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Determining Ecuadorian Undergraduate English Polytechnic Students' Speaking Anxiety While Making Presentations in Virtual Environments During COVID-19

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Abstract

Using oral presentations in foreign language classrooms is a widespread practice. This form of oral exercise entails generating speaking anxiety in students. This paper aimed to identify the anxiety levels experienced when learners do in-class presentations. A mixed-methods design was adopted. The Public Speaking Class Anxiety Scale (PSCAS) was utilized for the quantitative phase. Eight open-ended questions were used for the qualitative phase. One hundred thirty-two students of English registered at a public polytechnic university in Ecuador took part in the quantitative phase of the study. Twelve of them took part in the interviews. The data were analyzed using Factor Analysis which related three sources of anxiety "Communication apprehension," "Apprehension to peer's reactions," and "Apprehension during the presentations." The majority of participants were found to experience high levels of anxiety. Several implications stem from this study. Raising awareness of speaking anxiety among language department administrators and teachers is one.

Keywords: Ecuador, students' presentations, speaking anxiety, English as a foreign language

1. Introduction

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the seventh coronavirus to attack humanity worldwide (Ciotti et al., 2020). It was discovered in Wuhan, Hubei province, China, in December 2019 (Lone & Ahmad, 2020). WHO declared COVID-19 a pandemic in March 2020 (World Health Organization, 2020). The virus has spread worldwide, thousands have died, and lots more have been infected. However, the number of cases and deaths is declining. Around three million confirmed cases and fifty-five thousand deaths were reported in the last week of September 2021. These results have been attributed to the global vaccination processes (World Health Organization,

2021).

The first case reported in Ecuador was a seventy-four-year-old woman that returned from Spain in February 2020 (Parra & Carrera, 2021). The Ecuadorian government declared a sanitary emergency to preserve the population's health. This measure included canceling face-to-face classes in all educational institutions (Inca & Inca, 2020). There was no clear sign of when on-campus classes would be back up to that moment. Remote teaching started one month later in all educational institutions in Ecuador, using meeting apps such as Zoom, MS Teams, or WebEx. Although these platforms have aided in the delivery of education, they still cannot effectively replace the on-campus classes.

Salaberry & Burch (2021) explain that speaking skills are part of any language teaching curriculum. They also say this skill should be mastered when learning English since it is a productive skill that aids in establishing communication with others (Leong & Ahmadi, 2017). Students must learn vocabulary, pronunciation, intonation, and grammar when practicing speaking in another language. Speaking has been deemed in the literature as the most challenging skill to be dominated by foreign language students (Nazara, 2011; Malmir & Shoorcheh, 2012; Leong & Ahmadi, 2017; Abugohar et al., 2019).

The literature explains that the speaker does several things simultaneously when communicating with others orally using another language. They must consider the language used, what they say, how to use the vocabulary and grammar, their pronunciation, and listening and reacting to their interlocutors (Nunan, 2005). According to Kuning (2019), Nazara, 2011, and Ur (2009), speaking is the most important since students must produce grammar, vocabulary, or pronunciation out of the four language skills. They also are required to understand when, why, and how to produce language to prove their sociolinguistic competence. These issues are also embedded in their oral practice when learners prepare and give a themed presentation.

An oral presentation is often used in EFL/ESL classes and exams (Al-Issa & Al-Qubtan, 2010). Unlike writing tasks, an oral presentation demands students' language processing skills. According to Tuan & Neomy (2007), teachers give students time to prepare for a presentation since cognitive and affective factors might affect their oral performance. This preparation is known as strategic planning and can be tackled by students individually or in groups (Ellis, 2005).

Furthermore, doing in-class group presentations is a technique often used in Cooperative Learning classrooms, where students must interact simultaneously and have equal participation (Jacobs et al., 2016). The authors explain that when students work in groups to give presentations, while one makes the presentation, the others listen. Then they switch roles, creating an optimal situation for simultaneous interaction and equal participation. Moreover, while the presenter is doing the presentation, the rest of the class reads the visual aids, listens to the talk, and takes notes preparing for the questions sessions. Thus, oral presentations integrate the four skills giving them equal weight (Al-Issa & Al-Qubtan, 2010; Nguyen, 2015).

Several studies have shown how students improve their oral proficiency in the target language (L2) by doing presentations (Kibler et al., 2013; Nejad & Mahfoodh, 2019; Barrett et al., 2020). Okada et al. (2017) explain that students can improve their presentation skills by video recording themselves, watching the video to be aware of their strengths and weaknesses, and improving their skills in other presentations.

There are several advantages to using oral presentations in the EFL classroom. First, oral presentations help integrate the four essential and important language skills in one single exercise (Al-Issa, 2006; Okada et al., 2017). Second, oral presentations can help students see language as a group of sources that facilitate its acquisition (Kim, 2020). Third, the experience acquired doing oral presentations is beneficial for L2 learners' future employment (Brooks & Wilson, 2014). Fourth, to deliver presentations effectively, students must develop in-depth, insightful, and well-trained thinking strategies to give clear and logical explanations (Tuan & Neomy, 2007). Finally, presentations promote learning through discovery and research. They become responsible for their learning. Thus, oral presentations encourage learner autonomy (Al Issa, 2010; Boonma &

Swatevacharkul, 2020).

Despite these benefits, there is evidence in the literature that students who are faced with giving a presentation may experience anxiety levels (Raja, 2017; Kimani & Bickmore, 2019; Tsang, 2020; Gallego et al., 2021). Furthermore, the literature counts with data originating from all global latitudes. Like Indonesia (Huda & Ma'mun, 2018; Fadlan, 2020; Amini, 2021), Hungary (Tóth, 2021), Colombia (Dueñas et al., 2018), South Korea (Tian, 2019), the Republic of China (Tian & Mahmud, 2018), Taiwan (Kelsen, 2019), and Thailand (Yaikhong & Usaha, 2012). Unfortunately, despite all these data sources, Ecuadorian research is scarce. Thus, a gap in the literature needs to be filled.

With this context in mind, this researcher aimed to identify the anxiety levels Ecuadorian polytechnic undergraduate students experience when doing in-class oral presentations in virtual sessions during the COVID-19 pandemic. Also, the sources of anxiety that generate this negative feeling will be analyzed. Therefore, the following research questions have been posed.

RQ1: What sources create anxiety in Ecuadorian undergraduate polytechnic students when doing in-class oral presentations during the COVID-19 pandemic?

RQ2: What anxiety levels do Ecuadorian undergraduate polytechnic students experience when doing in-class oral presentations during the COVID-19 pandemic?

RQ3: To what extent do age and gender affect the anxiety levels that Ecuadorian undergraduate polytechnic students experience when doing in-class oral presentations during the COVID-19 pandemic?

2. Literature Review

2.1 Emergency Remote Teaching

The literature has defined Emergency Remote Teaching (ERT) as a short-term change in teaching delivery because of a crisis. For Hodges et al. (2020), ERT means using remote teaching instead of on-campus or hybrid courses. It is effective until the emergency, such as the COVID-19 pandemic, has weakened. ERT's main objective is to provide temporary access to instruction in a quick and reliable form during a crisis. Shisley (2020) explains that ERT implies an unplanned alternative method for delivering education from a distance, as neither teachers nor students are physically present in a classroom. Estrella (2021) explains that ERT students believe using digital media to learn a language is helpful. However, one significant disadvantage of virtual classes is distraction, whether from digital devices or relatives who come by the student's location.

2.2 Foreign Language Anxiety

The literature makes an extensive account of Foreign Language Anxiety (FLA). According to Horowitz et al. (1986), FLA is "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process." MacIntyre & Gardner (1991) explained that language anxiety is a unique situation-specific anxiety that occurs consistently over time. MacIntyre (1999) explains that FLA is the stress, nervousness, emotional reaction, and worrisome linked to foreign language learning. FLA includes specific feelings towards the language learning process which eases or hinders its learning (Al-Saraj, 2013)

One of the theories that can shed light on FLA is Krashen's (1982) Affective Filter Hypothesis. It explains that motivation, self-confidence, and anxiety can indirectly influence learning by not letting input reach the language acquisition device in the brain. Thus, a high filter is expressed in terms of high levels of anxiety. Using this theory in the foreign language classroom, teachers can expect their students to improve. Students will participate in exercises by lowering the affective filter, and input will be obtained.

Another theory used to explain FLA was devised by Horowitz et al. (1986) in their theory of Foreign Language Anxiety. The authors claim that FLA is a situation-specific form of anxiety that develops from language classes' teaching-learning process. Their theory suggests that other study fields have different degrees of self-concepts and expression than those experienced in language learning. Students whose results in other subjects are good, explain Horowitz et al. (1986), might experience high anxiety levels when the subject of study is a foreign language. Several studies embarked on testing this theory and provided evidence to

support it (MacIntyre & Gardner, 1989; Onwuegbuzie et al., 1999; Bailey et al., 1999; Chen & Chang, 2004; Salehi & Marefat, 2014; Kurk, 2017).

The literature has compiled information on factors such as foreign language aptitude and language skills and their relationship with FLA. Also, on students' and teachers' perceptions of foreign language proficiency and how it is affected by FLA, and students' perceptions about their proficiency (Bensalem, 2018; Liao & Wang, 2018; Zhang, 2019; Presbitero, 2020). Horowitz et al. (1986) explain that three factors are the sources of FLA. They are a) fear of negative evaluation, b) communication apprehension, and c) test anxiety. Fear of negative evaluation is the apprehension about being evaluated by others (Karatas et al., 2016). It is a feeling of avoiding evaluative situations and the expectation of being negatively evaluated by peers (Horowitz et al., 1986). Miskam & Saidalvi (2018) explained that communication apprehension is the worry associated with communication with another student. It is usually associated with shy, quiet, or reluctant learners to speak to others (Horowitz et al., 1986). Finally, test anxiety is the fear students experience when being academically evaluated (Horowitz et al., 1986). This concept is based on the fear of failure (Miskam & Saidalvi, 2018). It adversely affects students' learning potential. Thus, the more unknown the tasks and formats in the test, the higher the anxiety levels are (Aydin et al., 2020; Onwuegbuzie et al., 1999).

One of Horowitz et al.'s (1986) most significant contributions is the Foreign Language Classroom Anxiety Scale (FLCAS) which measures the anxiety levels in the foreign language environment on a thirty-three item 5-point Likert scale. Some items on the FLCAS are negatively worded, so total scale scores range from 33 to 165. High scores indicate high anxiety levels. It has been deemed a reliable tool for exploring FLA. Language researchers have widely used the FLCAS (Bailey et al., 1999; Bensalem, 2018; Chen & Chang, 2004; Elaldı, 2016; Galante, 2018; Juwitawati & Pratiwi, 2018; Kruk, 2017; Onwuegbuzie et al., 1999; Park, 2014; Park & French, 2013; Salehi & Marefat, 2014; Yassin, 2018). The FLCAS has proven reliable and valid, with an alpha of .93 and an eight-week test-retest coefficient of .83 (Horowitz et al., 1986). Horowitz & Young (1991) explain that the scale's validity was established through correlations with communication apprehension, personal reports of communication, and test anxiety.

2.3 Foreign Language Speaking Anxiety

Students must perform orally in front of their peers or participate in group discussions or presentations during their foreign language classes. These speaking tasks may negatively affect learners, making them anxious when performing in a foreign language (Karatas et al., 2016). As evidenced in the literature, speaking is the most anxiety-provoking skill, and it is the most outstanding source of anxiety in the foreign language classroom (Bashori et al., 2020; Karatas et al., 2016; MacIntyre & Gardner, 1991; Miskam & Saidalvi, 2018; Rachmawati & Jurianto, 2020). Sadighi & Dastpak (2017) ascertain that Foreign Language Speaking Anxiety (FLSA) has an impressive impact on students' development of speaking skills.

The literature has also depicted the sources of FLSA. Balemir (2009) conducted research in Ankara with 234 students from different departments at Hacettepe University. The author used a mixed-methods research design revealing that teaching and testing procedures, personal reasons, and fear of negative evaluation were the major sources of anxiety. In another mixed-methods study, Faye Alnahidh (2020) surveyed 85 females Saudi EFL university students. The author identified other sources of FLSA: fear of making mistakes, forced participation, lack of vocabulary, lack of practice, lack of grammar, fear of making pronunciation mistakes, teachers' negative attitudes, and the need to give oral presentations. Sadighi & Dastpak (2017) did a study with 154 Iranian students who answered a questionnaire adapted from the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz, Horwitz, and Cope (1986). Three sources of FLSA were identified, namely "fear of making mistakes," "fear of negative evaluation," and "lack of vocabulary knowledge."

2.4 Previous Research on Foreign Language Speaking Anxiety in Presentations

Huda & Ma'mun (2018) performed descriptive qualitative research in Indonesia. Forty-one

first-year students at the Walisongo State Islamic University responded to the Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz et al. (1986). In addition, five students took part in in-depth interviews. The study concluded that lack of preparation, bad experiences, low proficiency, low confidence, and fear of making mistakes were the sources of students' speaking anxiety during presentations.

In another study, Kelsen (2019) reported on the associations between personality traits and perceived anxiety when doing presentations. Data were collected via the Big Five Inventory (BFI) and the Personal Report on Public Speaking (PRPSA). Four public speaking anxiety factors were identified using exploratory factor analysis, Positive mindset, Physical symptoms, Preparation anxiety, and Performance anxiety. The scholar also identified that extraversion, neuroticism, consciousness, and openness to experience predict public speaking anxiety factors.

Fadlan (2020) aimed to identify the types and sources of anxiety experienced by students when doing presentations through an applied qualitative descriptive research design. Six participants majoring in English at the Graduate Program of Makassar State University took part in this research. The investigation identified three types of anxiety, facilitative anxiety, debilitative anxiety, and non-effecting anxiety. In addition, the investigator found one anxiety-causing factor, namely an internal factor.

In a qualitative case study design, Tian (2019) looked at twenty-two English students at a Korean university with classroom observation, self-reported questionnaires filled out after the presentations, and a semi-structured interview used for additional data. The effects of anxiety detected were subconscious behaviors, silence, speech disruptions, and a slow speaking rate. The scholar concluded that there are four primary sources of anxiety in classroom presentations, i) negative attitude towards presentations, ii) preparation time, iii) language ability, and iv) negative feedback from peers. While factors like making mistakes, attention from the audience, and teachers' feedback were not considered significant sources of students' anxiety.

Tóth (2021) performed mixed-methods research on thirty-three English students from a Hungarian university. The study examined if giving a presentation in pairs feels more positive and provokes less anxiety than doing it individually. Students filled out two ten-point rating scales indicating how pleasant or unpleasant they felt during the presentation and how much anxiety they experienced. They also had to reflect on their experience by answering an open-ended questionnaire. The quantitative results suggest no significant difference in anxiety when working in pairs or individually. Nonetheless, the post-presentation reflections hint that participants prefer working in pairs to doing it alone.

Scholars have developed scales to measure foreign language speaking anxiety. Huang (2004) developed the Foreign Language Speaking Anxiety Scale (FLSAS). It holds 24 statements on speaking anxiety. It uses a five-point Likert scale where answers are ranged from strongly disagree to strongly agree. Cronbach's alpha for the questionnaire is .822, which suggests high internal consistency. Saltan (2003) investigated the causes of speaking anxiety experienced by Turkish EFL students. The researcher adopted the Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horowitz et al. (1986) and a four-page questionnaire developed by Young (1990). The questionnaire's internal consistency was determined with a Cronbach's alpha of .89. The FLCAS contains 63 items scored on a 5-point Likert scale ranging from strongly agree to strongly disagree. Bartholomay & Houlihan (2016) developed a public speaking anxiety scale (PSAS) that assesses public speaking anxiety through behavioral, cognitive, and physiological properties. It has a 17-item self-report statement scored on a 5-point Likert scale ranging from not at all to extremely. The scale has high internal consistency measured with Cronbach's alpha at .938. Finally, Yaikhong & Usaha (2012) developed a Public Speaking Class Anxiety Scale (PSCAS) to measure anxiety in the EFL public speaking class. The items used in the scale were adopted from other scales, namely the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al. (1986); Personal Report of Communication Apprehension (PRCA-24), and Personal Report of Public Speaking Anxiety (PRPSA-34) by McCroskey (1970); and Speaker Anxiety Scale (SA) by

Clevenger and Halvorson (1992). The preliminary scale yielded an internal consistency of .84 using Cronbach's alpha coefficient.

3. Methods

3.1 Research Design

According to Creswell & Creswell (2018), a researcher has three options for the research design, quantitative, qualitative, and mixed methods. Mixed methods involve collecting, analyzing, and interpreting qualitative and quantitative data in one study investigating an underlying phenomenon (Leech & Onwuegbuzie, 2007). This researcher has chosen this design to put findings into context, adding richer detail to the conclusions. Also, converge the quantitative and qualitative data to illustrate the former with the latter and make the results more credible by triangulating the data collection methods (Doyle, 2009; Uprichard & Dawney, 2016).

Johnson & Onwuegbuzie (2004) offered the mixed-method design matrix. They present two dimensions, the time order decision and the paradigm emphasis decision. Considering this matrix and suggestions from Creswell & Plano Clark (2018) and Johnson & Onwuegbuzie (2004), the explanatory sequential approach has been chosen since the qualitative data gives more detail to the initial quantitative results. This design allows the researcher to use qualitative data to assess the validity of the quantitative findings (Doyle, 2009; Fetters et al., 2013). It also employs integrative interpretation to explore the matter deeper. Thus, obtaining a more insightful understanding of the investigated issue (Plano Clark, 2019).

Fielding (2012) states that data integration is critical in mixed-methods analysis. It is also a challenging task to undertake (Uprichard & Dawney, 2016). This research follows the typology development from the different strategies depicted in the literature. According to O'Cathain et al. (2007), this strategy analyzes one data type that yields categories that will later be used to analyze the other data type. This is the strategy planned for the present research. Data will be obtained from a factor analysis utilized to develop themes. Qualitative data will be coded and used to feed the quantitative data. Plano Clark (2019) explains that researchers need to consider why, what, when, and how to integrate data. When talking about how to integrate, Fetters et al. (2013) suggest integrating through narrative, which is when the researcher describes the quantitative and qualitative findings. This researcher has chosen the weaving approach from the three approaches described by the scholars, which involves writing both types of findings together on a theme-by-theme basis.

3.2 Participants

The participants of this study are students at a state polytechnic university who enrolled in the last level of the English courses, which are mandatory for every student. They are 63% male and 37% female. Most students ranged from 18-25 years of age (90%). Most students come from private high schools (61%), and the other 39% come from public high schools.

Most of them (88%) decided to register at the university alone. In comparison, 8% said it was their parent's decision, and 5% explained they had no other option. Most students (28%) are registered in the Faculty of Electricity and Computer Engineering, 27% of them matriculated in the Faculty of Social Sciences and Humanities, 17% of students are currently taking the programs of the Faculty of Mechanics and Production Sciences, the other 28% registered in other Engineering Faculties. Forty-eight percent of participants said they started studying English in school. In contrast, 39% started studying it in high school, and only 13% started in university. Table 1 contains all the demographic data obtained.

Table 1. Participants' demographic characteristics

Demographics	**Categories**	**N=132**	**%**
Gender	Male	83	63
	Female	49	37

Age	18-21	77	58
	22-25	42	32
	26-29	8	6
	30 +	5	4
Race	Mestizo	118	90
	Montubio	4	3
	African Ecuadorian	4	3
	White	4	3
	Indigenous	2	1
Secondary	Private	81	61
Education	Public	52	39
City of origin	Guayaquil	77	58
	Salinas	9	7
	Playas	3	2
	Milagro	3	2
	Daule	3	2
	Others	37	29
People in family	2	1	1
	3	13	10
	4	41	31
	5 +	77	59
Decision to enter	Own decision	117	88
the university	Parents	9	7
	No other choice	6	5
Faculty	FIEC	37	28
	FCSH	35	27
	FIMCP	23	17
	Other engineering programs	37	28
Started studying	School	63	48
	High school	51	39

University	18	13	

Sampling strategy

3.2.1 Sampling Scheme

The literature reviews the sampling scheme options available in mixed methods investigations (Collins et al., 2007; Teddlie & Yu, 2007; Onwuegbuzie & Collins, 2015). Amongst those, the researcher has chosen to use a convenience sampling scheme. This decision was taken since the scheme allows for selecting conveniently available individuals who are willing to participate in the study. These individuals are the students of English as a foreign language enrolled in the courses assigned to the researcher.

3.2.2 Sample Size

Collins et al. (2007), Collins (2010), and Onwuegbuzie & Collins (2015) make a comprehensive review of the sample sizes required for every type of research conducted. Based on that information, the researcher chose to go with the total number of students assigned to him, which adds up to 140. Out of that number, 132 signed the informed consent form. Therefore, that is the sample size used for the quantitative section of the study. Meanwhile, Guest et al. (2006) and Onwuegbuzie & Collins (2015) suggest that researchers use a sample size of 10 to 15 participants for the qualitative stage. Thus, this research will use a sample size of 12 participants for the round of interviews.

3.3 Data Collection Tools

3.3.1 Survey

The first tool used was the Public Speaking Class Anxiety Scale (PSCAS), devised by Yaikhong & Usaha (2012) to assess anxiety in Thailand's EFL public speaking class. The items used in this survey were adopted from the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al. (1986), the Personal Report of Communication Apprehension (PRCA-24), and the Personal Report of Public Speaking Anxiety (PRPSA-34) by McCroskey (1970), and the Speaker Anxiety Scale (SA) by Clevenger and Halvorson (1992). The PSCAS yielded an internal consistency of .84 using Cronbach's alpha coefficient and was factor-analyzed to show the construct of the final version. This definitive version, used in this research, contains 17 questions. The survey's internal consistency with the above-stated sample was 0.983, an excellent index (Cortina, 1993; Brown, 2002; Tavakol & Dennick, 2011; Taber, 2017; McNeish, 2018). In addition, the researcher made wording changes to reflect the specificity of doing presentations.

The survey was first piloted with a reduced number of students who were asked to be attentive to the wording to ensure every proposition was easy to understand. After the pilot, it was identified that, although the questions were easy to understand as the vocabulary was simple, it was better to translate the questionnaire into Spanish. This decision was taken to avoid any bias from students whose level of English might not be good enough, thus, making it difficult not to understand the questions correctly. Then Cronbach's Alpha was used to calculate the internal consistency of the questionnaire coming to 0.86. Also, Lawshe's content validity index was calculated for the survey. This index is a rigorous methodological approach to assessing the validity of individual items and the overall questionnaire (Kennedy et al., 2019). As a result, the content validity ratio came to 0.84, which is a good ratio, accounting for the survey's validity. Finally, the survey was sent to students with a link from MS Forms used to generate it. Students completed the survey during the tenth week of class when they did a presentation exercise.

3.3.2 Interviews

The second collection tool was an open-ended questionnaire with an eight-question protocol. The questionnaire was translated into Spanish and presented to the translation coordinator at the Languages Department to confirm it was an accurate version of the English protocol. Additionally, the researcher took measures to account for the questionnaire's validity.

Face validity, explained by Kennedy et al. (2019), assesses the relevance of the questionnaire's content to the participants by looking at feasibility, readability, style consistency, and language clarity.

The questionnaire was given to three teachers and two members of the university's academic writing center, who evaluated the above characteristics to check for face validity. The agreement index reached 84.52%. Then, Cohen's Kappa Index (CKI) was performed on the test questions to check the inter-rater reliability. The agreement index was 89.25% with kappa=0.88, which is a good agreement according to Landis and Koch (1977). Therefore, the questionnaire accounts for face validity.

The literature also suggests assessing a questionnaire for content validity (Almanasreh et al., 2019; Kennedy et al., 2019). A group of five teachers from the languages department evaluated each question focusing on their relevance and clarity. They rated those characteristics essential or not essential. The content validity index (CVI) was 0.83, which is a good result according to Polit & Beck (2006). Thus, the questionnaire also accounts for content validity.

Additionally, to this calculation, a readability index was computed to assess the readability of the questions. The results of this test can be seen in Table 2. These results can be interpreted as the questions for the interview being easy to read.

Table 2. Readability indexes

Description	Index
Gunning Fog index:	7.4
Coleman Liau index:	5
Flesch Kincaid Grade level:	6.2
ARI (Automated Readability Index):	4.1
SMOG index:	4.9
Linear Write Formula:	6.8
Flesch Reading Ease:	75.4

Given the virtuality resulting from the COVID-19 pandemic, the interviews were done using individual Zoom meetings. It is worth noting that the researcher reminded respondents about the study and their role. Also, the researcher pointed out that they had signed the informed consent forms before participating in the survey. However, they were free not to take part in the interview. Also, the researcher clarified that every participant's name would not be displayed when reporting their comments, but a number would identify them. Finally, the researcher asked the participants if they wanted to do the interviews in English or Spanish. All of them chose the Spanish version of the questionnaire.

4. Analysis

4.1 Factor Analysis

The researcher performed a factor analysis to reduce the items into smaller factors to facilitate interpreting the results. The SPSS V.20 package was used for data extraction. Principal Component Analysis was used with the Varimax rotation method to order the factors with high or low factor loadings. Additionally, the Kaiser criterion was used to find the number of factors with eigenvalues greater than one. The three factors found accounted for 69.12% of the total variance. Cronbach's alpha of the factors ranged from 0.94 to 0.67, being adequate values. The factor loadings ranged from 0.51 to 0.9. Therefore, all were above the critical value of 0.50 suggested by Hair et al. (2010). The KMO index was 0.88, indicating a good relationship between the variables, so it was appropriate to perform the Factor Analysis. Additionally, Barlett's test of sphericity was significant ($p< 0.05$), so the Factor Analysis was the proper use. The results are shown in Table 3.

Table 3. Factor analysis of anxiety sources

Variable	1	2	3	Sources
Q7: I get nervous when the English teacher asks me to give a presentation I have prepared in advance.	.850			Communication apprehension
Q15: I dislike using my voice and body expressively while I am giving a presentation.	.757			
Q1: I never feel quite sure of myself while giving a	.746			

presentation in English.				
Q5: I get nervous and confused when giving a presentation in English.	.739			
Q4: I don't feel confident while giving a presentation in English.	.729			
Q17: Even if I am very well prepared, I feel anxious about giving a presentation.	.711			
Q8: I fear giving a presentation in English.	.694			
Q14: I feel anxious while waiting to give a presentation in English.	.691			
Q16: I have trouble coordinating my movements while giving a presentation in English.	.676			
Q3: When giving a presentation class, I get so nervous that I forget things I know.	.671			
Q9: I can feel my heart pounding when I am called on.	.555			
Q11: It embarrasses me to volunteer to go out first to give a presentation in English.		.880		Apprehension to peers' reactions
Q12: I do not face the prospect of confidently giving a presentation in English.		.703		
Q13: Certain parts of my body feel very tense and rigid while giving a presentation.		.671		
Q6: I am afraid that other students will laugh at me while giving a presentation.		.630		
Q2: I start to panic when I have to give a presentation in English without preparation in advance.			.812	Apprehension during the presentation
Q10: I do not feel relaxed while giving a presentation in English.			.414	
Cronbach's alpha	.945	.839	.673	
Eigenvalue	6.407	3.873	1.470	
Variance explained (%)	37.68	22.78	8.64	
Total variance explained (%)		69.12		
KMO		.883		
Bartlett's Sphericity Test	Chi-square= 1171.8 – sig= .000			

According to the results in Table 3, the first factor or source of anxiety was labeled "Communication Apprehension." It was related to having fears and physical uneasiness when faced with doing a presentation in class. This factor included 37.68% of the total variance, making it the most important factor compared to the others. The second source of anxiety was "Apprehension to peers' reactions," which related to how students feel when they know their peers will see them and feel anxious about their reactions to the presentation. This factor accounted for 22.78% of the total variance. In contrast, the third post-pandemic factor was labeled "Apprehension during the presentation" and was related to students' feelings of despair when they gave their presentations. This factor explained 8.64% of the total variance.

4.2 Interview Analysis

With the results from PSCAS, the researcher built an eight-question protocol to dig deeper into what was identified from the quantitative section of the research. First, twelve respondents were chosen randomly from the initial one hundred and thirty-two study participants. Their answers were recorded, transcribed, and coded (Braun & Clarke, 2012). Then the responses were divided into themes correlated to the three dimensions identified in the previous heading after a few reading rounds. This analysis was done to obtain more support for the results gained from the quantitative stage of the study.

5. Results and Discussion

The results and their discussion will be depicted by answering the three research questions defined in the introduction section.

RQ1 wanted to identify the sources of anxiety students experiment when doing in-class oral presentations. The Factor Analysis determined three dimensions identified as "Communication Apprehension", a very common source of anxiety found in papers regarding foreign language anxiety (Horowitz et al., 1986; Sadighi & Dastpak, 2017; Miskam & Saidalvi, 2018). The other two sources of speaking anxiety during in-class presentations are "apprehension to peers' reactions" and "apprehension during the presentation." The first one is similar to "negative feedback from peers," which Tian (2019) found. The latter is similar to "performance anxiety," as Kelsen (2019) identified.

The results from the interviews also corroborate these findings. For example, participant 10 explains, "I really get nervous when I have to give a presentation. I sometimes forget what I have to say, but I know it. It is just that knowing that everybody is watching me on their screens while I give the presentation makes me very nervous." In the same vein, participant 2 said, "It is really stressing, for me, when we are in class, and we have to prepare to give a presentation, mainly because there is not much time and waiting for the teacher to call my name and give the presentation makes me anxious." To go further on the issue, participant 5 ascertained, "I know that giving a presentation is not difficult, but I get so nervous that I tend to forget things, I don't feel confident of what I have to say, and I sometimes kind of stutter. So, my presentations tend not to be very good."

There were mixed responses when participants were asked about their feelings about their classmates seeing them do their presentations. Take participant 6 account "one of the things that really worries me when I am giving a presentation is whether the topic I chose is interesting enough for my classmates to pay attention to me. When I am at the university, it is one thing because I can see them looking at me. However, during the pandemic with online classes, I cannot see them, and it stresses me that they might be just chatting on their cell phones. I sometimes think they might be sending messages on the chat criticizing my presentation."

Participant 9 explained, "I know the teacher gives us time to prepare our presentation, but it makes me nervous having to give a presentation and then I have to answer questions. When that part comes, my hands get sweaty because I fear not answering correctly, and the teacher might think I am not good." When the researcher enquired about the reasons for these feelings, most respondents explained that they lacked vocabulary, pronunciation, and bad grammar. For example, respondent 7 said, "I don't like doing presentations because I know my level of English is not good enough to be level 5. Also, I am not confident in doing a good job." On the other hand, a couple of respondents ascertained that giving presentations is easy for them, and they do not get nervous. When the researcher asked their reasons, they both said it was easier for them because they have a better level of English than their classmates and have been giving presentations in English since high school.

Finally, the interview protocol had questions aimed at probing for more information on the issue of students' feelings while giving the presentation. For example, participant 3 said, "It is strange because when I start doing a presentation, I feel nervous, at least at the beginning of it. But as I move along, I start gaining confidence." On the other hand, participant 10 expressed, "I don't like to do presentations in class because there is no time to prepare. I mean, I don't have notes or anything to look at. Maybe I can use my phone, but I don't know. So, it is very stressful for me."

RQ2 aimed to identify anxiety levels that students of English as a foreign language experience when doing in-class oral presentations. The research resorted to the survey results to answer this question. A survey with 17 items was used to measure students' anxiety levels. The survey used a 4-point Likert scale with a total score ranging from 22 to 68. The first step was calculating the total scores for each student's answers. A total of 22 or fewer indicates a low level of anxiety. At the same time, a score between 23 and 44 demonstrated moderate anxiety. Participants with a score of more than 45 presented a high level of speaking anxiety. Next, the mean scores for all participants were calculated to determine the level of foreign language speaking anxiety during in-class presentations. This calculation revealed that students experience a high level of anxiety (M=44.74; SD=12.016). These results are supported by other researchers (Abdullah Ayash Ezzi, 2012; Öztürk & Gürbüz, 2013; Chou, 2018; Jiang & Dewaele, 2019). The anxiety levels are depicted in Table 4.

Table 4. Anxiety Levels

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Low	6	4,5	4,5	4,5
	Moderate	56	42,4	42,4	47,0
	High	70	53,0	53,0	100,0
	Total	132	100,0	100,0	

Additionally, the SPSS computed the frequencies and percentages of the three levels of anxiety experienced by participants. The descriptive analysis demonstrated that more than half of the 53% of students experience a high level of foreign language speaking anxiety. On the other hand, it is also seen that 42.4% of participants exhibited a moderate level of anxiety. At the same time, only 4.5% of the students surveyed reported experiencing a low level of anxiety while doing in-class presentations.

RQ3 aimed at identifying how age and gender affect anxiety students experience when doing in-class oral presentations. An independent t-test was conducted to explore whether the male and female participants differed in their foreign language speaking anxiety when doing in-class presentations. The results show a statistical difference between female students (M = 2.57, SD = .61) and male students (M = 2.44, SD = .54), *t* (1.154), p = .02, overall scores with a moderate effect size. These findings suggest that female students are more anxious about foreign language speaking anxiety when doing in-class presentations. It is also worth noting that Aydin, as cited by Karatas et al. (2016), implies that when students compare themselves to their peers causes them to present competitive behaviors. Since students deem important their performance and success, it is suggested that oral performances, including presentations, make them anxious. These results are supported by Öztürk & Gürbüz (2013), Çağatay, S. (2015), and Karatas et al. (2016); the results are shown in Table 5.

Table 5. Independent T-test results

Gender	**N**	**Mean**	**Std. Deviation**	**Std. Error**	**T**	**P**
Male	86	2.44	.544	.065	1.154	.017
Female	46	2.57	.606	.080		

In terms of age, a descriptive statistics crosstab was performed on SPSS. The results of the analysis can be seen in Table 6. According to these calculations, the younger the students, the higher

their anxiety levels. The 18 to 22 is the age range with the highest percentage of anxious students. Furthermore, the table shows that among students in that range, forty-three of them experience a high level of anxiety while doing their presentations (32.6% of the total). In comparison, twenty-eight students in the same age range exhibit a moderate anxiety level. In the following age range (23-25), most students (16.7%) experience moderate anxiety during their in-class presentations. While the last two age ranges also present a high level of anxiety for 6% of the surveyed students.

Table 6. Crosstab Results

			Anxiety Levels			Total
			Low	Moderate	High	
Age	18-22	Count	2	28	43	73
		Expected frequency	3.3	31.0	38.7	73.0
		% of the total	1.5%	21.2%	32.6%	55.3%
	23-25	Count	3	22	19	44
		Expected frequency	2.0	18.7	23.3	44.0
		% of the total	2.3%	16.7%	14.4%	33.3%
	26-29	Count	1	2	6	9
		Expected frequency	.4	3.8	4.8	9.0
		% of the total	0.8%	1.5%	4.5%	6.8%
	30 +	Count	0	4	2	6
		Expected frequency	.3	2.5	3.2	6.0
		% of the total	0.0%	3.0%	1.5%	4.5%

Additionally, to further examine the influence of age differences on anxiety among students experiencing in-class presentation anxiety, this study discusses the correlation between the dependent and independent variables. Table 7 shows the results of the correlation between in-class presentation anxiety and age. It can be seen that there is a negative impact of the correlation between in-class presentations and age. Pearson correlation is -0.109, implying a medium correlation between the two variables. Moreover, the results indicate that $r = 0.109$, $n= 132$, and $p< 0.05$. Since $p=0.000$ in the result is smaller than 0.05%, implying that age has a significant influence on in-class presentation anxiety. This result means that there is a negative correlation between the two variables. Thus, students of lower ages experience more anxiety when doing presentations in class. These results concur with Gaibani & Elmenfi (2016) and Yassin (2018).

Table 7. Correlation result between age and speaking anxiety

Dependent variable		Independent variable
In-class presentation anxiety		Age
	Pearson correlation	-0.109***
	Sig. (2-tailed)	0.000

N	132

Note: ***shows that correlation is significant at the 0.01 level (2-tailed)

6. Conclusions

Learning has dramatically changed since the beginning of the COVID-19 pandemic in late December 2019. Ecuadorian educational institutions started conducting online learning to prevent the spread of the disease. However, anxiety has become one of the challenges faced during online foreign language classes. Doing in-class presentations is an exercise that generates anxiety in students. This research aimed to identify the sources of anxiety, levels of anxiety experienced by students, and the effect that students' age and gender have on their anxiety levels.

Three were the sources of anxiety detected by this investigation, namely, a) communication apprehension, which deals with the uneasy feelings students experience when they have to do an in-class presentation, b) apprehension to peers' reactions, which regards students' fear of being judge by their peers given their performance doing the presentation, and c) apprehension during the presentation, which is the nervous feelings students exhibit while doing the presentation. Other scholars have presented these three factors with the same or similar names. In terms of the anxiety levels experienced by the English students, it was concluded that most students reported high levels of anxiety. Finally, the research suggested that women suffer more from speaking anxiety than men. The younger the student, the more anxious they are. However, as they grow old, their anxiety levels tend to diminish; as mentioned before, these results corroborate those reported by other researchers. Going further on the results observed by this researcher, one of the main contributions of this investigation to the literature is the up-to-date data originating from a Latin American country like Ecuador, from which evidence is scarce. Thus, helping to close the gap of knowledge provided by Ecuadorian undergraduate polytechnic students.

6.1 Implications, Limitations, and Suggestions for Future Research

This study presents some pedagogical implications. First, Ecuadorian undergraduate polytechnic students experience foreign language speaking anxiety when giving a presentation during remote classes. Therefore, language institution administrators can use the outlined results to raise awareness among their teaching staff of FL speaking anxiety. Thus, once teachers recognize the presence of FL speaking anxiety, they can make changes to their classroom practices and assessment conditions to lower students' affective filter and reduce anxiety levels. For example, having students practice giving presentations more often during class or even having them do their presentations in pairs or groups can help reduce their anxiety levels. Also, when making groups to practice presentations in class, it is a good idea to mix girls and boys so that their anxiety levels can be balanced, and girls can be less prone to be affected by speaking anxiety during the presentations. Finally, to help students lower their anxiety levels, when organizing group work to prepare presentations, teachers can mix students according to their ages so that younger students are less likely to suffer from speaking anxiety.

Second, it has been proven that foreign language anxiety impacts students' willingness to communicate, especially when doing in-class presentations. One of the sources of anxiety identified by this research is the apprehension students suffer from their peer's reactions to the exercise. Thus, to help learners reduce this anxiety trigger, teachers can ask students to rate their language proficiency. If students are their own judges, it might be a better experience, and their anxiety levels could be reduced. This self-awareness exercise will help them identify which part of the language-learning process has caused more anxiety. Then, they can work on them and start lowering their anxiety levels.

One limitation of this study is that it was conducted in just one university. Therefore, although the sample was not very small, it was not big enough to account for the generalization of findings. Consequently, it is suggested for future

lines of research to conduct a new study with a much larger sample and with the participation of more higher education institutions. The results can be generalized to the Ecuadorian student population doing this.

Another limitation of the research is the investigation's scope which was to identify the sources, levels, and effects of age and gender on speaking anxiety during in-class presentations. In addition, this research did not look at coping with such levels. Thus, as a new line of research, it is recommended to conduct another qualitative research. Then, through observations and interviews with participants, suggestions can be presented to deal with speaking anxiety within the classroom to reduce its effects on students' performance.

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Data Availability

The author declares that data supporting the findings of this study are available within the article.

Conflicts of Interest

The author declares no conflict of interest in the study's design, in the collection, analysis, or interpretation of data, in the writing of the manuscript, or in the decision to publish the results.

References

Abdullah Ayash Ezzi, N. (2012). The impact of gender on the foreign language anxiety of the Yemeni University students. *International Journal of Applied Linguistics & English Literature*, *1*(2), 65–75. https://doi.org/10.7575/ijalel.v.1n.2p.65.

Abugohar, M. A., Al-Hnifat, M. A., Al-Smadi, O. A., Rashid, R. A., & Yunus, K. (2019). English language speaking skill issues in an EMP context: Causes and solutions. *International Journal of English Linguistics*, *9*(3), 211–225. https://doi.org/10.5539/ijel.v9n3p211.

Almanasreh, E., Moles, R., & Chen, T. F. (2019). Evaluation of methods used for estimating content validity. *Research in Social and Administrative Pharmacy*, *15*(2), 214–221. https://doi.org/10.1016/j.sapharm.2018.03.066.

Al-Issa, A. S. M. (2006). Ideologies Governing Teaching the Language Skills in the Omani ELT System. *Journal of Language and Learning*, *4*(2), 218–231.

Al-Issa, A. S., & Al-Qubtan, R. (2010). Taking the floor: Oral presentations in EFL Classrooms. *TESOL Journal*, *1*(2), 227–246. https://doi.org/10.5054/tj.2010.220425.

Al-Saraj, T. M. (2013). Foreign language anxiety in female Arabs learning English: Case studies. *Innovation in Language Learning and Teaching*, *8*(3), 257–278. https://doi.org/10.1080/17501229.2013.837911.

Amini, A. (2019). A correlation between students' anxiety levels and oral presentation performance in EFL speaking class. *Journal of English Education and Teaching*, *3*(3), 403–412. https://doi.org/10.33369/jeet.3.3.403-412.

Aydin, S., Denkci Akkaş, F., Türnük, T., Baştürk Beydilli, A., & Saydam, İ. (2020). Test anxiety among foreign language learners: A qualitative study. *The Qualitative Report*, *25*(12), 4290–4309. https://doi.org/10.46743/2160-3715/2020.4686.

Bailey, P., Daley, C. E., & Onwuegbuzie, A. J. (1999). Foreign language anxiety and learning style. *Foreign Language Annals*, *32*(1), 63–76. https://doi.org/10.1111/j.1944-9720.1999.tb02376.x.

Balemir, S. H. (2009). The sources of foreign language speaking anxiety and the relationship between proficiency level and degree of foreign language speaking anxiety. Bilkent University, Ankara. Retrieved from http://repository.bilkent.edu.tr/bitstream/handle/11693/14917/0003883.pdf?sequence=1&isAllowed=y.

Barrett, N. E., Liu, G.-Z., & Wang, H.-C. (2020). Seamless learning for oral presentations: Designing for performance needs. *Computer Assisted Language Learning*, 1–26. https://doi.org/10.1080/09588221.2020.1720254

Bartholomay, E. M., & Houlihan, D. D. (2016). Public speaking anxiety scale: Preliminary psychometric data and scale validation. *Personality and Individual Differences*, *94*, 211–215.

https://doi.org/10.1016/j.paid.2016.01.026.

Bashori, M., van Hout, R., Strik, H., & Cucchiarini, C. (2020). Web-based language learning and speaking anxiety. *Computer Assisted Language Learning*, 1–32. https://doi.org/10.1080/09588221.2020.1770293

Bensalem, E. (2018). Foreign language anxiety of EFL students: Examining the effect of self-efficacy, self-perceived proficiency, and sociobiographical variables. *Arab World English Journal*, *9*(2), 38–55. https://doi.org/10.24093/awej/vol9no2.3.

Boonma, N., & Swatevacharkul, R. (2020). The effect of autonomous learning process on learner autonomy of English public speaking students. *Indonesian Journal of Applied Linguistics*, *10*(1), 194–205. https://doi.org/10.17509/ijal.v10i1.25037.

Brooks, G., & Wilson, J. (2014). Using Oral Presentations to Improve Students' English Language Skills. *Kwansei Gakuin University Humanities Review*, *19*, 19–212. Retrieved from http://hdl.handle.net/10236/13201.

Brown, J. D. (2002). The Cronbach alpha reliability estimate. *Shiken: JALT Testing & Evaluation SIG Newsletter*, *6*(1), 17–19. Retrieved from https://hosted.jalt.org/test/bro_13.htm.

Chen, T.-Y., & Chang, G. B. (2004). The relationship between foreign language anxiety and learning difficulties. *Foreign Language Annals*, *37*(2), 279–289. https://doi.org/10.1111/j.1944-9720.2004.tb02200.x.

Chou, M.-H. (2018). Speaking anxiety and strategy use for learning English as a foreign language in full and partial English-medium instruction contexts. *TESOL Quarterly*, *52*(3), 611–633. https://doi.org/10.1002/tesq.455.

Ciotti, M., Ciccozzi, M., Terrinoni, A., Jiang, W.-C., Wang, C.-B., & Bernardini, S. (2020). The COVID-19 pandemic. *Critical Reviews in Clinical Laboratory Sciences*, *57*(6), 365–388. https://doi.org/10.1080/10408363.2020.1783198

Collins, K. M. (2010). Advanced Sampling Designs in Mixed Research: Current Practices and Emerging Trends in the Social and Behavioral Sciences. In A. Tashakkori & C. Teddlie (Eds.), *Sage Handbook of Mixed Methods in Social & Behavioral Research* (Second, pp. 353–378). essay, SAGE Publications. https://doi.org/10.4135/9781506335193.

Collins, K. M., Onwuegbuzie, A. J., & Jiao, Q. G. (2007). A mixed-methods investigation of mixed-methods sampling designs in social and Health Science Research. *Journal of Mixed Methods Research*, *1*(3), 267–294. https://doi.org/10.1177/1558689807299526.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed-method approaches (5th ed.)*. SAGE Publications, Inc.

Creswell, J. W., & Plano Clark, V. L., (2018). *Designing and conducting mixed methods research (3rd ed*.) SAGE.

Clevenger, T., & Halvorson, S. K. (1992). Converting the PRCA-State version 2 to the speech anxiety scale. Tallahassee, The Florida State University.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, *78*(1), 98–104. https://doi.org/10.1037/0021-9010.78.1.98.

Doyle, L. (2009). An overview of mixed methods research. *Journal of Research in Nursing*, *14*(2), 175–185. https://doi.org/10.1177/1744987108093962.

Dueñas, L. J., Restrepo-Castro, J. C., & Becerra Garcia, A. M. (2018). Reliability and factorial analysis of the Public Speaking Anxiety Scale in Spanish (PSAS-S). *Psychology & Neuroscience*, *11*(1), 50–57. https://doi.org/10.1037/pne0000126.

Elaldı, Ş. (2016). Foreign language anxiety of students studying English language and literature: A sample from Turkey. *Educational Research and Reviews*, *11*(6), 219–228. https://doi.org/10.5897/err2015.2507.

Ellis, R. (2005). *Planning and task performance in a Second language.* Language Learning and Language Teaching Series. John Benjamins Pub. Co.

Estrella, F. (2021). The effectiveness of using digital platforms to practice English during the COVID-19 crisis as perceived by Ecuadorian students. *Journal of Applied Research in Higher Education*, *Ahead-of-Print*.

https://doi.org/10.1108/jarhe-05-2021-0194.

Fadlan, A. (2020). Factors causing language anxiety of EFL students in classroom presentation. *ELS Journal on Interdisciplinary Studies in Humanities*, *3*(2), 219–230. https://doi.org/10.34050/els-jish.v3i2.9718.

Faye Alnahidh, S. A. (2020). The Level and Sources of Foreign Language Speaking Anxiety among Saudi EFL University Students. *Advances in Language and Literary Studies*, *11*(1), 55–64. https://doi.org/http://dx.doi.org/10.7575/aiac.alls.v.11n.1p.55.

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs-principles and practices. *Health Services Research*, *48*(6pt2), 2134–2156. https://doi.org/10.1111/1475-6773.12117.

Fielding, N. G. (2012). Triangulation and mixed methods designs. *Journal of Mixed Methods Research*, *6*(2), 124–136. https://doi.org/10.1177/1558689812437101.

Gaibani, A., & Elmenfi, F. (2016). Age as an affective factor influencing public speaking anxiety of English language learners at Omar al-Mukhtar University. *Advances in Language and Literary Studies*, *7*(2), 179–182. https://doi.org/10.7575/aiac.alls.v.7n.2p.179.

Galante, A. (2018). Drama for L2 speaking and language anxiety: Evidence from Brazilian EFL learners. *RELC Journal*, *49*(3), 273–289. https://doi.org/10.1177/0033688217746205.

Gallego, A., McHugh, L., Penttonen, M., & Lappalainen, R. (2021). Measuring public speaking anxiety: Self-report, behavioral, and physiological. *Behavior Modification*, 014544552199430. https://doi.org/10.1177/0145445521994308.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822x05279903.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. EDUCAUSE Review. Retrieved November 11, 2021, from https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning.

Horowitz, E. K., Horowitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, *70*(2), 125–132. https://doi.org/10.1111/j.1540-4781.1986.tb05256.x.

Horwitz, E. K., & Young, D. J. (1991). *Language anxiety: From theory and research to classroom implications*. Prentice Hall.

Huang, H. (2004). The Relationship between Language Learning Anxiety and Language Learning Motivation among Iranian Intermediate EFL Learners (unpublished MA thesis).

Huda, N. L., & Ma'mun, N. (2018). The Anxiety of EFL Students in Presentation. *ELITE JOURNAL: Journal of English Linguistics, Literature, and Education*, *1*(1), 45–61. Retrieved from https://elitejournal.org/index.php/ELITE/article/download/31/22.

Inca, G., & Inca, A. (2020). Evolución de la enfermedad por coronavirus (COVID-19) en Ecuador. *La Ciencia Al Servicio De La Salud y La Nutrición*, *11*(1), 5–15. Retrieved from http://revistas.espoch.edu.ec/index.php/cssn/article/view/441/422.

Jacobs, G. M., Power, M. A., & Loh, W. I. (2016). *The teacher's sourcebook for cooperative learning: Practical techniques, basic principles, and frequently asked questions*. Skyhorse Publishing.

Jiang, Y., & Dewaele, J.-M. (2019). How unique is the foreign language classroom enjoyment and anxiety of Chinese EFL learners? *System*, *82*, 13–25. https://doi.org/10.1016/j.system.2019.02.017.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14–26. https://doi.org/10.3102/0013189x033007014.

Juwitawati, W., & Pratiwi, A. R. (2018). Analysis of students' anxiety in learning speaking using drill method. *PROJECT (Professional Journal of*

English Education), *1*(5), 600–607. https://doi.org/10.22460/project.v1i5.p600-607.

Karatas, H., Alci, B., Bademcioglu, M., & Ergin, A. (2016). An investigation into university students' foreign language speaking anxiety. *Procedia—Social and Behavioral Sciences*, *232*, 382–388. https://doi.org/10.1016/j.sbspro.2016.10.053.

Kelsen, B. A. (2019). Exploring public speaking anxiety and personal disposition in EFL presentations. *Learning and Individual Differences*, *73*, 92–101. https://doi.org/10.1016/j.lindif.2019.05.003.

Kennedy, L. G., Kichler, E. J., Seabrook, J. A., Matthews, J. I., & Dworatzek, P. D. N. (2019). Validity and reliability of a Food Skills Questionnaire. *Journal of Nutrition Education and Behavior*, *51*(7), 857–864. https://doi.org/10.1016/j.jneb.2019.02.003.

Kibler, A. K., Salerno, A. S., & Palacios, N. (2013). but before I go to my next step: A longitudinal study of adolescent English language learners' transitional devices in oral presentations. *TESOL Quarterly*, *48*(2), 222–251. https://doi.org/10.1002/tesq.96.

Kim, K.-R. (2020). Oral Presentations as an Alternative Approach to Enhance L2 Learning and Communication Skills. *Journal of Digital Convergence*, *18*(7), 111–122. https://doi.org/10.14400/JDC.2020.18.7.111.

Kimani, E., & Bickmore, T. (2019). Addressing public speaking anxiety in real-time using a virtual public speaking coach and physiological sensors. *Proceedings of the 19th ACM International Conference on Intelligent Virtual Agents*, 260–263. https://doi.org/10.1145/3308532.3329409.

Krashen, S. D. (1982). Language Acquisition Theory. In *Principles and practice in Second language acquisition*, 13–52. Essay, Pergamon Press.

Kruk, M. (2017). Changes in foreign language anxiety: A classroom perspective. *International Journal of Applied Linguistics*, *28*(1), 31–57. https://doi.org/10.1111/ijal.12182.

Kuning, D. S. (2019). Technology in teaching speaking skills. *Journal of English Education, Literature and Linguistics*, *2*(1), 50–59. https://doi.org/10.31540/jeell.v2i1.243.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, *33*(1), 159–174. https://doi.org/10.2307/2529310.

Leech, N. L., & Onwuegbuzie, A. J. (2007). A typology of mixed methods research designs. *Quality & Quantity*, *43*(2), 265–275. https://doi.org/10.1007/s11135-007-9105-3.

Leong, L.-M., & Ahmadi, S. M. (2017). An analysis of factors influencing learners' English speaking skills. *International Journal of Research in English Education*, *2*(1), 34–41. https://doi.org/10.18869/acadpub.ijree.2.1.34.

Liao, H.-C., & Wang, Y.-H. (2018). Using comprehension strategies for students' self-efficacy, anxiety, and proficiency in reading English as a foreign language. *Social Behavior and Personality: An International Journal*, *46*(3), 447–458. https://doi.org/10.2224/sbp.6648.

Lone, S. A., & Ahmad, A. (2020). Covid-19 pandemic—an African perspective. *Emerging Microbes & Infections*, *9*(1), 1300–1308. https://doi.org/10.1080/22221751.2020.1775132

MacIntyre, P. D. (1999). Language Anxiety: A Review of the Research for Language Teachers. In D. J. Young (Ed.), *Affect in foreign language and Second language learning: A practical guide to creating a low-anxiety classroom atmosphere* (Ser. Directions in second language learning, pp. 24–45. McGraw Hill.

MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. *Language Learning*, *39*(2), 251–275. https://doi.org/10.1111/j.1467-1770.1989.tb00423.x.

MacIntyre, P. D., & Gardner, R. C. (1991). Investigating language class anxiety using the focused essay technique. *The Modern Language Journal*, *75*(3), 296–304. https://doi.org/10.1111/j.1540-4781.1991.tb05358.x.

Malmir, A., & Shoorcheh, S. (2012). An investigation of the impact of teaching critical thinking on the Iranian EFL learners' speaking skills. *Journal of Language Teaching*

and Research, *3*(4), 608–617. https://doi.org/10.4304/jltr.3.4.608-617.

McCroskey, J. C. (1970). Measures of communication-bound anxiety. *Speech Monographs*, *37*(4), 269–277. https://doi.org/10.1080/03637757009375677.

McNeish, D. (2018). Thanks, coefficient alpha, we'll take it from here. *Psychological Methods*, *23*(3), 412–433. https://doi.org/10.1037/met0000144.

Miskam, N. N., & Saidalvi, A. (2018). Investigating English language speaking anxiety among Malaysian undergraduate learners. *Asian Social Science*, *15*(1), 1–7. https://doi.org/10.5539/ass.v15n1p1.

Nazara, S. (2011). Students' perception of Efl speaking skill development. *JET (Journal of English Teaching)*, *1*(1), 28–43. https://doi.org/10.33541/jet.v1i1.50.

Nejad, A. M., & Mahfoodh, O. H. (2019). Assessment of oral presentations: Effectiveness of self-, peer-, and teacher assessments. *International Journal of Instruction*, *12*(3), 615–632. https://doi.org/10.29333/iji.2019.12337a.

Nguyen, H. (2015). Student perceptions of the use of Pechakucha presentations for EFL reading classes. *Language Education in Asia*, *6*(2), 135–149. https://doi.org/10.5746/leia/15/v6/i2/a5/nguyen.

Nunan, D. (2005). *Designing tasks for the communicative classroom* (Cambridge Language Teaching Library). Cambridge University Press.

O'Cathain, A., Murphy, E., & Nicholl, J. (2007). Integration and publications as indicators of yield from Mixed Methods Studies. *Journal of Mixed Methods Research*, *1*(2), 147–163. https://doi.org/10.1177/1558689806299094.

Okada, Y., Sawaumi, T., & Ito, T. (2017). Empowering Japanese EFL learners with video recordings. *INTED2017 Proceedings*, *14*(2), 129–144. https://doi.org/10.21125/inted.2017.0728.

Onwuegbuzie, A. J., & Collins, K. (2015). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 281–316. https://doi.org/10.46743/2160-3715/2007.1638.

Onwuegbuzie, A. J., Bailey, P., & Daley, C. E. (1999). Factors associated with foreign language anxiety. *Applied Psycholinguistics*, *20*(2), 217–239. https://doi.org/10.1017/s0142716499002039.

Park, G.-P. (2014). Factor analysis of the Foreign Language Classroom Anxiety Scale in Korean learners of English as a foreign language. *Psychological Reports*, *115*(1), 261–275. https://doi.org/10.2466/28.11.pr0.115c10z2.

Park, G.-P., & French, B. F. (2013). Gender differences in the Foreign Language Classroom Anxiety Scale. *System*, *41*(2), 462–471. https://doi.org/10.1016/j.system.2013.04.001.

Parra, M., & Carrera, E. (2021). Evolución de la COVID-19 en Ecuador. *Revista Investigación y Desarrollo I+D*, *13*. Retrieved from https://revistas.uta.edu.ec/erevista/index.php/dide/article/view/1002/926.

Pérez, M., & Tufiño, A. (2020). Teleeducación y COVID-19. *Cienc Am UTI*. Retrieved from http://cienciamerica.uti.edu.ec/openjournal/index.php/uti/article/download/296/448?inline=1.

Plano Clark, V. L. (2019). Meaningful integration within mixed methods studies: Identifying why, what, when, and how. *Contemporary Educational Psychology*, *57*, 106–111. https://doi.org/10.1016/j.cedpsych.2019.01.007.

Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? critique and recommendations. *Research in Nursing & Health*, *29*(5), 489–497. https://doi.org/10.1002/nur.20147.

Presbitero, A. (2020). Foreign language skill, anxiety, cultural intelligence and individual task performance in Global Virtual Teams: A cognitive perspective. *Journal of International Management*, *26*(2), 100729. https://doi.org/10.1016/j.intman.2019.100729.

Rachmawati, D. I., & Jurianto, J. (2020). Investigating English department students' foreign language speaking anxiety: A case study in universitas Airlangga, Indonesia.

Social Sciences, Humanities and Education Journal (SHE Journal), *1*(2), 22–34. https://doi.org/10.25273/she.v1i2.6624.

Raja, F. U. (2017). Anxiety level in students of public speaking: Causes and remedies. *Journal of Education and Educational Development*, *4*(1), 94–110. https://doi.org/10.22555/joeed.v4i1.1001.

Sadighi, F., & Dastpak, M. (2017). The sources of foreign language speaking anxiety of Iranian English language learners. *International Journal of Education and Literacy Studies*, *5*(4), 111–115. https://doi.org/10.7575/aiac.ijels.v.5n.4p.111.

Salaberry, M. R., & Burch, A. R. (2021). *Assessing speaking in context: Expanding the construct and its applications* (Ser. Second Language Aquisition). Multilingual Matters.

Salehi, M., & Marefat, F. (2014). The effects of foreign language anxiety and test anxiety on Foreign Language Test Performance. *Theory and Practice in Language Studies*, *4*(5), 931–940. https://doi.org/10.4304/tpls.4.5.931-940.

Saltan, F. (2003). Efl speaking anxiety: How do students and teachers perceive it? (Unpublished Master's thesis). The Graduate School of Social Science of the Middle East Technical University. Retrieved from https://open.metu.edu.tr/bitstream/handle/11511/13325/140214.pdf.

Shisley, S. (2020). Emergency remote learning compared to online learning. *Learning Solutions Magazine*. Retrieved November 12, 2021, from https://learningsolutionsmag.com/articles/emergency-remote-learning-compared-to-online-learning.

Taber, K. S. (2017). The use of Cronbach's Alpha when developing and Reporting Research Instruments in science education. *Research in Science Education*, *48*(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd.

Teddlie, C., & Yu, F. (2007). Mixed Methods Sampling: A Typology with Examples. *Journal of Mixed Methods Research*, *1*(1), 77–100. https://doi.org/10.1177/2345678906292430.

Tian, C. (2019). Anxiety in classroom English presentations: A case study in Korean tertiary educational context. *Higher Education Studies*, *9*(1), 132–143. https://doi.org/10.5539/hes.v9n1p132.

Tian, S., & Mahmud, M. (2018). A study of academic oral presentation anxiety and strategy employment of EFL Graduate students. *Indonesian Journal of EFL and Linguistics*, *3*(2), 149–170. https://doi.org/10.21462/ijefl.v3i2.78.

Tóth, Z. (2021). Two heads better than one? pair presentation in the EFL classroom – a panacea for anxiety? *European Journal of Foreign Language Teaching*, *5*(5), 103–128. https://doi.org/10.46827/ejfl.v5i5.3921.

Tsang, A. (2020). The relationship between Tertiary-level students' self-perceived presentation delivery and public speaking anxiety: A mixed-methods study. *Assessment & Evaluation in Higher Education*, *45*(7), 1060–1072. https://doi.org/10.1080/02602938.2020.1718601

Tuan, T. A., & Neomy, S. (2007). Investigating Group Planning in preparation for oral presentations in an EFL class in Vietnam. *RELC Journal*, *38*(1), 104–124. https://doi.org/10.1177/0033688206076162.

Uprichard, E., & Dawney, L. (2016). Data diffraction: Challenging Data Integration in mixed methods research. *Journal of Mixed Methods Research*, *13*(1), 19–32. https://doi.org/10.1177/1558689816674650.

World Health Organization. (2020). Coronavirus disease (COVID-19)—events as they happen. World Health Organization. Retrieved from https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen.

World Health Organization. (2021). Weekly epidemiological update on COVID-19 - September 28, 2021. World Health Organization. Retrieved November 7, 2021, from https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---28-september-2021.

Yaikhong, K., & Usaha, S. (2012). A measure of EFL public speaking class anxiety: Scale development and preliminary validation and reliability. *English Language Teaching*, *5*(12), 23–35. https://doi.org/10.5539/elt.v5n12p23.

Yassin, M. (2018). Age sex and grade across level of education effect on foreign language anxiety. *JOURNEY (Journal of English Language and Pedagogy)*, *1*(1), 67–77. https://doi.org/10.33503/journey.v1i1.224.

Young, D. J. (1990). An investigation of Students' perspectives on anxiety and speaking. *Foreign Language Annals*, *23*(6), 539–553. https://doi.org/10.1111/j.1944-9720.1990.tb00424.x.

Zhang, X. (2019). Foreign language anxiety and foreign language performance: A meta-analysis. *The Modern Language Journal*, *103*(4), 763–781. https://doi.org/10.1111/modl.12590.

Çağatay, S. (2015). Examining EFL students' foreign language speaking anxiety: The case at a Turkish State University. *Procedia - Social and Behavioral Sciences*, *199*, 648–656. https://doi.org/10.1016/j.sbspro.2015.07.594.

Öztürk, G., & Gürbüz, N. (2013). The impact of gender on foreign language speaking anxiety and motivation. *Procedia - Social and Behavioral Sciences*, *70*, 654–665. https://doi.org/10.1016/j.sbspro.2013.01.106.