerful for the overall listening anxiety. The anxiety in listening, a student’s confidence in his or her own listening proficiency and listening decoding skills predicted the overall classroom anxiety, with the anxiety in listening being the most powerful predictor, followed by a student’s confidence in his or her own listening proficiency, and the least powerful predictor listening decoding skills.

The result of this study leaves the following implications for online class design and listening teaching.

(1) In online classrooms, students’ English listening anxiety gets alleviated for the adjustability of listening condition, while their classroom anxiety remains the same as in offline classroom since it’s harder for students to practice speaking English in online settings. Therefore, more efforts could be made by teachers to increase chances for students to perform in class, thus
incrementally reducing their performance anxiety. Teachers could avail themselves of the online techniques by encouraging students to shoot videos of their own English speech and play these videos in class, thus to attract students’ attention and learn from others’ performance easily even in virtual classes.

(2) Students who are more proficient in listening are greater in their listening anxiety in online settings rather than lower, as in offline settings, due to the tension brought by new instruction technology. In online settings, given greater listening anxiety of students more proficient in listening, it is advisable to try to turn the online English classroom as well as online listening environment into a safer place for students to enjoy themselves in learning, thus reducing their anxiety, which is similar to the strategy suggested in offline English classroom (Baez-Holley, 2013). To achieve this aim, teachers could put activities that require lighter cognitive process at first and other activities later so that students could gradually absorb what they need to learn (Russell, 2020).

(3) Considering the positive relationship between listening anxiety and classroom anxiety, provision of better acoustic devices could help alleviate students’ listening anxiety and in turn lessen their classroom anxiety. Moreover, teachers should be aware of challenges brought by online teaching and strive to help students with technical problems and relieve students’ anxiety over online learning. For example, emergency plan such as teleconferencing or class playback should be well prepared to help with students who are stuck with network problems and have limited access to online courses.

This study had certain limitations. First, in the realm of specific anxiety like class or listening anxiety in online context, future research could take into account the recursive relations among anxiety, cognition, and behavior proposed by MacIntyre (1995), the lack of which is a limitation for the present study, and therefore the relationship between listening proficiency and classroom anxiety could be more convincing. Second, this research was based on samples from merely a group of students of the same year of study from the same university. Future research could sample from various populations. And it would be better if students with more diverse years of study and in different universities could be included in the larger sample.

Appendix Questionnaire

本研究旨在调查外语听说焦虑现象，请仔细阅读每一题，选出最适合自己的选项（只限选一，1-72共72题）：‘SD—很不同意’（1），‘D—不同意’（2），‘N—不知道’（3），‘A—同意’（4），或‘SA—很同意’（5）。请注意：各选项无对错之分，汇报结果时采用匿名制，由此得到的各种信息均为大家保密。

性别：_________ 系别：_________ 年龄：_________ 学校：_________ 年级：本科生 1/2/3/4；研究生 1/2/3；博士生 1/2/3

<table>
<thead>
<tr>
<th>题号</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
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<tbody>
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<td>3</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>
5. 多选几门网络外语课对我来说根本不是负担。
6. 网络英语课上，我发现自己总是想着与本课程无关的事情。
7. 上网课时，我一直认为其他同学的英语比我的好。
8. 我在英语课堂考试中通常比较放松。
9. 网络课上，如果我必须在没有准备的情况下说英语，我就感到恐慌。
10. 我担心网络英语课通不过的后果。
11. 我不明白为什么有些人对网络英语课感到如此心烦。
12. 网络英语课上，我能紧张的连我知道的东西都忘了。
13. 如果在网络英语课上主动回答问题，我会觉得尴尬、不安。
14. 网络英语课上，和以为英语为母语的人交谈时，我不觉得紧张。
15. 网络英语课上，如果我不明白老师在纠正什么，我就感到烦躁不安。
16. 网络英语课上，使我准备得很充分，我也会感到焦虑不安。
17. 我经常不想上网络英语课。
18. 在网络课堂上说英语时，我感觉自信。
19. 网络课上，我担心英语老师会随时准备纠正我犯的每一个错误。
20. 网络英语课上，当我要被点名回答问题时，我能感觉心在砰砰猛跳。
21. 我越努力准备网络英语考试，就越觉得迷惑不解。
22. 为网络英语课做好充分准备对我来说没有任何压力。
23. 网络英语课上，我总觉得其他同学的英语说得比我好。
24. 网络英语课上，在其他同学面前说英语时，我非常紧张、焦虑。
25. 网络英语课的进度太快，我担心跟不上。
26. 与其他课程相比，我在网络英语课上更觉得紧张。
27. 我在网络课程的班上说英语就紧张、烦恼。
28. 准备上网络英语课时，我感觉既轻松又信心十足。
29. 网络课上，如果我不明白英语老师说的每一个单词，我就感到紧张。
30. 网络课上，为了学会说英语而要学习那么多的规则，我感到无法应付。
31. 网络课上，我担心我说英语时别的同学会嘲笑我。
32. 与以英语为母语的人相处，我可能会觉得舒服、自在。
33. 网络课上，如果我回答我没有准备的问题时，我就会紧张。
34. 网络英语课上，与性别不同的人说英语时，我会紧张不安。
35. 网络英语课上必须用英语讨论我不熟悉的事情时，我会紧张不安。
36. 网络课上，为了学会说英语而要学那么多的单词，我感到无法应付。
37. 当不确定是否听懂了所听的英语时，我就烦躁不安。
38. 听英语时，我常听懂了单词，但仍然不很明白说话人在说什么。
39. 听英语时，我变得很困惑以至都记不得所听的内容了。
40. 无论什么时候需要听篇英文的文章，我都觉得害怕。
41. 当我在听篇话题不熟的英文文章时，我就紧张。
42. 听英语时，只要一听到不知道的语法，我就烦躁不安。
43. 听英语时，若不明白每一个单词，我就紧张、困惑。
44. 听英语时，遇到不会读的单词，我就烦。
45. 听英语时，我常常是在逐字逐字翻译。
46. 等我弄明白某个奇怪的英语读音后，我就很难记得听到什么了。
47. 我担心为理解英语口语所要学的所有新发音。
48. 我喜欢听英语。
49. 听英语时我感觉自信。
50. 一旦习惯了，听英语就不那么难了。
51. 学英语最难的部分就是学习理解英语口语。
52. 如果只是学习阅读英语而不用学习理解英语口语，我会高兴去学的。
53. 如果就我自己在听英语，我无所谓；但是如果必须是一组（群）人在听英语，我会很不自在。
54. 我对自己目前所取得的英语听力理解水平感到满意。
55. 英语文化和思想对我来说很奇怪。
56. 要理解英语口语，必须了解很多英语历史和文化。

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