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Exploring the relationship between foreign language anxiety and students' online engagement at UK universities during the Covid-19 pandemic

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Abstract: Although foreign language anxiety (FLA) and student engagement have both been found to have significant effects on a number of behavioural and academic outcomes for language students (Awan et al. 2010, Gargalianou et al. 2016). FLA is poorly understood in university students studying English as a second language. However, limited research shows it is present (Haley et al. 2015). Additionally, the relationship between FLA and student engagement has seldom been explored. Therefore, the present exploratory study investigated the relationship between FLA and online learning in university students, particularly focusing on online learning as the new mode of instruction since the start of the COVID-19 pandemic. We wanted to explore to what extent FLA is present among international students studying in L2 English at UK universities and whether FLA affects engagement with online learning. We tested 65 international students, studying at UK universities, using two newly developed scales for measuring FLA and student engagement with online learning. Participants completed an online questionnaire with background questions, the FLA scale, and the students' engagement scale. The results of our multiple linear regression analyses suggest that FLA has a significant negative influence on students' engagement with online learning.

Keywords: foreign language anxiety; Higher Education; international students; online learning; student engagement

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1 Introduction

Foreign language anxiety (FLA) is a language-related anxiety which usually occurs when users engage in communicative activities in their second or foreign language (Horwitz et al. 1986; MacIntyre and Gardner 1994). It has been well-documented that FLA has a negative impact on a range of learner behaviours and outcomes such as socialisation with peers and academic achievement (Awan et al. 2010; Gargalianou et al. 2016; Yan and Horwitz 2008), and that it is present in both face-to face classroom and online learning (Horwitz et al. 1991; Hurd 2007). Likewise, a factor that has similar negative effects on student behavioural and academic outcomes is students' engagement with their course and learning (Dixson 2015; Lee et al. 2019). While student engagement has been well-researched in the university population (USA and Australia in particular), FLA remains poorly understood in the university context although limited research shows it is present (Gargalianou et al. 2016; Haley et al. 2015). The relationship between FLA and student engagement in university students is even less understood.

Measuring and ensuring student engagement with online learning seems more relevant than ever in light of the emergence of the COVID-19 pandemic, which has forced numerous universities across the world to move their provision online (or a part of it). Of interest for the present paper are a large number of international students studying at UK universities, who make up approximately 19.6% of the university student population (Stern 2020), and the effects that the rather sudden move to online learning has had on their engagement. In particular, we propose that one of the major factors influencing international students' online engagement is FLA. We explored to what extent FLA is present in this student population and whether and to what extent FLA affects students' engagement with online learning. Furthermore, considering that institutions bear a part of the responsibility to provide students with an environment that is conducive to learning and engagement with that learning (Krause and Coates 2008), we qualitatively explored how institutions can help mitigate the effects of FLA and help international students effectively engage with their online course.

2 Background

2.1 Foreign language anxiety

Foreign language anxiety (FLA) has been a well-researched topic over the last few decades and in its traditional classroom sense it refers to “a distinct complex set of

self-perceptions, beliefs, feelings and behaviours related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz et al. 1991: 31). FLA usually occurs when second and foreign language (L2) learners are engaging in tasks such as speaking, listening, and learning (MacIntyre and Gardner 1994), and can manifest itself in avoiding to communicate, performance problems, and insecurities (Luo 2013).

In addition to classroom face-to-face learning, FLA has also been studied in online learning (Hurd 2007; Pichette 2009). This area of research has become particularly popular in the last decade with the advancement of online learning technologies and recently grew in popularity and importance as a result of the COVID-19 pandemic. The manifestations of FLA in online learning can be largely the same as in face-to-face classroom learning, but its sources tend to be different. For example, Hurd (2007) suggested that FLA may be intensified in online environments as students are physically separated from their peers and tutors, leading to isolation. Hurd researched FLA in 500 UK students enrolled on a French as a foreign language course and found that about 24% of the learners were more anxious in the online classroom than in face-to-face classes. Similarly, Fondo and Jacobetty (2019) explored the potential sources of FLA in online learning and found the lack of learners’ autonomy, task design, lack of support, and affective factors to be barriers in the online learning process.

Even though most studies reviewed so far suggest that FLA negatively affects online learning, a few studies report a neutral (Pichette 2009) or positive (El-Hariri 2017) impact of the online learning environment on the learner. Therefore, while it is established that FLA is also present in online learning environments, it is not conclusively clear whether its influence on engagement and learning is positive or negative.

2.1.1 FLA and proficiency

Although there are numerous factors that affect the presence of FLA in students, such as personality and learner/instructor beliefs about language learning, perhaps the most pertinent to the present study is proficiency. Numerous studies have found proficiency to be a factor predicting levels of FLA, in that lower proficiency is associated with higher levels of FLA (Alsowat 2016; Bensalem 2017; Dewaele and Ip 2011; Thompson and Lee 2014;). For instance, Dewaele and Ip (2011) found that high school foreign language participants who reported higher levels of L2 proficiency experienced less FLA when compared to those with lower L2 proficiency. Similarly, a study with university students suggests that those

students with lower proficiency (as measured by vocabulary knowledge) have increased levels of FLA which negatively affect their ability to write and speak in the foreign language (Alsowat 2016). In another study with university students, Bensalem (2017) showed that participants with lower FLA performed better on language tests than those with higher FLA.

2.1.2 FLA in university students studying in EFL

FLA has been examined in L2 language learners who are university students, but studies on FLA in university students who are not L2 language learners but rather are studying for a degree in English as a foreign language (EFL) are limited. To the best of our knowledge, there are only two existing studies published on this topic. One is that of Haley et al. (2015) who found high levels of FLA in a group of 59 non-native English speakers studying for a counselling degree in EFL compared to 61 native speakers of English on the same course. Participants who had higher levels of FLA also exhibited lower levels of counselling self-estimated efficacy. The other study, conducted by Gargalianou et al. (2016), showed that 320 L1 Dutch university students studying for a business degree in EFL suffered from FLA, with proficiency being a significant positive predictor of FLA (i.e., higher proficiency results in lower levels of FLA).

Considering the ever growing number of international students at UK universities, the shift to online learning and our limited understanding of FLA among this population, the present study addressed this gap by exploring to what extent FLA occurs among international students studying in EFL at UK universities. It is particularly important to explore FLA in this population as high levels of FLA are implicated in a number of negative consequences such as lower engagement and academic achievement.

2.2 Student engagement

Student engagement is seen as the time and effort that students are able to put into their course by actively thinking and interacting with the content as well as their peers and teachers (Dixson 2015; Kuh 2003). Student engagement has become a popular topic of interest in recent years due to its potential to significantly influence student academic performance, course approval rates and overall well-being (Assunção et al. 2020; Wonglorsaichon et al. 2014). Although there is still an ongoing debate as to which components student engagement comprises, most

researchers agree that it is a multidimensional construct with both behavioural and affective dimensions (Handelsman et al. 2005). Summarising research by Handelsman et al. (2005), Kuh (2003) and Maroco et al. (2016) we find three broad dimensions of student engagement: academic, behavioural and emotional (affective).

2.2.1 Student engagement with online learning

One of the main challenges of online learning is the lack of real-life interaction between the learners and their teacher and peers, which can negatively impact student engagement (Cho and Cho 2014). Issues with interaction arise mainly due to a lack of synchronicity and placidness (i.e., being in the same geographical location) (Anderson 2004). As a result, students may struggle to make a connection with their peers and teachers, resulting in poor behavioural but also emotional engagement. To overcome these challenges, Dixson (2015) proposed that universities should create courses that a) establish a strong social presence where at least some of the teaching is synchronous, thus allowing for interaction with ‘real’ people, b) build a community so that students can develop a sense of belonging, and c) enable meaningful interaction that allows for sharing, negotiating and discussing. Swan et al. (2000) also added the importance of a transparent online technology that is easy to navigate and use, because otherwise students may become discouraged to engage.

2.2.2 FLA and student engagement

In language learning, research so far suggests that FLA has a negative impact on student engagement. For example, Fondo et al. (2017) discovered that on an e-tandem language learning platform, with over 2,000 members, about 40% of participants reported emotional barriers such as FLA in accessing the video chat feature. Likewise, a study on a bilingual exchange programme showed that FLA was one of the factors reported as a problem in engaging with online learning (Fondo and Jacobetty 2019). Furthermore, Luo (2013) found FLA to result in communicative avoidance and problems with performance, which in some learners could result in lower engagement.

By contrast, a recent (and to our knowledge only) study on university students studying in EFL in the Costa Rican context, suggests that FLA can have a positive impact on students’ engagement with online learning (García-Castro and O’Reilly 2022). Therefore, the relationship between FLA and students’ engagement with

online learning remains unclear. Given that both FLA and student engagement separately have been found to be implicated in a number of the negative academic, behavioural, and emotional outcomes discussed above, it is necessary to further explore this relationship, especially among university students.

2.3 The current study

The current study was preregistered on an online platform Open Science Framework (OSF). All data and R scripts will be available on OSF. Its aim was trifold and can be formulated as the following research questions:

1. To what extent is FLA present among international students studying in L2 English at UK universities?
2. To what extent does FLA affect engagement with online learning of international students studying in L2 English at UK universities?
3. What can universities do to support students who suffer from FLA in online learning?

3 Method

3.1 Participants

The participants in the present study were international students at four UK universities, who had received online tuition during the spring term of the academic year 2019/2020 due to the COVID-19 pandemic. We recruited a total of 65 participants in the period between June and September 2020. The majority of the participants were female ($n = 59$) and the average age was 24 years ($SD = 4.92$). There were 21 undergraduate and 44 Masters participants. The overall proficiency of the participants was 6.6 ($SD = 0.67$) as measured by self-reported IELTS scores which placed the participants between upper-intermediate and advanced proficiency according to CEFR. On average, the majority of the participants reported having taken the IELTS test between 2018 and 2020, which is the typical period of the test validity adopted by most UK universities.

Based on the sensitivity power analyses with the software G-power, the minimum number of participants necessary for a statistical power of 90%, and $p < 0.05$ is 65 participants.

3.2 Measures

First, we discuss the development and validation process of two scales that were developed for the purposes of the present study to measure FLA and students' engagement with online learning among international students at UK universities. Second, we discuss the procedures and data analysis approach we employed to explore FLA in online engagement.

3.3 Scale development and validation

We developed two scales: the Foreign Language Anxiety Scale (FLAS) and the Student Online Engagement Scale (SOES). Both scales went through several steps of validation. First, they underwent content validation by three expert reviewers in the field of second/foreign language learning, who rated the scales items for representativity, comprehensibility, reliability, and conciseness. The items were rated on a 4-point Likert scale for each of the four constructs above, and the reviewers had a chance to provide comments on the wording of individual items. Most items were rated 3 or above indicating that the items of the scales were highly rated and were therefore retained in their original form. However, changes to some items were made in accordance with reviewers' comments. Additionally, the items' context validity index (CVI) was calculated by dividing the number of judges who evaluated the items with a 3 or 4 on the Likert scale, by the total number of judges (Delgado-Rico et al. 2012). The items' CVI was higher than 0.70 indicating high context validity (Tilden et al. 1990). The results of the scale validation process by expert reviewers are available as Supplementary Materials.

In order to determine how well individual items tested the main constructs of FLA and student online engagement respectively, we performed an exploratory factor analysis (EFA), using the maximum likelihood method (Field et al. 2012). To assess the appropriateness of individual items, we used a cut-off of 0.32 as suggested by Tabachnick and Fidell (2013). Furthermore, Comery and Lee (1992) suggest that loadings of 0.71 or above are excellent, 0.63 very good, 0.55 good, 0.45 fair, and 0.32 poor. Therefore, items that had a loading below 0.32 were removed from the scale. The EFA was performed in R using the psych package (Revelle 2020).

Finally, the scales items were tested for reliability using ordinal omega (McNeish 2018). The coefficients were calculated in R using userfriendly science (Peters 2018).

3.3.1 Foreign language anxiety (FLA)

FLA is a self-completed scale comprising 19 items based on Fondo and Jacobetty's (2020) T-FLAS for assessing FLA in online language learning. Each scale item was rated on a 5-point Likert scale with responses ranging from 1 (strongly disagree), 2 (somewhat disagree), 3 (neither agree nor disagree), 4 (somewhat agree), and 5 (strongly agree). Item 17, which was positively worded, was reverse coded ensuring that all item responses were in the same direction. A higher score on the scale indicates higher levels of FLA.

17 out of 19 items were reworded to be more suitable for use with students at UK universities, i.e., 'e-tandem practice' was replaced with 'Virtual Learning Environment (VLE),' which is commonly used by UK universities to communicate and share content with students.

We ran a one factor EFA, which suggested that two items (17 and 18) had loadings below 0.32, so they were removed from the scale and further analysis. All other items above the cut-off were retained, leaving a total of 17 items (Table 1). A significant Bartlett's test suggested that EFA was an appropriate analysis for the data of the FLA scale, $X^2(171) = 777.225$, $p < 0.001$ (Field et al. 2012). To assess whether our sample was adequate, we used the Kaiser–Meyer–Olkin (KMO) measure. Keiser (1974) suggests that a value of 0.5–0.7 is mediocre, 0.7–0.8 is good, 0.8–0.9 great, and above 0.9 superb. It is also suggested that both individual and overall values be inspected. For the FLA scale, in a sample of 78 participants, the overall KMO was 0.85 with individual items above the 0.5 limit, suggesting that our sample (of 65 participants) was good.

Finally, Table 1 also shows the ordinal omega coefficient for the scale of 0.92, indicating excellent reliability.

3.3.2 Student engagement (SE)

SOES is a self-completed scale comprising 25 items to assess the engagement of university students with online learning. Each scale item was rated on a 5-point Likert scale with responses ranging from 1 (strongly disagree), 2 (somewhat disagree), 3 (neither agree nor disagree), 4 (somewhat agree), and 5 (strongly agree). A higher score indicates more student engagement with online learning.

Items 1–5 were adapted from Dixon (2015), items 6–10 from Lin and Huang (2018), and items 14, 15 and 19–22 from Lee et al. (2019). The researchers added items 11–13, 16–18, and 23–25.

An EFA was run with one factor, with three items below the 0.32 cut-off (items 7, 20 and 23) which were thus removed from the scale and further analysis. All other items were retained (see Table 2), leaving a total of 22 items. A significant Bartlett's test suggests that EFA was an appropriate method for the SOES scale

Table 1: FLA scale items, factor loadings (after oblimin oblique rotation) and reliability.

Item	Factor loadings	ω
1. I feel anxious when I want to express myself but can't find the proper words in English when engaging on the VLE.	0.58	0.92
2. When participating in online activities on the VLE I can get so nervous I forget things I know.	0.63	
3. I am nervous communicating in English in front of native speakers on the VLE.	0.82	
4. I feel nervous when I'm expected to communicate in English with people from my class on the VLE.	0.85	
5. When participating on the VLE I feel nervous when I can't express myself in English.	0.83	
6. I feel low self-confidence about participating in English on the VLE.	0.69	
7. I feel anxious when I don't understand what the people in my class are saying in English	0.59	
8. I often feel that other international students have higher English proficiency than me.	0.69	
9. I feel uncomfortable writing in English on the VLE.	0.46	
10. I don't enjoy sharing my opinions in English on the VLE.	0.48	
11. I feel anxious when communicating in English online.	0.76	
12. I find it difficult to communicate in English with native speakers of English in my class on the VLE.	0.76	
13. I fear that I will misspell words in English when writing on the VLE.	0.45	
14. I feel nervous around more proficient students in my class in online learning.	0.59	
15. I feel uncomfortable interacting online	0.61	
16. I get very nervous when I have problems with technology while engaging in online learning.	0.34	
17. I am less nervous about participating in my coursework online than in face-to-face lessons.	0.29	
18. I don't like using technological devices.	0.28	
19. I feel uncomfortable learning online.	0.33	

data, $X^2(300) = 831.882$, $p < 0.001$. In our sample of 65 participants, the overall KMO for the SOES scale was 0.71 and the item values also above the 0.5 limit. These results indicate that our samples were good.

Table 2 also shows the ordinal omega reliability of 0.91 for the SOES scale, indicating excellent reliability.

Table 2: SOES scale items, factor loadings (after oblimin oblique rotation) and reliability.

Item	Factor loadings	ω
1. I study on a regular basis.	0.50	0.91
2. I try to do all of the assigned readings.	0.63	
3. I take notes of the readings, PowerPoints, and/or lecture recordings.	0.46	
4. I look over my notes before online lectures or seminars to make sure I understand the material.	0.60	
5. I participate actively in small-group discussion on the VLE as part of my lectures or seminars.	0.48	
6. I am confident that I can learn the course content through online learning.	0.50	
7. I usually do well on the assessments.	0.26	
8. I enjoy contributing to class discussions set by the lecturer or seminar leader.	0.45	
9. I take the initiative in asking questions when I don't understand the instructor.	0.43	
10. I value the knowledge and expertise learned in lectures and seminars.	0.38	
11. I engaged with the seminar activities every week of the summer term.	0.58	
12. I engaged with the lecture content every week of the summer term.	0.59	
13. I found the lecture and seminar content interesting this term.	0.61	
14. Online classes are very useful to me.	0.61	
15. After taking an online lesson, I look forward to the next one.	0.56	
16. I try to engage with other students in my seminar groups in online activities (e.g. by commenting on their contributions).	0.61	
17. I can ask my lecturers and seminar leaders questions when I need to.	0.43	
18. I can access support regarding my modules when I need to.	0.37	
19. I often ask the instructor about the contents of the lesson.	0.43	
20. I ask other students for help when I can't understand a concept taught in my online class.	0.27	
21. I tend to apply the knowledge I have learned in online classes to real problems or new situations.	0.63	
22. When I take an online course, I plan a learning schedule.	0.48	
23. I feel a sense of belonging to the online class community.	0.22	
24. I need emotional support from my lecturer-tutor to increase my self-confidence in the module.	0.49	
25. I was satisfied with the online classes I took in the summer term.	0.51	

3.4 Procedure

Participants (as outlined in Section 3.1) took 20 min to complete an online questionnaire, administered via the software Qualtrics, with background questions, the FLA scale and the SOES scale. Participants were recruited via university departments and social media. Participants were asked to provide their emails if they wished to participate in a prize draw of a £10 Amazon voucher.

3.5 Statistical approach

We conducted a multiple linear regression to explore whether FLA affects students' engagement with online learning. The outcome variable was the students' engagement as measured by the SOES scale, while the total FLA scores were entered as the main predictor. In addition, we also added proficiency, type of degree (undergraduate or Masters), and reported stress levels during the pandemic as predictors. All the predictors were added to the model, but we specified an interaction between FLA and stress, with the aim of ascertaining that if FLA and stress during the pandemic were associated with online engagement, these associations were irrespective of each other.

3.5.1 Variables

To centre the mean, all continuous predictors were transformed into standardised *z*-scores. Mean centring is necessary to ensure that all estimates are comparable across predictors. With centred means, one standard deviation in the predictor score predicts the same amount of change in the outcome variable.

Composite FLA and SOES score. To explore the relationship between overall FLA and student engagement, we calculated a composite FLA score expressed as a mean of the scores on 17 items. The same procedure was used on the SOES scores to arrive at a composite score based on 22 items of the scale.

Proficiency. This was a continuous variable based on self-reported IELTS scores. There was some missing data which was dealt with by imputing missing variables using the `md.pattern` function in the `mice` package in R (van Buuren and Groothuis-Oudshoorn 2011).

Stress during the pandemic. A continuous variable measured on a 5-point Likert scale with higher scores indicating higher levels of stress during the pandemic.

Degree. A dichotomous variable with two possible responses (undergraduate or Masters student).

3.5.2 Qualitative approach

At the end of the questionnaire, participants were prompted to answer an open-ended question asking them what they thought universities could do to help reduce FLA and increase engagement with online learning. The question was optional, and 29 participants responded. The responses typically consisted of 1–2 sentences.

To analyse the data from the open-ended question, based on previous literature we developed a coding schedule, which encompassed different aspects of student engagement with online learning: satisfaction with the course, psychological engagement, support, study skills and equipment/technology. Furthermore, course satisfaction could be coded as either positive or negative. The dimension of support was broken down into language support, support from tutor(s) (e.g., ability to contact tutors when necessary), and support with regards to the organisation of learning (e.g., whole class vs. small group discussion, organisation of materials).

The coding schedule was shared with three raters who were asked to rate each response. It was possible to assign more than one dimension to each comment. For a rating to be considered valid, two out of three raters had to have agreed on the same dimension(s). To check inter-rater reliability, we calculated Fleiss's Kappa for three raters in R using the irr package. Reliability was high, with Fleiss's Kapp of 0.652 for the ratings of dimensions and 0.73 for the ratings of the subcodes.

4 Results

4.1 Statistical analysis

The descriptive statistics for all variables are shown in Table 3. All scales had a high reliability, where appropriate, and all variables were normally distributed with none exceeding skew and kurtosis values of ± 1.5 .

Table 4 shows correlations between the variables, suggesting several weak to moderate but significant correlations. We found that FLA was significantly negatively correlated with student online engagement (SOES) and proficiency, but positively correlated with stress experienced during the pandemic. In addition, proficiency was found to be positively correlated with the degree.

Table 3: Descriptive statistics for all variables used in analyses.

Variable	N	Mean	SD	Min.	Max.	Skew	Kurtosis	ω
FLA	78	3.04	0.77	1	4.65	-0.62	0.2	0.92
SOES	65	3.53	0.56	2.18	5	0.34	0.19	0.91
Degree	65	1.32	0.47	1	2	0.74	-1.48	-
Proficiency	51	6.62	0.67	5	8	-0.52	0.09	-
Stress during pandemic	65	3.6	1.14	1	5	-0.8	-0.11	-

FLA and SOES are mean composite scores; Proficiency was based on self-reported IELTS scores obtained from a test in the last two years; Stress during pandemic is a one item self-reported measure on a 5-point Likert scale.

Table 4: Correlations for the main regression model.

	1	2	3	4	5
1. FLA	–				
2. SOES	–0.28 ^a	–			
3. Degree	–0.10	–0.19	–		
4. Proficiency	–0.39 ^b	–0.05	0.30 ^a	–	
5. Stress during pandemic	0.27 ^a	0.18	–0.04	–0.05	–

^a<0.05; ^b<0.01.

Table 5 shows the results of the multiple regression. We found that overall FLA was a significant negative predictor of student engagement with online learning, ($F(5, 73) = -0.235, p = 0.000$). We also found that stress during the pandemic was a significant predictor of student engagement, but a positive one ($F(5, 73) = 0.189, p = 0.004$). Importantly, there was no significant interaction between FLA and stress during the pandemic, suggesting that FLA and stress are separate predictors of student engagement. However, we did not find proficiency or the degree level to be significantly associated with student engagement.

Table 5: Multiple linear regressions predicting student engagement from FLA, proficiency, type of degree, and stress during the pandemic.

Parameter	<i>B</i>	<i>SE</i>	95% CIs	<i>p</i> value
FLA	–0.235	0.064	[–0.364, –0.106]	0.000 ^b
Proficiency	–0.083	0.064	[–0.213, 0.045]	0.201
Degree	–0.196	0.130	[–0.456, 0.062]	0.134
Stress during pandemic	0.189	0.064	[0.061, 0.317]	0.004 ^b
FLA*Stress ^c	0.061	0.048	[–0.035, 0.157]	0.211
Adjusted R^2		0.176		
<i>F</i> stat (<i>df</i>)		4.664 (5, 73)		

^b<0.01; ^cFor parameter indicates an interaction specified between the two variables in the regression model.

Overall, the model predicted about 18% of the variance (adjusted R^2) and met the assumptions of multiple regression analysis. First, the data met the assumption of independent errors (Durbin–Watson value = 2.245) as well as multicollinearity (mean VIF = 1.221). The scatterplot of standardised residuals showed that the data met the assumptions of homogeneity and linearity.

4.2 Qualitative analysis

The qualitative data showed that the majority of the comments were concerned with the support the students wanted to receive (mentioned in 23 out of 29 comments). The majority of comments ($n = 14$) referred to support with language.

Students expressed the need for more language sessions, to help with both academic language but also with the social aspects of communication. Some students also expressed a wish for sessions or activities in which they would have a chance to communicate with native speakers of English.

Student 29: *"Perhaps they could give us a lecture about academic English in online education."*

Student 41: *"I hope the university can offer some English languages classes, like speaking, listening and writing."*

Student 47: *"It's useful to create some activities to let international students have chance to communicate with each other in English."*

Nine comments also related to the organisation of learning, such as the need for small group as opposed to whole group discussion, which students commented would help them develop self-confidence. Students also mentioned that it would be helpful for materials to be available on the VLE and if time differences could be taken into consideration when scheduling sessions.

Student 20: *"Enable small group discussions to develop self-confident..."*

Finally, some of the comments regarding support were related to the support the tutors can provide, mainly in the form of being available to answer questions both in class and after class.

Student 31: *"Offer a safe space on individual basis to ask questions and query things (doing it in front of others may be difficult), offer emails as a point of contact."*

Psychological engagement and equipment/technology were mentioned in three comments respectively. The comments about psychological engagement referred to a sense of community with other students, especially other international students that shared cultural similarities. The comments about equipment conveyed the need for better microphones.

Finally, the two least mentioned dimensions were satisfaction with the course (two comments) and study skills (one comment).

5 Discussion

The present study investigated to what extent FLA is present among university students at UK universities studying EFL and whether FLA affected student engagement with online learning introduced at most UK universities during the

COVID-19 pandemic. We also asked participants to comment on what universities can do to reduce FLA and help increase engagement with online learning.

In response to our first research question, we observed medium levels of FLA among our student population, thus adding to the previous literature that FLA is present among university students studying in EFL (Gargalianou et al. 2016; Haley et al. 2015). We also found that FLA was a statistically significant negative predictor of student engagement with online learning, which is in line with previous studies within the language learning context, but in contrast with a recent study with university students studying in EFL (García-Castro and O'Reilly 2022). It is possible that FLA has a different impact on students' online engagement depending on the context and culture of the country they study in, but this requires further investigation.

On the other hand, stress during the pandemic was found to be a positive predictor of student engagement, suggesting that students who experienced more stress during the pandemic tended to engage more with their learning online. This finding is somewhat difficult to interpret as we did not ask the participants what type of stress they experienced during the pandemic, which makes this relationship between stress and engagement too complex to interpret from our data. However, there was no significant interaction between stress during the pandemic and FLA suggesting that if stress had an effect on engagement in our sample, it was separate from the effects of FLA.

Furthermore, in our sample, proficiency was significantly negatively correlated with FLA which is in line with previous literature (Alsowat 2016; Bensalem 2017; Dewaele and Ip 2011; Thompson and Lee 2014). However, this did not seem to affect the students' online engagement. It is possible that we did not find any interaction between proficiency and online engagement because our sample was of a relatively high self-reported proficiency making it difficult to discern any proficiency effects.

Overall, these quantitative findings suggest that FLA as a construct is a significant predictor of student engagement since students who experience higher levels of FLA tend to be less engaged with their online learning. This effect in our sample was observed irrespective of the students' proficiency and level of study.

The results of our qualitative analysis enabled us to take a more in-depth look at which aspects of student engagement are most affected by FLA and what universities can do to further support students to engage with online learning. Students reported support to be the most important dimension for reducing FLA and increasing engagement, especially language support both for academic and social communication. Further support with language is also suggested in forms of small group discussions to build confidence, as well as materials being available in advance on the VLE. Tutors also have an important role to play, mainly by being

available to answer queries both in and outside the class, since some student reported not being confident enough to ask questions in front of other students. Some students also referred to the dimension of psychological engagement but highlighted that this is enabled through a sense of belonging with other international students who are going through similar experiences. Finally, a handful of students mentioned issues with technology, especially a lack of appropriate microphones (or audio quality) which prevented them from following adequately the content discussed in online sessions.

In summary, our findings show that international students at various stages of study experience FLA and that this has a significant negative impact on their engagement with online learning. The qualitative data suggest that FLA and subsequent engagement are predominantly language related and that universities could further help students with dedicated language support for both academic and social communication. It also seems that the language related anxieties could be minimised by organising smaller group discussions and making class materials available on the VLE. Some of the anxieties students face in online learning are about asking questions in front of their peers for fear of judgement, which can be mitigated with support from tutors, especially with the option of contacting the tutors outside of the class.

6 Limitations

The present study is not without limitations. First, although according to the G-power analysis our sample size is large enough to detect meaningful statistical results, it is nevertheless smaller than is typical of studies on FLA or student engagement. The present study is a start in the important direction of exploring FLA in university students and its impact vis-a-vis engagement with online learning, but further studies are needed to explore these constructs in larger samples. Furthermore, our scales, although innovative and highly relevant for the UK context, need further validation with a larger sample. In this paper, we offer limited data on a very important but neglected topic in Higher Education research to show that FLA exists among and affects university students, but we intend in future to replicate this study with larger sample sizes.

Second, the present results suggest that FLA and stress during the pandemic are two separate constructs with their own effects on student engagement with online learning. In our future research, we intend to further tease these constructs apart by collecting more specific data on the stress during the pandemic variable.

Finally, it would be useful for future research to collect data from a more varied sample in terms of proficiency in order to be able to better tease apart the effects proficiency may have on student engagement with online learning.

7 Conclusions

The current study demonstrated that FLA is present among international students studying EFL at UK universities, contributing to the limited literature on this topic. Our results suggest that FLA is a good predictor of student engagement with online learning irrespective of proficiency, degree level, and other forms of stress particularly related to the pandemic. Our qualitative analysis suggests that the international students in our sample mostly feel they need additional support with language skills from their universities, which they indicate should take the form of additional classes but also small group discussions which can reduce FLA and increase engagement.

These findings are an important start in an area of research that is largely unexplored but is vital to a large number of international students at UK universities who face many barriers in engaging with their online course, one of which is FLA. Universities also have a role to play in reducing FLA among international students and increasing engagement, and the results of our qualitative analysis suggest that this is mainly through additional language support and organisation of learning such as working in small groups.

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