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Resnik, P. and Dewaele, Jean-Marc and Knechtelsdorfer, E. (2023) Differences in foreign language anxiety in regular and online EFL classes during the pandemic: a mixed-methods study. *TESOL Quarterly* 57 (2), pp. 618-642. ISSN 0039-8322.

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Differences in the intensity and the nature of foreign language anxiety in in-person and online EFL classes during the pandemic: A mixed-methods study¹

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Abstract

This paper explores differences in 437 learners' *foreign language classroom anxiety* (FLCA) in in-person and online English as a Foreign Language (EFL) classes before the outbreak of the pandemic and during the first lockdown in spring 2020. Statistical analyses of data gathered with a web survey revealed a slight, yet significant drop in learners' overall FLCA in *emergency remote teaching*. In order to obtain a more granular view, item-level analyses revealed that learners in online classes were significantly less worried about being outperformed by peers, suffered less from physical symptoms of anxiety when called on in class and were less anxious when they were in fact well-prepared. Feeling embarrassed to volunteer answers was significantly higher in online classes. Interviews with 21 participants revealed that the interviewees mentioned anxiety-provoking aspects of the class considerably more frequently in online than in in-person classes. However, the sources of anxiety in online classes differed from the ones in classes taught on site. Thus, it seems that the newness of the setting foregrounded anxiety-provoking aspects specific to emergency remote teaching, making others fade in the background at the beginning of the pandemic.

Keywords: Covid-19; English as a Foreign Language; foreign language classroom anxiety; learner emotions; online language learning

Introduction

When in March 2020 teaching had to be abruptly moved online due to the outbreak of Covid-19, neither teachers nor students or university administration were prepared for online-only teaching. Hodges et al. (2020) refer to this impromptu, temporary switch as *emergency remote teaching*, distinguishing it from existing online courses which require a long time to establish. As such, emergency remote teaching should be “accepted as temporary solution to an immediate problem” (Hodges et al., 2020) that needs creative solutions for a range of challenges. New technology-enhanced learning environments had to be established and teaching methodologies as well as learning strategies of students adapted. Students suddenly needed to become more autonomous learners (Müller & Goldenberg, 2021; Rapanta et al., 2020). Schober et al.'s (2020a, 2020b) longitudinal study of university students' experiences with emergency remote teaching showed that learners faced incredible challenges in its initial phase. As emergency remote teaching is implemented *ad hoc* and in times of crises, the first months of it are characterized by increased stress, uncertainty, and feelings of isolation, which have a negative impact on teaching and learning (Morgan, 2020; Müller & Goldenberg, 2021; Rapanta et al., 2020; Schober et al., 2020b). While increased feelings of isolation and disconnectedness (e.g., Exter et al., 2009) have been well documented for regular distance learning (Bolliger & Inan, 2012), too, the suddenness with which the switch to the online

¹ Pre-print version of: Resnik, P., Dewaele, J.-M. & Knechtelsdorfer, E. (2022) Differences in foreign language anxiety in regular and online EFL classes during the pandemic: A mixed-methods study. *TESOL Quarterly* <http://doi.org/10.1002/tesq.3177>

mode happened, the general insecurity in this crisis mode, and the imposed lockdowns in spring 2020 might have increased such feelings.

A number of strategies have been proposed to help students deal with the stress of emergency remote teaching, including flexible deadlines (Hodges et al., 2020), learning environments in which students can experience success (Holzer et al., 2021) and where they can demonstrate competence, autonomy and relatedness to sustain their well-being (Schober et al., 2020b). Regular communication between teachers and students as well as peer-to-peer interaction in diverse formal and informal online settings need to be ensured, too (Pu, 2020). As previous research showed that “the perceptions of psychological presence a distance student holds on the part of teachers, student peers, and the institution can be significant predictors of their success in distance learning” (Shin, 2003, p. 79) it can be argued that it is equally crucial to ensure presence in ERT classes. This includes maintaining cognitive presence, which is crucial for critical thinking, social presence, which is linked to the former as well as to learners’ emotions, and teaching presence (Garrison et al., 2000). Overall, presence ensures the group’s connectedness and mitigates feelings of isolation (Shin, 2003).

Emergency remote teaching during the Covid-19 pandemic was like a lifebuoy for students who found themselves being unwittingly “thrown into emotional *terra incognita*” (Resnik et al., 2021, p. 100). It was already known that learners do not cope well with volatile, uncertain, complex, and ambiguous circumstances in emergency remote teaching (Hadar et al., 2020), all of which are potential sources of negative emotions and a threat to positive emotions which have been described as the fuel of foreign language learning (see, e.g., Dewaele, Chen et al., 2019). All learner emotions were found to be dulled in online EFL classes during the pandemic (Resnik & Dewaele, 2021), which the authors attribute to emotional disembodiment of online interactions.

The current study pursues this path to focus specifically on EFL learners’ *foreign language classroom anxiety* (FLCA) (Horwitz et al., 1986) in pre-Covid-19 classes taught in person and classes taught remotely of the same learners once the pandemic had begun. Quantitative data collected through a web survey from 437 Austrian EFL learners was complemented by 21 in-depth interviews in order to gain a deeper understanding of what it is that makes learners anxious in EFL classes taught remotely in crisis mode as opposed to classes taught in person. While the many differences between emergency remote teaching and regular online classes have been outlined above, such as students and teachers having been forced into the online mode and not having chosen it themselves, emergency remote teaching shares similarities with regular distance classes too. The findings from the present study will, thus, allow a better understanding about what is unique to emergency remote teaching and what is more commonly related to FLCA in the online mode.

Literature Review

Foreign Language Classroom Anxiety

Learners’ FLCA has been among the most widely researched emotions since Horwitz et al.’s (1986) pioneering work in the field revealed its crucial role in language learning trajectories and classrooms. According to MacIntyre (2017), Gardner’s socio-educational model (1985) built the foundation of investigating language anxiety as a specific kind of anxiety, which needed to be conceptualised differently from other types that had been well established in psychology. FLCA was defined as “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) and measured through the Foreign Language Classroom Anxiety Scale, which is context-specific (Horwitz, 1986) and captures a learner’s tendency (referring to a trait) to feel anxious (referring to a state) when learning or using another language (Horwitz, 2017). Researchers now agree that context plays a crucial role,

and not just the social and interpersonal context but also the psychological context of learners which includes their emotions (MacIntyre, 2017, p. 26). A more sophisticated understanding of causality has also emerged, namely that FLCA may affect performance, but that weak performance may strengthen FLCA. MacIntyre (2017) concludes that “learners’ experience of language and communication is both continuous and integrated” (p. 27) and states that anxiety is only debilitating (see also meta-analyses by Botes et al., 2020; Teimouri et al., 2019).

A number of learner-internal and learner-external variables have been linked to FLCA. Dewaele and MacIntyre’s study (2014) showed that FLCA reaches a peak in teenage years before gradually decreasing among older age groups. Level of education and gender also seem to have an effect. Female participants reported experiencing more FLCA than male participants (a small effect size) (Dewaele et al., 2016). Language learning history and linguistic profile were also linked to FLCA: foreign language learners knowing more languages reported lower levels of FLCA (Dewaele & MacIntyre, 2014). Psychological variables, such as neuroticism (Dewaele & MacIntyre, 2019) and *trait emotional intelligence* (Dewaele et al., 2008) have also been shown to be linked to learners’ levels of FLCA.

Previous studies have shown that FLCA is more strongly linked to learner-internal than learner-external variables. However, learners who have teachers that are overly strict and unfriendly report higher levels of FLCA (Dewaele, Franco Magdalena et al., 2019).

While FLCA has been widely researched in in-person EFL classrooms, research into its role in regular online classes is comparatively limited in scope. Hurd (2007), for instance, found in her longitudinal study on FLCA in distance learning among tertiary-level learners of French that the nature and intensity of learners’ anxiety in the online mode differed considerably from the FLCA experienced in classes taught on site. The findings revealed anxiety-provoking causes that are specifically related to the distance mode, such as the lack of immediate feedback, feelings of isolation (see also Hauck & Hurd, 2005), learners’ difficulty in comparing their own progress to that of their peers, a lack of speaking practice and confidence when working independently and, linked to it, the lack of clear task instructions. However, the effect of distance learning on learners’ anxiety remained unclear. Pichette’s (2009) study on 186 adult French-speaking students of English and Spanish yielded no significant differences in general anxiety, reading anxiety, and writing anxiety experienced by learners in traditional and distance foreign language classes either. Furthermore, Bollinger (2017) found contextual differences in her investigation of 147 learners at a community college in Middle Georgia: learners in classes taught on site experienced significantly lower levels of FLCA than learners enrolled in distance courses.

A recent study into university learners’ positive and negative emotions in in-person classes and classes taught remotely during the pandemic has shown a drop in both enjoyment and anxiety (Resnik & Dewaele, 2021). The authors speculate that two-dimensional interactions with teachers and peers on a screen lack the emotional resonance of the traditional, three-dimensional classroom setting where the volume cannot be lowered, and where the sheer physicality of the experience can make students excited and fosters feelings of connectedness (Bollinger & Inan, 2012). Thus, exploring the psychological context of learners in greater detail in order to identify what exactly causes the drop in FLCA in emergency remote teaching settings is crucial.

The Study

The current study aims to provide a deeper understanding of the anxiety experienced by students in EFL classes taught in person before the outbreak of the pandemic and in EFL classes that were moved online during the Covid-19 pandemic. This comparison allows to investigate the previously established context-specificity of learner emotions in such contexts (Resnik & Dewaele, 2021) in depth. The study employed a convergent mixed-methods design (Creswell & Plano Clark, 2018) and the quantitative and qualitative data were collected simultaneously. A web survey allowed to compare learners' FLCA in both contexts based on a widely used scale, which was originally developed for traditional, in-person EFL classes (Dewaele & MacIntyre, 2014). Interviews were conducted at the same time with the aim to complement and add nuance to the web survey. This mixing of qualitative and quantitative approaches allows "breadth and depth of understanding" (Johnson et al., 2007, p. 151). Additionally, giving the interviewees the possibility to explain their FLCA freely without any preconceived conceptualisation was considered crucial, as the nature of FLCA in emergency remote teaching might be unique. Thus, the rationale behind the design is that "multiple ways of seeing and hearing, multiple ways of making sense of the social world" (Greene, 2007, p. 20) can enhance understanding of a unique setting the participants had not experienced before.

Research Questions

The following three research questions (RQs) are investigated:

RQ1: Is there a difference in FLCA in in-person and remotely taught EFL classes?

RQ2: More specifically, which of the eight items in the FLCA scale show the biggest differences?

RQ3: What sources of anxiety do learners experience in online EFL classes during the pandemic and to what extent do they differ from those experienced in in-person EFL classes, according to the learners themselves?

Participants

In total, 437 tertiary-level students participated in the web-based survey. They all had on-site EFL classes before and online EFL classes during the pandemic in Austria. Of these, 366 (83.8%) were female, 64 (14.6%) were male and seven respondents (1.6%) did not disclose their gender. This reflects the typical gender ratio of English language students in Austria (e.g., Unit for Reporting and Analysis of the University of Vienna, personal communication). On average, the students were 22.57 years (min. = 18, max. = 45, $SD = 3.45$) and they were frequent users of English, with a mean score of 4.08 (min. = 1, max. = 5, $SD = .675$) on a scale ranging from 1 (hardly ever) to 5 (almost always). Accordingly, they also described their knowledge of EFL as very high ($M = 4.6$, min. = 2, max. = 5, $SD = .601$) on a scale from 1 (very poor) to 5 (very good). Most of them were Austrian ($n = 395$, 90.39%), with smaller numbers of Croatian ($n = 6$), German ($n = 5$, 1.14%), Italian ($n = 5$, 1.14%), Serbian ($n = 4$, .9%) and Bosnian ($n = 4$, .9%) participants. Consequently, the majority spoke German as one of their first languages (L1s) ($n = 406$, 92.91%). Among the respondents, 41 (9.38%) spoke four foreign languages, 116 spoke three (26.54%), 199 (45.54%) spoke two, and 81 (18.54%) participants spoke one foreign language.

The sociobiographical profile of the 21 interviewees was very similar to that of the respondents to the web survey and so was their language learner history.

Instruments and Procedure

The web-based survey. Respondents were asked to complete several sets of questions. The first questions were related to their demographics, (their gender, age, nationality, and country they studied in). Further questions asked for the participants' language background (number and type of languages known) and language learner history, with a particular focus on English (knowledge and frequency of use of the language).

Participants were asked to rate their FLCA twice, once for their foreign language classes before the outbreak of Covid-19, which they rated retrospectively, and once for their remotely taught classes during the first lockdown. It was captured with eight items extracted from Horwitz et al.'s (1986) *Foreign Language Classroom Anxiety Scale* (MacIntyre, 1992), a psychometrically validated short form. Exploratory and confirmatory factor analysis revealed the construct's unidimensional structure (Botes et al., 2022). The answer format was a 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The items in the FLCA scale capture physical symptoms of anxiety, and aspects related to self-confidence and being nervous in the process of learning or using the foreign language in class (see Appendix). Two negatively-phrased items were reverse-coded so higher scores reflect greater anxiety. Scale analyses showed high internal reliability in the case of classes taught on site (Cronbach's $\alpha = .899$, $N = 8$) as well as those taught remotely (Cronbach's $\alpha = .853$, $N = 8$).

The anonymous survey was made accessible online via the application LimeSurvey and remained online from mid-April to mid-May 2020. After the project and related instruments had received ethical approval from the first author's research institution, data were gathered via convenience and snowball sampling (Dewaele, 2018) and the link was distributed by numerous colleagues at various universities and university colleges in Austria, where students had language competence or linguistics classes in EFL as part of their degree. This way, we aimed at reaching learners from diverse backgrounds, (i.e. not only students enrolled in English and American Studies), thereby counteracting at least to some extent the problem of self-selection bias (Dewaele, 2018). Completing the survey took approximately 30 minutes.

Semi-structured interviews. Students who were sent the web survey link were also asked via e-mail whether they were willing to participate in an interview. Twenty-one of them agreed to share their experiences in this way. They completed a short questionnaire prior to the interviews on their demographics and their language learning history and signed a consent form, which informed them about the study and the possibility to withdraw from it. Communication happened with a research assistant, who received detailed instructions and training, and she conducted, transcribed, and anonymised the interviews as well.

Given participants' high proficiency in EFL, the interviews were conducted in English. They covered eleven questions related to learners' (1) perceived general differences between their pre-Covid foreign language classes and their online EFL classes during the pandemic, (2) sources of enjoyment in both, (3) anxiety-provoking aspects, (3) other emotions they experienced in both contexts as well as questions related to their (4) motivation, (5) learner autonomy, and (6) well-being. The interviews were conducted via Zoom and lasted on average 27.87 minutes (min. = 17.67 mins, max. = 47.53 mins). They were recorded digitally, and the transcripts amounted to a corpus of 81,769 words.

Data Analysis

The quantitative analysis serves the purpose of identifying significant differences between learners' overall FLCA they experienced in both contexts as well as identifying the specific items of the widely-used scales in which significant differences were reflected. The qualitative analysis serves the purpose of an add-on to the trends observed in the quantitative analysis and allows, based on qualitative content analysis (Kuckartz, 2014), identifying further sources of anxiety learners possibly experienced in both contexts, which were not covered in the scales, as well as giving participants a voice and letting them explain their feelings in the foreign language classes in their own words. The emerging themes were coded inductively by two researchers (see Table 3 for the codes), employing MAXQDA2020: after having coded 20% of the data individually, the researchers convened to find a consensus regarding the codes (Kuckartz, 2014) and then continued the coding individually and discussed the applicability of the categories repeatedly via feedback loops (Mayring, 2000) to ensure the same ones were used by both in their analysis. After both coders had coded all data, the reliability of the codes was analysed based on percent agreement of the frequency of the codes, which equaled, overall, 99.07% and was, thus, very high. The coders convened and discussed the disagreements, which were then resolved.

Consequently, the analysis proceeded in two phases: In the first stage, statistical analyses were used to measure the effect of contextual differences between learners' overall FLCA in in-person classes and in emergency remote teaching as well as at item-level, following the approach in Dewaele et al. (2016) to gain a more granular view of the phenomenon of FLCA. While Kolmogorov-Smirnov tests revealed that the items were not normally distributed (all $p < .002$), quantile-quantile plots showed that, apart from the extreme tails, the variables follow the normal distribution reasonably well (see also Table 1 for descriptive statistics of overall FLCA and normality tests). Thus, we opted for the more powerful parametric procedures and ran paired sample t-tests, which are generally robust and tolerate violations of normality assumptions (Rosenthal, 2008). In the second stage, the qualitative content analysis of the data gathered in the interviews allowed us to identify themes that emerged as sources of anxiety. Representative data extracts will be used for illustrative purposes (see, e.g., Dewaele et al., 2016). In the discussion section, both data sources are combined.

Table 1

Descriptive statistics for FLCA in in-person classes and in emergency remote teaching (ERT).

| Variable | <i>M</i> | <i>SD</i> | Min. | Max. | Skewness | SE | Kurtosis | SE |
|----------------|----------|-----------|------|------|----------|------|----------|------|
| FLCA in-person | 2.61 | .89 | 1.00 | 5.00 | -.187 | .119 | -.747 | .237 |
| FLCA ERT | 2.53 | .77 | 1.00 | 4.50 | -.088 | .119 | -.413 | .237 |

Results

Differences in Overall Anxiety Ratings Across In-person and Remotely Taught Foreign Language Classes

A paired samples t-test revealed a significant drop in students' FLCA in emergency remote teaching when compared to their FLCA in in-person EFL classes [$t(422) = 2.27, p = .024$; Cohen's $d = .11$], which, according to Cohen (1988), is indicative of a very small effect size (see Figure 1).

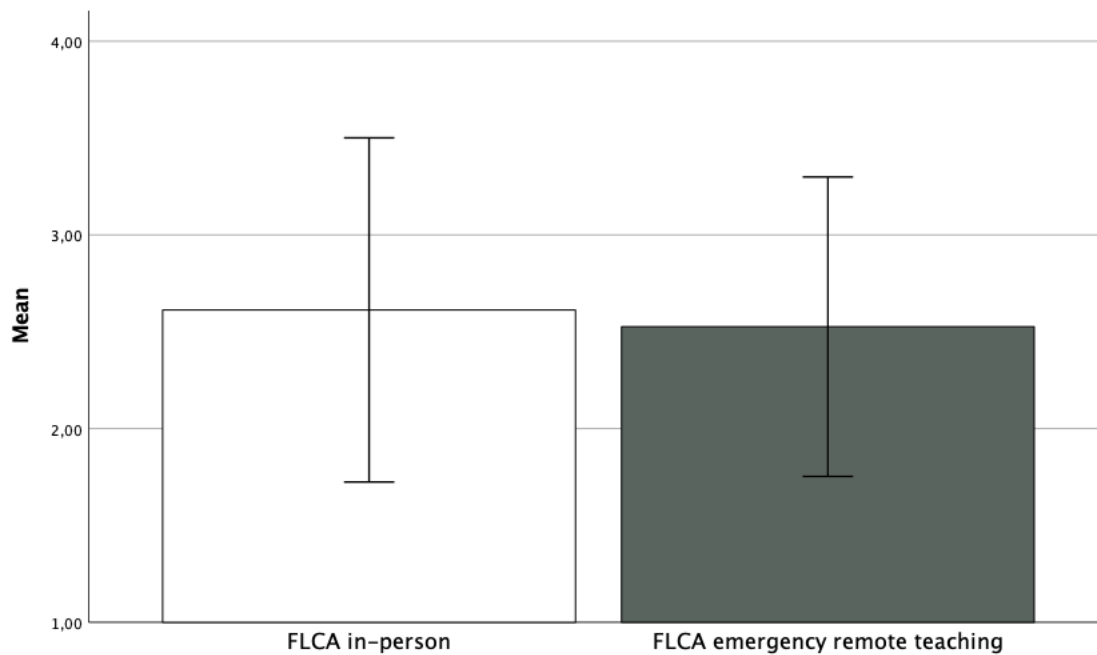


Fig. 1. A comparison of mean anxiety scores in in-person and remotely taught classes (with SD).

Differences in Anxiety Ratings Across In-person and Remotely Taught Foreign Language Classes at Item-level

In order to gain a more granular view of contextual differences in students' FLCA, a series of paired-samples t-tests was run on the eight items of the short scale. The Bonferroni-adjusted probability level was $p \leq .0063$. Table 1 shows that significant differences between learners' FLCA in emergency remote teaching and in classes taught on site before the outbreak of the pandemic existed for four items: values were significantly lower in emergency remote teaching for the feeling of the superiority of others, the experiencing of a pounding heart when called on in the foreign language class and the feeling of anxiety despite being well-prepared. On the other hand, feeling embarrassed to volunteer answers in the foreign language class increased significantly in classes that were moved online due to the pandemic. The significant differences in mean scores are illustrated in Figure 2. Overall, these contextual differences in learners' FLCA were very small (see Table 2).

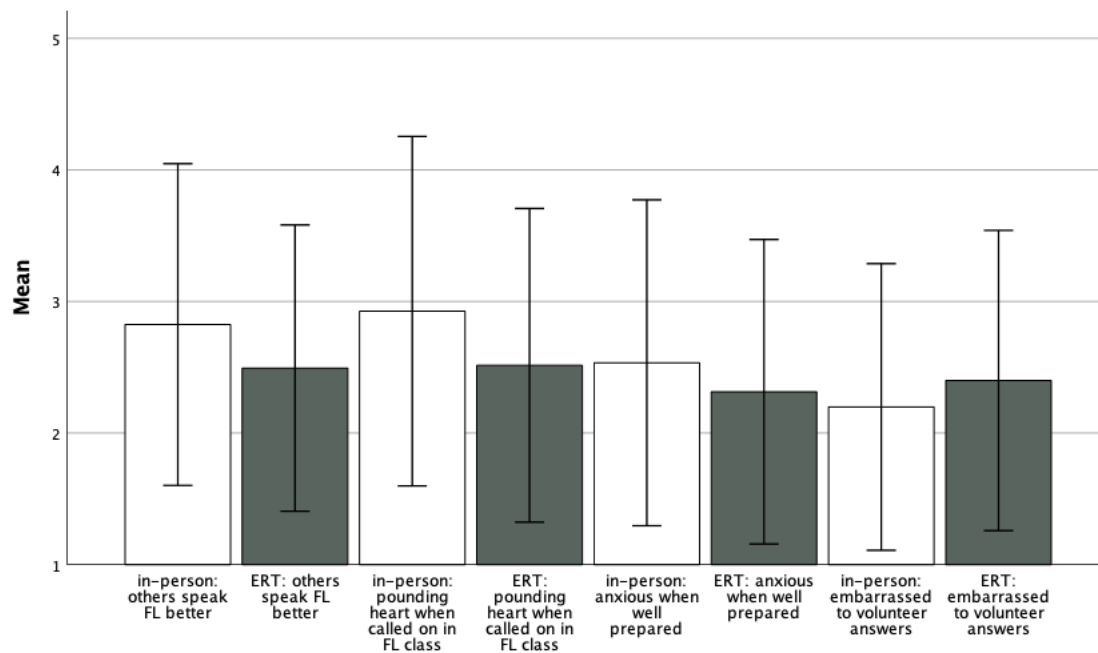


Fig. 2. Differences in mean values (and SD) of items reflecting FLCA in in-person foreign language (FL) classes and in emergency remote teaching (ERT).

Table 2

Difference between learners' FLCA in in-person classes and in emergency remote teaching at item-level (ranked according to the level of significance).

| Item | <i>t</i> | <i>df</i> | <i>p</i> | <i>Mean in-person</i> | <i>SD</i> | <i>Mean ERT</i> | <i>SD</i> | <i>Cohen's d</i> |
|--|----------|-----------|----------|-----------------------|-----------|-----------------|-----------|------------------|
| I always feel/felt that the other students speak English better than I do. | 7.25 | 422 | < .001 | 2.83 | 1.22 | 2.49 | 1.01 | .35 |
| I can/could feel my heart pounding when I am/was called on in the English class. | 6.5 | 422 | < .001 | 2.93 | 1.33 | 2.52 | 1.19 | .32 |
| It embarrasses/embarassed me to volunteer answers in my English class. | -3.58 | 422 | < .001 | 2.2 | 1.09 | 2.4 | 1.14 | .17 |
| Even if I am/was well prepared for my English class, I feel/felt anxious about it. | 3.19 | 422 | .002 | 2.53 | 1.24 | 2.31 | 1.16 | .15 |
| I don't/didn't worry about making mistakes in my English class.* | 2.75 | 422 | .006 | 3.23 | 1.13 | 3.1 | 1.15 | .13 |
| I start/started to panic when I have/had to speak without preparation in my English class. | -1.96 | 422 | .05 | 2.17 | 1.13 | 2.26 | 1.07 | .1 |
| I feel/felt confident when I speak/spoke in my English class.* | -1.66 | 422 | .1 | 2.58 | 1.01 | 2.67 | .95 | .08 |
| I get/got nervous and confused when I am/was speaking in my English class. | -1.05 | 422 | .3 | 2.44 | 1.09 | 2.49 | 1.05 | .05 |

* *Note.* These items were reverse-coded.

Qualitative Data: Elements Conducive to Learners' FLCA in In-person and Remotely Taught Classes

The five most frequently occurring themes for each context are presented in Table 3 and ranked according to frequency of occurrence and relative proportion. They will be analysed in depth in the following two sections. Less frequent themes were coded as 'Other'. This category included, for instance, test anxiety, the fear of negative evaluation ($n = 5$) and the stage fright experienced when giving presentations ($n = 4$) in in-person classes. Examples of less frequently mentioned sources of anxiety in emergency remote teaching were group work ($n = 4$), being anxious about making mistakes ($n = 2$) and being called on unexpectedly ($n = 2$).

The first striking finding is that participants reported more reasons for FLCA in classes that were moved online due to the pandemic ($n = 81$) than in in-person EFL classes ($n = 53$). Secondly, the sources of anxiety turned out to be very different in both settings (see Table 3).

Table 3.

The top five themes conducive to FLCA in the interviews in both contexts.

| Foreign language classroom anxiety | | | | | |
|---|-----------|--------|--------------------------------------|-----------|--------|
| In-person classes | | | Emergency remote teaching | | |
| Theme | Frequency | % | Theme | Frequency | % |
| Contributing to in-class discussions | 9 | 16.38% | Use of technology | 21 | 25.93% |
| Anxious about others speaking the foreign language better | 8 | 15.09% | Uncertainty: requirements | 20 | 24.69% |
| Nervous/confused when speaking | 7 | 13.21% | Contributing to in-class discussions | 13 | 16.05% |
| Worried about making mistakes | 6 | 11.32% | Uncertainty: too little feedback | 9 | 11.11% |
| Anxious when called on unexpectedly | 6 | 11.32% | Increased workload | 8 | 9.88% |
| Other | 17 | 32.08% | Other | 10 | 12.35% |
| Total | 53 | 100% | Total | 81 | 100% |

Elements conducive to learners' FLCA in in-person classes. As shown in Table 3, the most frequent sources of FLCA experienced by the interviewees in in-person EFL classes are all covered in the FLCA scale, which was used in the web survey and originally designed for foreign language classes taught on site (Dewaele & MacIntyre, 2014). Learners' most frequently mentioned anxiety-provoking aspect in in-person EFL classes was 'contributing to in-class discussions'. While Participant 8, for example, mentioned "feel[ing] safe when sitting at home", she described experiencing an "immediate anxiety" in brick-and-mortar classrooms in such situations. Many other interviewees experienced this "anxiety of [...] giving opinions" (Participant 14), too. It was linked to them being either "a bit of a shy person" (Participant 17) or "a very quiet student" (Participant 19), and sometimes, this anxiety was linked to disliking being put on the spot and the fear of being judged. Participant 12 described that talking "in the plenum in front of everyone was really stressful" for her. Consequently, several interviewees, such as Participant 19, experienced "a bit more anxiety than there is in online classes in the sense that you feel [...] pressure, you feel like you have to, or I feel like I have to participate".

Many interviewees also mentioned having been anxious about their peers speaking English better than themselves in classes taught on site (see Table 3). Their peers' perceived superiority could be related to "a better British accent" (Participant 6), them being more fluent

in English as they had attended “a bilingual school and you hear the difference” (Participant 5), or being more “knowledgeable” (Participant 20). While some described the comparison of one’s own performance to others’ as “normal” (Participant 11), the constant comparison also made these students anxious, as Participant 13 explained: “[Y]ou always have people who you feel know much more than you do or speak much better English than you do”. Them feeling they “couldn’t keep up with that [the performance of their peers]” made them anxious (Participant 12). Participant 20 even described it as “a nightmare because I [he] was just afraid I [he] wasn’t good enough. [...] There are some really, really good students here.”

Another recurrent theme was being nervous and feeling confused, which was mostly related to class content (see Table 3). Participant 12 described it the following way: “I really got anxious about the content. So, I was like, ‘Okay, am I gonna get this right?’ And there are so many theoretical concepts that you have to know and that you have to understand.” A similar explanation pattern can be found in Participant 10’s description of situations in in-person EFL classes which made her anxious: “I would get stressed if I felt like I did not comprehend the topic and I felt like... that the conversation was going like beyond me and... like I didn't know what was going on.” This made Participant 8 clearly prefer online classes in this respect as “the physical presence of the people” and their “immediate” reaction when “sometimes ask[ing] questions that you maybe haven’t thought through very well or maybe [...] some people might misinterpret some questions you ask” made her anxious. This feeling of exposure made several students nervous (e.g., Participant 18) and it made Participant 20 “feel like what I have to say was very [ir]relevant”.

The interviewees also mentioned their fear “of making [language-related] mistakes” (e.g., Participant 14) in on-site EFL classes rather often (see Table 3) and one of them also stated that the teachers themselves play an important role in this context, too: “especially with teachers who I felt like they weren’t that supportive” she was afraid “they might judge me... if I made mistakes.”

An aspect that was perceived as equally anxiety-provoking in such classes was ‘being called on unexpectedly’ in the EFL class (see Table 3). When a lecturer said “Okay, I’m gonna ask you randomly some questions. I’m gonna pick someone”, this made Participant 12 very anxious and stressed her, leading to the following reaction, hoping “it’s not gonna be me [her]”: “Okay, I’m gonna look down on my papers, and I’m not gonna have face-to-face contact with the professor in order to not be called out.” Similarly, Participant 20 mentioned he “constantly felt that I [he] was being tested and, you know, with a certain lack of self confidence especially in the [...] L2 um, yeah, it was a vicious circle almost.” Some students linked this fear of being called on unexpectedly to specific teachers though, such as Participant 18, who stressed it was linked to the teacher’s behaviour: “she turns around and says something and she says, Miss XY, what’s your opinion and nobody expected it.”

Elements conducive to learners’ FLCA in emergency remote teaching. The most frequently mentioned anxiety-inducing aspect in classes that were taught remotely due to the pandemic was the ‘use of technology’ (see Table 3). Due to their unfamiliarity with the newly introduced technology in these classes, students mentioned being anxious and “very, very nervous whether they [presentations] would work the way we wanted them to work” (Participant 19). In fact, several students ($n = 6$) mentioned being worried about giving online presentations, especially, and found these exceptionally challenging, such as Participant 2, who explained her insecurities the following way:

I had my first online presentation a couple of days ago, and I was really nervous about that because it was a new experience talking to the computer, not seeing who you’re talking to. I felt that’s really weird because then you didn’t know if it’s making sense what I’m saying? Can they follow me?

In this context, one interviewee (Participant 15) explained that “sometimes, looking at myself [herself], can stress me [her]”, too, during online presentations. Additionally, connection issues were repeatedly ($n = 5$) mentioned. While Participant 10 was anxious during her presentation she gave together with a colleague as her “colleague got lost in the Zoom universe”, others described the anxiety and worry about their own connection crashing before classes in general:

So, each time I was afraid that I... that my internet connection would break down, or that I wouldn't be able to participate properly because, you know, my microphone didn't work once. And that was really very stressful, because I wanted to participate, but I couldn't (Participant 16).

The novelty of the setting as such also was a stressor linked to exams. To put it in Participant 3's words: “online exams are another big part, a very big stressor. I have an online exam in 10 days and it will not let me sleep. [...] [I]t is a big stressor for me to have a new form of exam that I have to deal with. [...] The fact that... that everything will depend on my internet connection for these 90 minutes [is a] very big stressor.”

Table 2 shows that another emergent theme conducive to learners' FLCA was the uncertainty they experienced linked to the requirements of their classes. Participant 6, for instance, mentioned fewer possibilities to double-check whether she understood what was expected of her in an assignment as anxiety-provoking: “if I don't get some tasks. Or, if I don't understand them, I have no one to ask because I can't write emails constantly”. Learners, such as Participant 6, also mentioned that moving classes online had caused changes in requirements and a lack of certainty as to what is relevant:

Once Corona [...] started, [...] all the course requirements changed completely [...] I don't really know what's relevant for my final grade anymore because the requirements change all the time. I have to fulfil so many tasks, even though I'm not really quite sure if they are relevant or if I have to fulfil them or if they are prerequisite to get my grade. It's not very transparent anymore... the requirements.

Linked to the changes in requirements because of the transition to the online mode, the interviewees mentioned being worried about task achievement in the sense of “oversee[ing] tasks” (Participant 19) and missing deadlines, too. Participant 16 stated in this respect: “I found it really hard to keep track of all the deadlines. So, often I really had the impression: Oh my God, I missed the deadline or what am I supposed to do until the next session now?” Ultimately, this led to them being anxious about not passing a course. Participant 20's explanation illustrates this fear: “it was [...] the uncertainty of, okay, will I be able to, you know, get a grade? Does it work or will [...] this thing really work with the online lessons? That was one of my fears. Will I really have a grade by the end of June?”

Another recurrent theme linked to FLCA experienced in online classes was the contribution to in-class discussions (see Table 3). This was partly linked to the impression that “everybody's focus really is completely on you when you do that” (Participant 15), which, consequently, made Participant 16 question whether she was “powerful enough and strong enough to ask questions in these classes”. Most responses ($n = 7$) were linked to turn-taking issues though (e.g., Participant 14). On the one hand, the interviewees found it “super hard to just interrupt the teacher” (Participant 13) but they also found group discussions with colleagues difficult in this respect: “Because we can't really... It's just chaos” (Participant 9). Not being able “to see them [colleagues] and their gestures” increased Participant 15's feeling stressed about her contributions. Participant 4 concludes that “even if you have a camera turned on, you feel like you have to prepare to jump in if you want to say something without interrupting three other people... then you might only use the chat or just don't bother to comment at all”. The difficulty related to turn-taking in the online mode silenced other students, too (e.g., Participant 13).

Several participants also mentioned that the insecurity about their progress makes them anxious (see Table 2). These students complained about receiving too little or hardly any feedback, such as Participant 1, who stated the following in this context:

I upload assignment after assignment and I don't get feedback and I wait for my feedback for eight, seven, nine weeks... and I don't get anything. And this makes me anxious. It doesn't make me anxious to participate in online sessions whatsoever.

While students often showed understanding for their lecturers' situation, too, such as Participant 3, who mentioned "[w]e didn't receive any feedback because they [the lecturers] have their own problems, issues and things on their table", "having no idea of where I stand in a lecture" made her anxious and worried about "not doing enough and not being told about that". Consequently, she felt to some extent "left alone in the situation" (Participant 3).

Additionally, several interviewees (see Table 3) explained that the workload increased tremendously during the first lockdown, which contributed to their anxiety. Participant 1 experienced this as if they "get more assignments automatically because we're [they are] not there". Participant 6 explains the increased workload based on the teachers' being inexperienced with emergency remote teaching:

[S]o at the beginning [...] [of the] Corona outbreak everyone was just horrified and completely stressed... there were so many tasks because the professors didn't know how to handle the situation properly. So I was just bombarded with tasks and texts to read.

To some extent, the increased workload was seemingly also caused by turning the credits for in-class participation into other tasks, as explained by Participant 12:

[T]he evaluation system is different now. So what was or what used to be class participation (...) is now shifted towards the final paper. So this might also be a challenge... especially now that going to the library isn't that easy. [...] That stresses me.

Overall, many students found the increased workload in online classes at the beginning of the pandemic "overwhelming" (Participant 11).

Discussion

The present study confirmed the finding in Resnik and Dewaele (2021) that FLCA dropped in the emergency remote teaching environment compared to the previous in-person classes. Although the difference was significant, the effect size was very small. A more detailed analysis at item-level showed that the difference was significant for half the items and that it did not all go in the same direction. The sense of peers' superiority, the feeling of a pounding heart when called on in the EFL class and the feeling of anxiety despite being well-prepared was significantly lower in emergency remote teaching. However, the feeling of embarrassment to volunteer answers in the foreign language class increased significantly in the online mode.

These nuanced findings need a cautious interpretation. It is likely that the decrease in FLCA is linked to remotely taught classes having been less interactive, i.e. more teacher-centred and frontal, at the beginning of the pandemic, making it, on the one hand, easier for students to hide (Resnik & Dewaele, 2021) but feeling more isolated as a result (Prodanović & Gavranović, 2020). Similar to regular online classes, maintaining presence (Garrison et al., 2000) is equally crucial in emergency remote teaching to mitigate students' feelings of isolation and to ensure a "sense of belonging and acceptance" (Bolliger & Inan, 2012, p. 43). Additionally, the item-analysis revealed that learners felt significantly more embarrassed to volunteer answers in the online mode, which might be linked to their insecurity due to the novelty of this very setting. Having to raise the electronic hand, waiting for permission to unmute the microphone and then talking is a much more cumbersome, official process,

resulting in being the complete center of attention for a brief moment. Also, the lack of clear audio- and visual feedback meant that it was harder to judge the impact of the intervention, including non-verbal signs that it was, for example, time to finish up. Teachers and students had to adapt to new turn-taking rules in order to avoid embarrassment and had to make do with this more limited form of communication to counteract a growing sense of isolation (Pu, 2020), a feeling which was amplified by the very fact that lockdowns were imposed at this time (Fruehwirth et al., 2021). This shows that the previously established crucial role of interaction in regular online classes (Bolliger & Martindale, 2004) applies to emergency remote teaching, too, and teachers need to ensure interaction between themselves and their learners, interaction with the content, and interaction among the peers themselves (Bolliger & Inan, 2012) through, e.g., discussions in breakout rooms, peer-teaching sessions, or tasks they collaborate on together. Interaction is crucial for people to get to know each other, build connections and form social bonds, which might well reduce the embarrassment felt when contributing to in-class discussions.

This study furthermore aimed to explore contextual differences in FLCA based on qualitative data from in-depth interviews. The findings provided rich and nuanced insights: Interestingly, when learners were given the chance to voice what made them anxious in their own words without any preconceived conceptualisation of FLCA, it was shown that anxiety-related aspects were, overall, mentioned far more frequently for emergency remote teaching ($n = 81$) than for classes taught on site ($n = 53$). That the scale captures all aspects most relevant to in-person EFL classes very well was reflected in the anxiety-provoking aspects mentioned by the learners: According to the interviewees, they were most anxious about contributing to in-class discussions, about others being more fluent in English than themselves, and about feeling nervous and confused while talking. They were also worried about making mistakes and anxious when called on unexpectedly in the English class. All of these aspects are captured in the FLCA scale (Dewaele & MacIntyre, 2014), meaning the interviewees named the well-established typical sources of FLCA in traditional classes. What needs to be mentioned at this point is that learners were asked to report on the sources of FLCA in on-site EFL classes retrospectively, which might have had an impact. However, as lockdowns were imposed abruptly, there was no other way of comparing both settings. Still, it is possible that the frequency of mentioning anxiety-provoking aspects linked to in-class participation and the comparison with peers may have been influenced by learners' comparing both contexts and, consequently, by emergency remote teaching having often been described as less interactive in its initial phase and students regretting the absence of comforting social aspects of traditional classroom settings (Resnik & Dewaele, 2021).

When asked what made the interviewees anxious in online EFL classes during the first lockdown, a different picture emerged, with four of the five most frequently mentioned anxiety-inducing aspects being online-specific or specific to emergency remote teaching: Technology-related aspects linked to the novelty of the setting as such and being unfamiliar with it were most frequently mentioned. Here, regular and frequent communication with teachers and peers could increase learners' feeling at ease, as suggested by Pu (2020), which might increase their willingness to contribute to in-class discussions in online classes too. Fostering interaction and ensuring comfort boosts students' sense of connectedness in online classes (Bolliger & Inan, 2012), which might help to decrease their anxiety experienced due to being uncertain about course requirements and learners' feeling they receive too little feedback (Hurd, 2007). These findings support Hadar et al.'s (2020) claim that students do not cope well with volatile, uncertain, complex, and ambiguous circumstances during the pandemic and they show that such circumstances actually increase their anxiety experienced in emergency remote teaching. The fact that the interviewees furthermore often mentioned feeling overwhelmed by the increased workload shows that not only learners needed time to adapt to the new setting, but teachers too needed time to adjust to the unique context of

emergency remote teaching. Thus, the analysis of the interviews showed that FLCA was present in [classes taught online during the pandemic](#), too, which is in line with previous research on regular online foreign language classes (see, e.g., Pichette, 2009; Russell, 2018). Overall, the findings from the qualitative analysis offered a possible explanation for the observed drop of learners' FLCA in emergency remote teaching, when conceptualised in a similar way as in traditional foreign language classes: It seems that learners **did** experience high levels of FLCA in emergency remote teaching; however, context-specific sources of anxiety seem to have been foregrounded at the beginning of the pandemic, making the sources of anxiety typically observed in in-person classes fade into the background.

The current study has a number of broad pedagogical implications that echo those presented in Rapanta et al. (2020) and many of them are in line with findings from research into regular online classes (see, e.g., Bolliger & Inan, 2012): Online teaching needs to be student-centered, support collaboration and encourage active participation of students to ensure learners' engagement and sense of social connectedness (see also Müller et al., 2021). Of course, we should not forget that at the start of the pandemic everybody was anxious, stressed, grieving and adapting to a new reality in which computers played a more central part. If the anxiety linked to the use of technology has eased over time as both teachers and learners have become more used to this new type of classroom interaction and as the rest of society has adapted to the new reality needs to be explored further to see if the reliance on technology as a main cause of FLCA is only specific to online classes during the pandemic due to the suddenness with which the switch to the online mode happened or if it is more generally part of the nature of the anxiety experienced in online classes. Russell (2018), for instance, observed a significant decrease in learners' FLCA in regular online classes throughout a semester and it would be equally interesting to observe learners' development of FLCA longitudinally throughout the pandemic.

More research is needed also on the role of positive emotions and their possible context-specificity, for they fulfil different functions (MacIntyre & Gregersen, 2012). Such studies could identify what exactly learners enjoyed in online EFL classes in crisis mode, allowing teachers to make informed choices as to what elements of emergency remote teaching might be transferred into post-pandemic foreign language classes.

To conclude, it seems that the abrupt move to emergency remote teaching led to a slight decrease in the intensity of foreign language anxiety but had a more profound impact on the nature of the anxiety.

Conclusion

The current study revealed that the relatively limited decrease in learners' levels of FLCA in EFL classes that were moved online due to the pandemic compared to in-person classes belied a drastic shift in sources of FLCA. Interviews revealed that technology was a major source of FLCA in emergency remote teaching. The absence of the physical classroom suited some students who preferred to remain in the background but it exacerbated their anxiety when called to intervene. The small effect sizes could be linked to the fact that the very experience of anxiety had changed in crisis-related online EFL classes, including strategies to handle it.

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Appendix

Face-to-face/Online anxiety scale

1. Even if I am/was well prepared for my online/in-person English class, I feel/felt anxious about it
2. I always feel/felt that the other students speak English better than I do

3. I can/could feel my heart pounding when I'm/was going to be called on in my online/in-person English class
4. I don't/didn't worry about making mistakes in my online/in-person English class
5. I feel/felt confident when I speak/spoke in my online/in-person English class
6. I get/got nervous and confused when I am/was speaking in my online/in-person English class
7. I start/ed to panic when I have/had to speak without preparation in my online/in-person English class
8. It embarrasses/ed me to volunteer answers in my online/in-person English class

Word count: 8,469 words (Appendix excluded)