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Foreign Language Anxiety in Online and In-person Learning Environments: A Case from Chile

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Abstract

Foreign language anxiety (FLA) is a distinct form of anxiety that plays a significant role in the process of acquiring a foreign language. This study aimed to assess the anxiety levels of Chilean undergraduate learners and investigate the potential correlations between foreign language anxiety and oral performance in two distinct learning settings: traditional in-person instruction and online learning. Employing a mixed methods research design, the study incorporated an adapted version of the Foreign Language Classroom Anxiety Scale (FLCAS) survey, an oral task, and semi-structured interviews. By triangulating the quantitative and qualitative findings, it was found that there were moderate discrepancies in anxiety levels, with in-person students exhibiting higher levels of anxiety. Furthermore, negative correlations were observed between oral performance and foreign language anxiety, primarily in the context of foreign language learning situations and processes. The outcomes of this study augment the existing body of research on foreign language anxiety in diverse learning environments and hold potential to enrich future pedagogical practices.

Keywords: *Foreign Language Anxiety, Oral Performance, In-person and Online Learning Environments*

Introduction

The last 50 years have witnessed a substantial amount of scholarly inquiry focused on language anxiety, an affective factor that has been deemed one of the major individual obstacles in the foreign language learning process (Chou, 2018; Dewaele et al., 2008, 2023; Xiao & Wong, 2014; Zhao et al., 2013). While students may exhibit high levels of motivation in the language learning experience, affective obstacles such as ‘anxiety reactions’ are reported to impede learners’ ability to perform in the foreign language classroom (Horwitz et al., 1986). Foreign Language Anxiety (FLA) has been defined as “a distinct complex of self-perceptions, beliefs,

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feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz et al., 1986, p. 128).

Research has indicated that anxiety can have an impact on language learning by preventing students from adequately processing linguistic input (Krashen, 1982, 2013), thus influencing students' achievement and willingness to participate actively in learning activities (Zhou, 2016). Furthermore, it is argued that anxiety can also have an adverse influence on learners' cognitive abilities when engaging in specific language-related tasks (Zhang, 2019). The examination of FLA has also accounted for additional variables such as gender, age, motivation, strategy employment, and proficiency across the four language skills such as foreign language reading anxiety (Zhao et al., 2013), foreign language listening anxiety (Zhang, 2013), foreign language writing anxiety (Salikin, 2019), and foreign language speaking anxiety (Bárkányi, 2021). Despite the potential for any of these language skills to cause FLA, empirical research has shown that lower levels of anxiety are caused by reading, while speaking tends to represent the most anxiety-inducing activity among students (Zheng & Cheng, 2018). Similarly, Mouhoubi-Messadh & Khaldi (2022) concluded that “students, regardless of their ability levels, might be intimidated by numerous anxiety-provoking situations” (p.30), establishing language anxiety as a predictor of inadequate oral performance. This is largely due to the fact that speaking has been widely recognized as a complex skill encompassing linguistic and discursive knowledge, fundamental speaking competencies, and communication strategies (Goh & Burns, 2012).

Research on FLA has also examined its role in different learning environments. Traditional classroom settings, characterized by face-to-face instruction, may exhibit different levels of anxiety when compared to the online learning milieu, where students engage in virtual platforms facilitated by internet-based tools and resources. Similarly, the levels of anxiety in emergency remote teaching (ERT), a form of instruction that occurs online but is characterized by its temporary nature, and which often lacks prior preparation or anticipation, may differ from those observed in both traditional face-to-face learning and regular online learning settings, (Russell, 2020), as was the case of the COVID-19 global pandemic.

As globalization and the emergence of ERT have led to an increase in online language learning, it has become imperative to examine anxiety within this context. According to Hurd (2007), online foreign language classes present additional anxiety-provoking factors, including limited access to immediate feedback, feelings of isolation, a lack of opportunities for oral practice, and reduced confidence during the learning process. Nevertheless, the research dedicated to exploring foreign language anxiety, specifically in online settings, remains scarce (Russell, 2020). Consequently, a notable literature gap persists regarding the comparative analysis of students' affective experiences in face-to-face foreign language classes versus those in online foreign language classes (Pichette, 2009; White, 2014). Moreover, amid the COVID-19 pandemic, research addressing the learning process and its implications on mental well-being during the transition from face-to-face classes to ERT has stressed the need for sustained support for college students due to the prolonged impact of the pandemic (El-Sakran et al., 2022).

In the Chilean context, the site of this study, the demand for English as a Foreign Language (EFL) has gained significant momentum, driven, for the most part, by increased awareness of the economic advantages associated with language proficiency in a globalized economy. The

importance of English proficiency for national and transnational development has been recognized by the Chilean Ministry of Education (MINEDUC) that has established goals to ensure that all young individuals attain a certain level of English proficiency, thereby positioning the country within the global economy where bilingualism holds priority. Concurrently, government policies have bolstered scholarship support for studying abroad, further emphasizing the value placed on English language learning.

In the light of the context described above, both face-to-face EFL classes and online EFL classes have experienced significant growth in Chile over the past years. This expansion has been driven by the collective efforts to meet the increased demand for English language instruction. Most notably, the Covid-19 pandemic brought about a rapid adaptation of educational institutions, prompting schools and higher education establishments to swiftly transition to Emergency Remote Teaching (ERT) systems (Cortés, 2021). This transition aimed to ensure the continuity of the learning process, requiring both learners and educators to promptly adjust to the new online learning environment.

The primary objective of this study is to determine whether or not there is a relationship between anxiety levels of adult learners enrolled in EFL courses at a public university in Santiago and the two learning environments available to them, viz. in-person classes and online instruction. Furthermore, this investigation aims to explore the extent to which these anxiety levels are associated with students' oral performance. In light of the aforementioned considerations encompassing various relevant domains, the research questions guiding this study are as follows:

RQ1: To what extent is there a relationship between the learning environment, namely in-person versus online instruction, and the levels of anxiety experienced by adult learners in English as a Foreign Language (EFL) courses?

RQ2: To what extent can the anxiety levels of adult EFL learners be associated with their oral performance in the English language?

Literature Review

Foreign Language Anxiety

FLA was first defined as a distinctive type of anxiety in the 1980s and was conceptualized as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz et al., 1986, p. 128). The authors argued that when learners experience FLA in language learning situations, very specific anxiety responses could be observed. They emphasized the importance to “recognize, cope with, and eventually overcome, debilitating foreign language anxiety as a factor shaping students’ experiences in foreign language learning” (Horwitz et al., 1986, p. 132). Similarly, MacIntyre and Gardner (1994b) conceptualized anxiety as “the feeling of tension and apprehension specifically associated with second language (L2) contexts, including speaking, listening, and learning” (MacIntyre & Gardner, 1994, p. 284). Furthermore, Krashen (1982) indicated that anxiety can have a major impact on language learning. This occurs when language learners experience anxiety, due to an elevated affective filter which prevents them from adequately processing linguistic input (Krashen, 1982, 2013). In a more recent study, Tahmouresi and Papi (2021) suggested that language anxiety includes a strong negative feeling as part of a mental state associated with emotions experienced when learning a foreign

language. Dewaele et al. (2023) applied structural equation modelling and latent dominance analysis to investigate a group of 502 Moroccan EFL learners and assessed the varying significance of FLA and other emotions in forecasting their performance in EFL. The latent dominance analysis unveiled that among the factors considered, FLA exerted the most potent (adverse) influence on English test scores.

Personality traits, such as extraversion, self-esteem, and anxiety have been recognized as strong predictors of success in attaining foreign language proficiency (Dörnyei, 2005). Additionally, anxiety has been investigated in relation to L2 motivation, revealing a negative association between anxiety and motivation (Cheng, 2008; Horwitz, 2017). In a similar vein, Papi (2010) found that while the learning experience and the ideal L2 self - representing the desired identity in language learning - diminish anxiety among students, the ought-to L2 self, encompassing the attributes individuals perceive as necessary to possess, produces significantly higher levels of anxiety. Yuan (2023) delved into the experiences of 492 Chinese students learning English as a foreign language online during the COVID-19 pandemic, focusing on their feelings of anxiety (FLA) and enjoyment (FLE) using a mix-methods methodology. A negative correlation was found between FLE and FLCA, suggesting that when students experienced more enjoyment, they tended to experience less anxiety. FLA was mainly influenced by factors within the learners themselves, such as their perceived status among peers and their interactions with the teacher in the online setting.

Several studies have explored students' beliefs about FL learning and anxiety. Findings have shown that students with greater confidence and self-efficacy in their language learning were less anxious (Li & Du, 2023; Mouhoubi-Messadh & Khaldi, 2022; Zhang, 2013; Zheng & Cheng, 2018). These findings are consistent with Subasi's (2010) study which revealed that students who believed to have lower speaking ability compared to their peers' experienced higher levels of anxiety. Social anxiety, characterized by fear of public speaking and communication apprehension, has also been investigated. Zhou (2016) found that learners who experience this specific type of anxiety tend to be less successful in second language learning and have weaker collaborative learning skills.

Research into FLA has addressed all four language skills, namely foreign language reading anxiety (Limeranto & Subekti, 2021; Zhao et al., 2013), writing FLA (Salikin, 2019), foreign language listening anxiety (Zhang, 2013), and speaking anxiety (Bárkányi, 2021), the latter of which is examined in the present study in different learning environments.

Foreign Language Speaking Anxiety

Research studies have shown that anxious language students perceive speaking as the most anxiety-inducing activity (Gawi, 2020; Öztürk & Gürbüz, 2013; Romero, 2021), which can affect their foreign language learning progress (Rajitha & Alamelu, 2020). Specifically, evidence suggests that students often experience stress during role-play activities (Yalçın & İnceçay, 2014). Consequently, individuals who perform poorly in oral evaluations tend to exhibit higher levels of speaking anxiety, whereas those who report lower anxiety levels tend to achieve better results (Hewitt & Stephenson, 2011). Thus, efforts have been made to overcome these barriers, including the exploration of strategies and tools such as technology. By way of illustration, Pan et al. (2022) found that the implementation of Massive Open Online

Courses (MOOCs) can potentially aid Iranian EFL students in boosting their motivation for language learning while reducing speaking anxiety.

Foreign language speaking anxiety might behave differently as speaking is an activity which is greatly shaped by the environment in which it takes place. It has been found, for example, that computer-mediated communication (CMC) has a positive effect on students' oral proficiency compared to in-person communication (Kock & Garza, 2011; Lin, 2015; Pan et al., 2022) despite the potential impact on accuracy and fluency (Lin, 2015). Nonetheless, speaking in online settings is characterized by limited interaction, which can significantly affect speaking skills development (Bárkányi, 2021).

A better understanding of speaking anxiety may translate into practical ways in which foreign language teachers can assist their students with their language learning by minimizing the effects of anxiety. Several studies have proposed practical strategies to reduce FLA (Guo et al., 2018; Nagahashi, 2007). Some of these have concluded that pedagogical efforts should take varied forms depending on, for instance, the learners' level of proficiency given the negative correlation between FLA and language proficiency (MacIntyre, 2017).

Online and In-person FL Learning and Learners' Affect

Education has been traditionally thought to be implemented in a traditional learning which involves teacher-student interactions on a face-to-face basis (Li & Du, 2023). However, the advent of the digital era, coupled with the global pandemic, has had a profound impact on education, prompting a reassessment of its traditional practices (Dewaele et al., 2022; Li & Du, 2023). Due to the pandemic, emergency remote teaching (ERT) emerged as an avenue to a rapid transition from face-to-face instruction to online settings. Some studies have focused on uncovering the impact of ERT on FLA in the context of instructional delivery during the outbreak of the Covid-19 pandemic (Hong et al., 2021; Rensik & Dewaele, 2021; Usher et al., 2020). These studies have shed light on the additional adverse effects of ERT, revealing a significant prevalence of anxiety, depression, post-traumatic stress disorder (PTSD), psychological distress, and stress within the general population. Indeed, Dewaele et al., (2022) found higher levels of foreign language boredom (FLB) in ERT classes as participants reported disengagement, frustration because of unexpected technical problems, lack of exciting social interaction, among other factors.

Resnik et al. (2023) examined the differences in FLA experienced by learners in in-person classes and online EFL classes during the COVID-19 pandemic. The study aimed to identify significant differences in FLA between the two contexts and explore the specific factors that contributed to anxiety in both settings. Through a paired samples *t*-test, the authors found a significant drop in students' FLA in online classes compared to in-person classes.

The review of scholarly literature in this study shows that the intrinsic attributes of learning environments can potentially elicit diverse manifestations of FLA, which are further influenced by individual learner characteristics (Russell, 2020), the dynamics of teacher-learner interactions (Weiser et al., 2018), and other pertinent factors. However, limited investigation has been undertaken in Chile thus far, particularly on the nature of speaking-related FLA in both traditional face-to-face and online learning contexts.

Methodological Design

This study employed a non-experimental research design through an explanatory sequential mixed-methods approach. This approach combines qualitative and quantitative research methods and data, leading to a more comprehensive understanding and increased validity and reliability of the findings (Creswell, 2014). To collect quantitative data on FLA, an adapted version of the 'Foreign Language Classroom Anxiety Scale' (FLCAS) (Horwitz et al., 1986) was utilized. Additionally, the study analyzed participants' rubric scores and grades from an oral presentation, using numerical indicators as measures of their speaking performance. Qualitative data were gathered through semi-structured follow-up interviews. These interviews provided a complementary understanding of the findings obtained from the quantitative analysis.

Participants

Participants were law students enrolled in the fourth level of a five-level English course at a university in Santiago, Chile. The participants attended both in-person and online EFL classes. Convenience sampling was employed to select participants based on their willingness and availability to participate in the study (Creswell, 2012). The sample comprised 38 university students, with 18 enrolled in online EFL classes and 20 in in-person EFL classes. The participants were required to attend three 70-minute hours of EFL lessons per week and were expected to achieve a B1 level of English proficiency by the end of level 4. The participants' age ranged from 18 to 21 ($M=19.5$, $SD= 1.2$). The gender distribution was balanced, with 19 males and 19 females. While most courses transitioned back to in-person learning in 2022, some students completed their third and fourth English levels online, while others did so in-person. Thus, all participants in this study had experience studying English in both modalities during the first and second semester of 2022, providing comparative insights into their learning experiences in their interview accounts.

Instruments

The FLCAS

The FLCAS, which draws on Horwitz et al.'s. (1986), was used as the instrument to gather FLA data. This scale consists of 33 items measured on a five-point Likert scale ranging from (1) strongly agree to (5) strongly disagree. The scale encompasses three sources of anxiety: communication apprehension, test anxiety, and fear of negative evaluation, across five dimensions, viz. communication apprehension, anxiety related to foreign language learning situations and processes, confidence in using the foreign language in and outside the class, and negative attitudes towards learning. These dimensions were adapted from a previous Spanish study conducted by De la Morena et al. (2011), considering the social context of language acquisition, as emphasized by Riquelme-Mella et al. (2015), who highlighted the need for appropriate instruments and language adaptations in Chile.

To assess anxiety levels in both online and in-person EFL classes, participants completed two versions of the FLCAS translated into Spanish. The FLCAS was administered online using Google Forms. One version of the FLCAS was specifically designed for online EFL learning, while the other version was for in-person EFL learning. Cronbach's Alpha was used to evaluate the internal consistency of the FLCAS survey and its constituent items. The resulting

Cronbach's Alpha scores for the five dimensions were as follows: communication apprehension dimension ($\alpha = .92$), FL learning situations and processes anxiety dimension ($\alpha = .85$), FL use confidence in the class dimension ($\alpha = .84$), FL use confidence outside the class dimension ($\alpha = .69$), and negative attitudes towards learning dimension ($\alpha = .67$).

Oral Presentation

To measure the speaking performance of EFL adult learners, an oral task was assigned at the conclusion of the semester, involving an oral presentation on the topic of Human Rights, which had been extensively covered during the course. Clear instructions and a rubric were provided two weeks prior to the presentation. The results of both online and in-person student groups were analyzed using oral ratings. To ensure the reliability of the ratings, the oral rating process involved three independent raters. In cases where there were notable discrepancies in ratings, a second round of rating would be conducted, followed by a discussion to address the specific performance. However, the ratings were largely consistent with each other, falling within the same performance level, and there was no need for arbitration as a result.

Semi-structured Interviews

In order to delve deeper into the anxiety experienced by the participants regarding their speaking performance in online and in-person learning environments, a semi-structured follow-up interview protocol was employed. The interview sessions took place via Zoom, and a total of six participants were included, with three selected from the online course and three from the in-person course. Each individual interview lasted approximately 40 minutes and was conducted in the Spanish language, enabling participants to express themselves with greater confidence, thus prioritizing the content of their responses.

Validity and Reliability

Three validation procedures were undertaken to ensure the validity and reliability of the FLCAS survey. The first procedure involved validating the survey's translation into Spanish. This process, known as 'back translation' or 'reverse translation', involved three experts who compared the Spanish translated version with the original English text to identify any discrepancies or inaccuracies (Wild et al., 2005). Initially, one of the researchers translated the survey from English to Spanish, and then three translators received the Spanish version and translated it back into English. Subsequently, the three English translations were compared with the original version.

A survey item-clarity procedure was also conducted, utilizing a 5-point Likert scale. This procedure led to minor modifications in the wording of a few items. For instance, item number 1 was revised from "*I don't feel confident when I speak in my online English class*" to "*I feel insecure when I have to speak in my online English class.*" These adjustments aimed to enhance the clarity and precision of the survey items.

Finally, an expert judgment validation procedure was implemented to evaluate the clarity of instructions provided in the survey. This assessment resulted in no further modifications being made.

Data Analysis

The quantitative data obtained from the FLCAS survey and the oral presentation ratings were analyzed using both descriptive and inferential statistical methods (Stapor, 2020). The R Statistics software (R Core Team, 2021) was used for the analysis of the quantitative data, including anxiety levels and oral presentation ratings. The FLCAS questionnaire, consisting of 33 items on a Likert scale, with eight items reverse coded, was analyzed using the software. The oral presentation ratings ranged from 1.0 to 7.0.

The first research question aimed to investigate the relationship between the learning environment (in-person vs. online) and anxiety levels among EFL learners. Due to the relatively small sample size, Wilcoxon rank test was used as a non-parametric measure to compare participants across different learning environments. The learning environment was treated as the comparison group, and the various anxiety measures served as the outcome variables. Any statistically significant differences ($p < .05$) observed in these comparisons would suggest disparities in anxiety levels across learning environments within the target population.

The second research question examined the association between EFL learners' oral performance and their anxiety levels. Similarly, due to the relatively small sample size, Spearman rank correlations were employed as non-parametric measures to determine whether oral performance correlated with different measures of anxiety.

Interview data was thematically analyzed. Thematic analysis involves grouping similar codes together to identify major themes within the data. These themes serve as fundamental elements in the analysis of qualitative data (Creswell, 2012, p.248).

Results and Discussion

Quantitative Results

The findings from the quantitative research instruments, the oral presentation ratings and the FLCAS, are presented in Tables 1 and 2. The FLCAS encompasses five dimensions, namely communication apprehension, anxiety related to FL learning situations and processes, confidence in FL use within the class, confidence in FL use outside the class, and negative attitudes towards learning. It must be noted that the scale was inverted, implying that higher mean scores should be interpreted as indicating higher levels of anxiety.

Regarding the online learning context, the average rating for oral performance was 6.72 (SD = 0.34). As for the FLCAS, the dimension with the lowest mean score was communication apprehension, which corresponded to 2.71 (SD = 0.56). It was followed by FL learning situations and processes anxiety with a mean score of 2.77 (SD = 0.74), negative attitudes towards learning with a mean score of 2.81 (SD = 0.24), FL use confidence in the class with a mean score of 3.11 (SD = 0.88), and FL use confidence outside the class with a mean score of 3.30 (SD = 0.73).

Table 1*Anxiety Levels and Oral Ratings: Results of Online Learning Environment*

	M	SD
Oral ratings	6.72	0.34
FLA: Communication apprehension	2.71	0.56
FLA: FL learning situations and processes anxiety	2.77	0.74
FLA: FL use confidence in the class	3.11	0.88
FLA: FL use confidence outside the class	3.30	0.73
FLA: Negative attitudes towards learning	2.81	0.24

*N = 18

Table 2 shows the results of the in-person learning environment. The oral ratings' mean was 6.33. Meanwhile, within the FLCAS, the dimension with the highest mean score was FL use confidence outside the class, which corresponded to a value of 3.70.

Table 2*Anxiety Levels and Oral Ratings: Results of In-person Learning Environment*

	M	SD
Grades	6.33	0.48
Communication apprehension	3.32	1.28
FL learning situations and processes anxiety	3.36	0.95
FL use confidence in the class	3.11	1.28
FL use confidence outside the class	3.70	0.75
Negative attitudes towards learning	3.14	0.84

*N = 20

Inferential Statistics

A Wilcoxon rank test was used to compare anxiety levels and grades among participants in both in-person and online learning environments. Significant differences ($p < .05$) in these comparisons would indicate variations across the learning environments within the target population. The results in Table 3 revealed that the p value for oral ratings was $p = .088$, indicating that while online participants performed better in oral presentations, the observed differences were not statistically significant. Regarding anxiety levels, the dimension of FL use confidence in the class exhibited a p value of .825, which was the least significant among the five dimensions. In terms of anxiety levels, participants in in-person classes reported higher levels of anxiety compared to those in online classes. However, no significant differences in anxiety levels between the two learning environments were observed, as all comparisons yielded non-significant results ($ps \geq .133$). In other words, no evidence was found to support the claim that participants in online classes reported different anxiety levels compared to participants in in-person classes.

Table 3*Oral Ratings and Anxiety Levels across Learning Environments*

	Online		In-person		Wilcoxon rank test
	M	SD	M	SD	
Grades	6.72	0.34	6.33	0.48	$W = 60, p = .088$
Communication apprehension	2.71	0.56	3.32	1.28	$W = 31, p = .425$
FL learning situations and processes anxiety	2.77	0.74	3.36	0.95	$W = 23, p = .133$
FL use confidence in the class	3.11	0.88	3.11	1.28	$W = 44, p = .825$
FL use confidence outside the class	3.30	0.73	3.70	0.75	$W = 30, p = .396$
Negative attitudes towards learning	2.81	0.24	3.14	0.84	$W = 32, p = .500$

Spearman rank correlations were used to examine the potential correlations between oral performance ratings and various anxiety dimension measures. Table 4 provides the p-values and the strength of the correlations. All the associations exhibited negative correlations. Specifically, a significant negative association was observed between oral performance and anxiety measured through the FL learning situations and processes anxiety dimension, $r(7) = -.51, p = .032$. This indicates that students with higher oral performance ratings tended to have lower levels of anxiety compared to those with lower oral performance. However, no significant associations were found between oral performance and anxiety when considering the communication apprehension dimension, $r(7) = -.45, p = .060$, FL use confidence in the class dimension, $r(7) = -.44, p = .069$, FL use confidence outside the class dimension, $r(7) = -.18, p = .472$, and negative attitudes towards learning dimension, $r(7) = -.43, p = .072$. It is important to note that caution should be exercised when interpreting the results pertaining to the FL use confidence outside the class and negative attitudes towards learning dimensions due to the relatively low reliability of these measures. This lower reliability may diminish the observed associations with other constructs.

Table 4*Correlations between Oral Performance and Anxiety Levels*

	M	SD	1	2	3	4	5	6
Communication apprehension	3.01	1.01	-					
FL learning situations and processes anxiety	3.06	0.88	.93** *	-				
FL use confidence in the class	3.11	1.07	.77** *	.70**	-			
FL use confidence outside the class	3.50	0.75	.58*	.52*	.41	-		
Negative attitudes towards learning	2.97	0.62	.46	.48*	.39	.15	-	
Oral ratings	6.53	0.45	-.45	-.51*	-.44	-.18	-.43	-

* $p < .05$, ** $p < .01$, *** $p < .001$ **Quantitative Discussion**

In relation to the first research question, it can be concluded that despite the fact that the participants in the in-person learning environment reported higher levels of anxiety across all the dimensions examined, there was no statistically significant difference in foreign language

anxiety scores as measured by the FLCAS between the two aforementioned learning environments, as illustrated in Table 3.

The findings of this study corroborate the conclusions drawn by Resnik and Dewaele (2021), who also identified higher levels of anxiety among in-person FL students. Additionally, they indicated that FLA levels were lower in the online learning environment due to the participants' perceived sense of anonymity or avoidance of interaction. Regarding the second research question concerning the relationship between anxiety levels of adult EFL learners and their oral performance in the English language, the Spearman rank correlation analysis revealed an overall significant negative correlation. In particular, it shows that higher levels of anxiety, as measured through the FL learning situations and processes anxiety dimension, were associated with poorer oral performance. This dimension encompasses anxiety experienced during evaluations and is rooted in the fear of failure within the foreign language classroom, as posited by Horwitz et al. (1986). This assertion is supported by the fact that the item with the highest reported anxiety percentages across both the online and in-person learning environments was "I worry about the consequences of failing my online (or in-person) English class". These findings provide further support for Horwitz et al.'s (1986) theory, which posits that anxiety has a detrimental impact on student performance, which aligns with Botes et al.'s (2020) and Chou's (2018) research that ratified the negative effects of language anxiety and test anxiety on test performance. Similarly, the results of this study are consistent with the findings in Al-Khotaba et al. (2019) which revealed a relationship between learners' language anxiety and their oral exam achievement.

Moreover, the results demonstrate that the associations among communication apprehension, FL learning situations and processes anxiety, and FL use confidence in the class dimensions are remarkably strong, exceeding a correlation coefficient of .70. This suggests that these dimensions may not be distinct from one another, indicating the potential for anxiety to be considered as a unidimensional construct in future research endeavors.

Qualitative Results

The findings of this study are centered on the themes identified in the interview protocol. Subsequently, these results are examined and addressed in relation to the two research questions that guide this investigation. The characteristics of the participants who took part in the semi-structured interviews, such as gender, age, and learning environment, are presented in Table 5. Their perspectives are then presented below, accompanied by quotations attributed to each participant using their respective participant numbers (e.g., P1).

Table 5

Profiles of Participants to the Semi-structured Interviews

N° of Participant (P)	Gender	Age	Learning Environment
P1	Male	19	Online
P2	Male	22	In-person
P3	Female	19	Online
P4	Male	21	In-person
P5	Female	20	In-person
P6	Male	20	Online

The themes that surfaced from the individual interview protocol are as follows: (i) *the social aspects of general and FLA and test anxiety*, (ii) *anxiety and learning environment*, and (iii) *anxiety as a positive factor*; and (iv) *paralanguage, learning environments, and FLA*.

Some participants in the study suggested that FLA might be partly rooted in a general predisposition to anxiety in social interactions somewhat unrelated, yet applicable to foreign language learning. For instance, Participant 1 expressed a personal inclination towards anxiety and mentioned experiencing social anxiety when interacting with others, including peers. Furthermore, Participant 2 disclosed a medical diagnosis of general anxiety disorder, which affected their participation in desired social events. Therapy enabled P2 to overcome anxiety and engage in social activities previously avoided.

Participant 5 revealed experiencing severe anxiety from childhood, primarily associated with managing potential conflicts with others, hindering her daily functioning. Moreover, anxiety levels appeared to escalate during the pandemic, compromising the ability to engage in social interactions. Participant 6 attributed the increase in anxiety to being responsible for a child and the uncertainties brought about by the pandemic. Subsequently, she added, *"Previously, it did not reach this intensity. I believe the current situation is worse due to the anxiety I developed during the pandemic"*.

The study participants reported experiencing foreign language anxiety in EFL classes, manifesting as various physiological and psychological symptoms. These symptoms included difficulty breathing and speaking, trembling, accelerated pulse rate, perspiration, mental blocks, sadness, loss of concentration, reddening of the cheeks, stomach pressure, throat tightness, rapid heartbeat, and disappointment.

Speaking, as a social activity, elicited the most anxiety among learners. Oral evaluations and classroom discussions were identified as situations that often triggered anxiety. Participants expressed fears of mental blocks, lack of confidence, self-consciousness, and comparison with peers regarding English language skills. Insufficient vocabulary was also proposed as a potential factor contributing to speaking anxiety during conversational exchanges.

FLA was also associated with comparing one's performance with that of peers. The fear of being judged based on English proficiency in relation to others was highlighted. Comparisons with classmates who demonstrated exceptional English skills led to feelings of lagging behind and hindered performance in class activities. "P4 remarked that...

"I have classmates who have exceptional English skills. When I compare myself to them, I realize that I am slightly lagging behind. It is almost inevitable to make such comparisons, especially when I take three minutes to respond to a question while a fellow student flawlessly answers within twenty seconds, with perfect pronunciation."

Additionally, anxiety was observed in social situations where learners imagined conversing in English with native speakers outside the classroom setting. The apprehension stemmed from the potential difficulties in understanding native speaker speech and using a particular English accent.

Assessments, especially oral tests, were identified as another significant contributor to anxiety in foreign language learning. Participants reported higher anxiety levels during

evaluations compared to regular classroom activities. However, the online learning environment was seen as more conducive to managing anxiety during oral tests, as participants could discreetly fall back on cheat sheets without drawing attention, as argued by P4.

Anxiety and the Learning Environment

The influence of learning environments on anxiety was explored, with learners showing preferences based on factors such as personality traits, anonymity, convenience, and flexibility. As noted by P1, who expressed a preference for the online modality due to higher anxiety associated with in-person classes and assessments: "*when it comes to answering a question or being evaluated [in in-person classes], that has a more direct impact because you are on the teacher's classroom stage.*"

Some participants reported experiencing difficulty concentrating in the online learning environment, which aligns with the argument put forth by Russell (2020) that not all students are well-suited for online language learning, especially those lacking motivation or the self-discipline required to take responsibility for their own learning. P2 echoed this sentiment, stating that "*I also find that I learn much more in face-to-face classes because I can focus better.*"

Conflicting opinions emerged regarding participation and learning environments. Some participants reported higher participation and reduced anxiety levels in online classes due to the absence of fear of being misunderstood. P3 remarked that "*since it's online, I feel more comfortable, and when I participate, I can tell that I learn more. Engaging in dialogues and communicating in English helps me develop my abilities and, therefore, learn more.*" In contrast, P4 expressed a preference for in-person learning environments, noting higher levels of participation, stating that "*in person, I believe I participate more, perhaps because I can't hide behind a camera, and that is motivating.*"

"The role of technology in online learning environments was also noted, providing instant access to learning resources, which raised concerns about the learner's true language knowledge and performance."

Anxiety as a Positive Factor

Several participants argued that the anxiety stemming from academic pressure served as a catalyst for more effort to achieve their language goals, thus enhancing their motivation to perform better. In support of this claim, P3 remarked that "*while I'm unsure if this can be categorized as a positive attribute, the feeling of nervousness pushes me to confront the challenge head-on. I become concerned and I prepare to perform well.*" Similarly, P5 mentioned that when experiencing anxiety, she directs her attention towards executing tasks accurately, leading to increased self-reflection. As a result, she does not perceive anxiety as entirely negative. Furthermore, P6 claimed that despite anxiety being an unpleasant sensation, the pressure of performing in front of an audience serves as a driving force for self-improvement.

Paralanguage, Learning Environments, and FLA

P2 emphasized the significance of non-verbal language, particularly visual contact between teachers and students, in the English class. This aspect contributes to the development of P2's confidence and fosters an environment with reduced anxiety. P2 further underscored the importance of observing facial expressions as a means to comprehend conversational meaning and asserted that *"when I encounter an unfamiliar word, I tend to decipher its meaning by interpreting facial expressions. They provide cues regarding whether the word conveys a positive or negative connotation."*

As far as online communication goes, P3 highlighted the challenges posed by the absence of visual stimuli, which hinders the organization and execution of group activities. Additionally, P3 mentioned the significance of visual instant feedback from the teacher, stating that *"the teacher looking at me, even through a screen, still holds importance. It visually confirms that I am effectively conveying my thoughts and that the conversation is progressing well. This confirmation also generates more interest and confidence, in my opinion."* Likewise, P5 stressed that the use of gestures and teachers' movement within the classroom greatly influences students' concentration and attention. P5 noted that when teachers remain seated at their desks, it diminishes the level of stimulus, concentration, and attention compared to teachers who actively use gestures and move around the classroom, for in-person environments. P5 expressed, *"When I see a teacher who is seated, my learning becomes predominantly auditory, as there is no visual stimulation. Visually, I merely perceive a person sitting still lacking active engagement."* In a similar vein, P6 voiced a preference for physical language, as the use of gestures and physical expressions aids in interpreting a person's intended message. P6 remarked that *"I feel more at ease with physical language, as gestures and physical expressions assist in deciphering a person's intended meaning."*

Qualitative Discussion

The qualitative findings of this study reveal that participants in the in-person learning environment reported higher levels of anxiety compared to those in online lessons. They emphasized that oral participation is "much more bearable in dealing with anxiety" when it comes to answering in online settings. Consequently, statements focusing on aspects of oral interaction demonstrated a more pronounced difference between the two learning environments, which aligns with the findings of B ark anyi (2021) and Bashori et al. (2020), who supported the notion that speaking, in general, is often perceived as difficult and anxiety-provoking among learners. Participants in this study attributed the higher levels of speaking FLA in in-person classes to a greater sense of reality experienced in this learning environment due to physical proximity with their peers and teacher, as opposed to online interventions where students tend to hide behind the camera. This finding aligns with Melchor-Couto's (2017) assertion that anonymity positively impacts self-confidence and reduces nervousness. As a result, the effects of anonymity suggest that more anxious students may prefer to enroll in online classes when given the opportunity to decide, anticipating less oral interaction. However, attention must be paid to online learning, as it may be more challenging to identify students with anxiety in this modality due to a lack of instant feedback, absence of sound, or indirect interaction with peers and teachers (Dewaele et al., 2022).

Furthermore, the findings of this study reveal that students experience high levels of oral test anxiety, which is exacerbated in the in-person learning environment. This finding aligns with the quantitative results of this study, which demonstrate that the Foreign Language Learning Situations and Processes Anxiety (including test anxiety) dimension scored one of the highest anxiety levels ($M=3.36$) in the in-person learning environment, as measured by the FLCAS. This anxiety level decreased in the online learning environment ($M=2.77$). As suggested by Khreisat (2022), this test anxiety may arise from the fear of failing a course or as a result of the interaction that occurs between teachers and students.

These findings are supported by the quantitative results of this study, despite not being statistically significant, which indicated that participants in the in-person learning environment reported higher levels of anxiety across the five dimensions studied.

Regarding the relationship between oral performance and anxiety levels, the qualitative results obtained from students' testimonies provided consistency and support for the finding that oral performance is negatively correlated with anxiety. Anxiety appears to manifest more strongly in the social aspects of human activities, and speaking is inherently a social activity. Therefore, students experience high levels of anxiety during Foreign Language Learning Situations and Processes, particularly in-person test anxiety, which they perceive as an influencing factor related to their oral performance. Moreover, students diagnosed with general anxiety disorder reported high levels of FLA, which negatively correlated with oral performance.

The idea that anxious individuals exhibit FLA levels during their studies is consistent with the suggestions made in the quantitative section, where strong associations were found between communication apprehension, Foreign Language Learning Situations and Processes Anxiety, and Foreign Language Use Confidence in the classroom dimensions (with correlations higher than .70). These results may indicate that these dimensions are not distinct from each other; thus, FLA could be studied as a result of general anxiety in future research.

However, some students suggested that oral ratings may not accurately reflect performance due to the use of technological tools like Google Translate in written evaluations or heavy reliance on note reading during oral presentations, which is less noticeable behind a camera. These findings are consistent with previous research, as some authors have found that technology has positively influenced students' learning in the classroom (Wali & Popal, 2020), while others have suggested that the quality of courses under ERT may have negatively impacted their academic performance (El-Sakran et al., 2022). This highlights the importance of gaining a deeper understanding of the positive and negative impacts that technology may have on education, and consequently, on anxiety levels.

Interestingly, learners appear to be indecisive about the advantages or disadvantages of anxiety in terms of academic performance. While some students reported feeling reluctant to participate when feeling anxious, resulting in a lack of oral ability, others reported feeling more challenged and motivated to participate when experiencing anxiety, leading to better oral performance through practice. Moreover, for most interviewed participants, the lack of facial expressions, body language, and sounds experienced in the online learning environment negatively interfered with their motivation to interact orally with their peers and, consequently, impacted their oral performance. Therefore, the effects of the online learning environment

could result in misinterpretation of information, leading to negative feelings such as frustration, confusion, and anxiety.

Finally, the results of this study are consistent with researchers who have identified FLA as a major obstacle in the acquisition of a foreign language, suggesting a negative correlation with academic achievement (Botes et al., 2020; Chou, 2018; Xiao & Wong, 2014).

Conclusion

This study aimed to assess anxiety levels among adult learners studying law at a public university in Santiago, Chile, and examine the possible correlations between anxiety and English oral performance. The study also sought to compare the results of two groups of learners studying in different learning environments: online and in-person. Using a mixed-methods methodology, the study found that while the quantitative results from the FLCAS survey showed higher anxiety levels among in-person class students compared to online participants, no statistically significant differences in anxiety levels were found across the two learning environments. However, the qualitative results provided more significance and consistency to these findings, showing that in-person learners perceived themselves as more anxious during in-person classes, particularly in oral evaluation situations, compared to online EFL learners. The qualitative findings indicated that anxiety levels are lower in the online learning environment, which can be attributed to the anonymity effects associated with this mode of instruction (Melchor-Couto, 2017; Resnik & Dewaele, 2021). Students reported feeling more relaxed without the fear of physical approach from teachers and peers, especially during oral presentations. They tend to hide behind cameras, creating a sense of experiencing an inauthentic situation. Furthermore, the highest anxiety levels in both learning environments were found in the FL Use Confidence Outside the Class dimension. Students' testimonies supported this finding, suggesting that the most prevalent source of anxiety stems from interactions with native speakers, which may be related to the lack of reality experienced in the classroom setting.

Regarding the correlations between anxiety levels and oral performance, the findings revealed that students with better oral performance scored lower in anxiety, showing negative correlations (Li & Du, 2023). Oral performance was particularly significant and negatively associated with the FL Learning Situations and Processes anxiety dimension. This implies that students with high test anxiety levels, primarily in the in-person learning environment, performed poorly. This might occur because students set unattainable goals for themselves, leading to a strong sense of failure that negatively influences their achievement. Qualitative findings also revealed that students who suffer from general anxiety are more likely to exhibit high levels of FLA, which in turn affects their oral performance.


The study also found that learners perceive that assessment ratings may not accurately reflect reality in online evaluations. Remote learning provides students with access to various technological tools that can help decrease anxiety and improve performance (Jenkins et al., 2022; Valizadeh, 2022). Therefore, a deeper understanding of the positive and negative impacts of technology on learning and anxiety is needed. Also, further research on the relationship between FLA and students' performance in the online learning environment should be conducted, as anxiety may be more challenging to identify in this modality. The findings demonstrated that while facial expressions, body language, and physical approach may


facilitate language acquisition in the in-person learning environment, students in the online setting seem to benefit from the absence of these elements. Furthermore, some students perceived anxiety as a positive factor, stating that they feel more challenged and motivated to participate when feeling anxious, leading to better oral performance. This finding suggests that learners can cope better with challenges and stress when they are aware of these emotions and feel in control.

The findings of this study contribute to a more nuanced understanding of the differences in anxiety levels between online and in-person classes, as well as the impact of foreign language anxiety on students' oral performance. The study also highlights the need for further investigation into FLA in different learning environments. Educators can benefit from a better understanding of FLA to improve their teaching practices, particularly in emergency remote circumstances, and make informed decisions to reduce anxiety levels, particularly in speaking activities. Additionally, as the growth of online EFL learning continues, it becomes crucial for educational institutions to adapt and cater to the diverse needs of students in various learning environments. This necessity extends beyond undergraduate students, and future studies should consider replicating this study in other institutions.

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