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English Language Anxiety and Language Achievement Among EFL Students in Saudi Arabia

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***Abstract*—Foreign language anxiety impedes language acquisition. Previous studies in various cultural contexts have found significantly negative and moderately high correlations between scores on the Foreign Language Classroom Anxiety Scale (FLCAS) and foreign language grades. This study aims to investigate the factor structure of the FLCAS in the Saudi Arabian context and to determine whether the main FLCAS factors predict English language achievement, as operationalised by university grades. A total of 257 Saudi students (19–21 years old) studying accounting and business administration completed a Saudi Arabian version of the FLCAS. Simultaneously, these students provided their most recent grades from university English courses. Maximum likelihood extraction with direct oblimin rotation was performed, and three main factors (trait anxiety, situation-specific anxiety, and communication apprehension and confidence) were identified, accounting for 17.5%, 18.6%, and 4.1% of the total FLCAS variance, respectively. The linear regression model with these factors as predictors and language achievement as a criterion was non-significant ($F = 0.479$; $p = 0.685$), indicating that the main FLCAS factors were not connected to English language achievement. The study highlights specific areas (trait anxiety and situation-specific anxiety) that English teachers in Saudi Arabia need to address using better-targeted techniques and strategies.**

***Index Terms*—English as a foreign language, English language anxiety, foreign language classroom anxiety scale, language achievement, Saudi Arabia**

I. Introduction

Learning a foreign language is frequently identified as a complex process affected by various factors (Moeller & Catalano, 2015). One of these factors is anxiety, which is an important affective factor that has been found to influence students' language achievement (Horwitz et al., 1986; Horwitz, 2001; Kráľová & Sorádová, 2015).

Various studies were conducted to examine the link between language anxiety and language achievement, beginning with the work of Horwitz et al. (1986) in which a questionnaire for the assessment of foreign language classroom anxiety was developed. This questionnaire, the Foreign Language Classroom Anxiety Score (FLCAS), has since become standard in this field, and its reliability and validity have been tested in numerous studies (Horwitz et al., 1986; Kim, 2005; Panayides & Walker, 2013) and from various theoretical viewpoints (see Bora & Jongmin, 2011 for an item response theory analysis of the FLCAS). Moreover, special forms of the questionnaire, such as the FLCAS for children, have also been developed, with their validity and reliability confirmed (Aydin et al., 2016). Broadly speaking, FLCAS items involve situations such as speaking in front of the class in a foreign language, worrying about making mistakes, and comparing one's performance to that of others. The questionnaire has seen numerous applications in various cultural contexts (Al-Saraj, 2014; Argaman & Abu-Rabia, 2002; Azizifar et al., 2014; Gerencheal & Mishra, 2019). Studies examining the link between language anxiety and language achievement (Al-Shboul et al., 2013; Amiri & Ghonsooly, 2015; Oruç & Demirci, 2020) have reported that anxiety as measured by the FLCAS is usually coupled with poor foreign language performance.

The teaching of English in Saudi Arabia has confronted significant hindrances despite investments and reforms, with most Saudi students reporting not having greatly benefited from their many years of English education (Barnawi & Al-Hawsawi, 2017). English language teaching in Saudi Arabia has a complex history, with decades of idleness and a recent surge in interest, particularly following the *Tatweer* 2007 initiative, which saw significant investment. One of the most important aims of *Tatweer* was the development of teachers' skills (Elyas & Badawood, 2016). Although the Saudi Ministry of Education has invested considerably in new reforms (close to $300 million), English education has posed significant challenges to all of the actors involved—teachers, students, and policymakers—with issues ranging from grading to 'the incompetency of teachers with regards to teaching methodology and test writing' and 'the adoption of a top-down model of instruction rather than a bottom-up model in which teachers play an active role in preparing materials based on students' needs and abilities' (Reda, 2013, p. 222). Despite that *Tatweer* has been designed to produce learners who are confident when communicating in English, there are issues preventing Saudi Arabian students from achieving better results. More concretely, anxiety has been identified as one of the most important factors affecting the EFL performance of Saudi students (Hakim, 2019), and it was noted that anxiety related to EFL is

extensive in the Saudi context (Alrabai, 2020). EFL anxiety in Saudi students has diverse negative consequences (Oteir & Abd Aziz, 2017) on personal (depression), academic (low performance and achievement), and social (isolation) levels.

Incompetency among teachers and anxiety in students are not unrelated. After investigating anxiety in Saudi EFL students, Hakim emphasised that 'language teachers should be aware of the reality of anxiety in language learners and classroom settings and are expected to implement expeditious and practical tactics to manage and overcome this problem' (2019, p. 70). In summary, investigating anxiety in Saudi EFL students can improve the outcome of educational reforms by providing essential information to English teachers.

In attempting to replicate previous findings (Alrabai, 2014) in relation to specific FLCAS factors identified in the Saudi context, this study aimed to provide meaningful recommendations to English language teachers in Saudi Arabia who seek to address anxiety among their students and to replicate previous findings on the relationship between the FLCAS and language achievement using FLCAS factors as predictors (Al-Shboul et al., 2013; Amiri & Ghonsooly, 2015; Oruç & Demirci, 2020).

A. Research Questions, Objectives, and Hypotheses

The two research questions of this study are as follows:

1. What is the factor structure of the FLCAS in a sample of Saudi Arabian students?
2. What is the relationship between the main FLCAS factor(s) and English language achievement?

Accordingly, the research objectives specified for this study are as follows:

- To determine the FLCAS factor structure in a sample of Saudi Arabian students
- To investigate a potential link between English language anxiety and language achievement in the EFL context among Saudi Arabian students
- To provide feasible recommendations to improve Saudi EFL students' confidence and decrease their language anxiety

B. Importance and Novelty of the Study

First, this study is primarily intended to contribute to validating factors in the FLCAS within the context of Saudi society and culture. The novelty of this study is the utilisation of a factor extraction method for identifying the latent structure of FLCAS scores in a sample of Saudi students. Although reducing FLCAS variables to a smaller set of principal components was already attempted in the Saudi context (Alrabai, 2014), the current study is the only one to have employed a factor extraction method.

Second, this study seeks to determine whether the findings of previous studies on the link between foreign language anxiety and academic performance (Al-Shboul et al., 2013; Amiri & Ghonsooly, 2015; Oruç & Demirci, 2020) can be generalised to the Saudi context. Saudi researchers have found a negative relationship between the FLCAS and foreign language achievement (Ahmad et al., 2020; Al-Shboul et al., 2013). However, Ahmad et al. (2020) only correlated raw FLCAS scores and speaking test scores. It is unlikely that raw FLCAS scores would be sufficient to encompass the real variance of the construct (foreign language anxiety). It is also unclear what type of speaking test was employed in their research. The novelty of this study is in its investigation of the connection between the main FLCAS factors and academic achievement in terms of college grades.

Ultimately, this study is intended to contribute to building a necessary basis for improving the teaching of English in Saudi Arabia. Identifying the underlying structure of foreign language anxiety in students is a prerequisite for plans aiming to improve the quality of teaching English in Saudi Arabia (Hakim, 2019). More specifically, Saudi English teachers are likely to benefit from having the main factors of EFL anxiety more clearly identified. Alrabai (2014) contended that English teachers have the most important role in alleviating students' anxiety and should be the most aware of the implications and recommendations of studies that purport to uncover the latent structure of learners' anxiety. Thus, in furthering the work commenced by previous researchers (Alrabai, 2014; Hakim, 2019), this study is expected to provide new and relevant recommendations for English language teachers in dealing with foreign language anxiety.

C. Hypotheses

The following hypotheses were examined:

1. FLCAS test data can be reduced to a smaller number of factors, and the main FLCAS factors will correlate significantly. This hypothesis is based on Park's (2014) systematic study of the FLCAS factor structure.
2. The main FLCAS factors will correlate negatively and moderately with the final English grade of the participants, enabling regression of those factors onto the final English grade as a dependent variable. This hypothesis is based on several studies performed in various cultural contexts, in which significant, negative, and moderately high correlations between FLCAS scores and foreign language grades were found (Aida, 1994).

II. Literature Review

A. Types of Anxiety and the FLCAS

Anxiety can be defined as a disproportionate and persistent feeling of dread and fear (Aydin, 2016). In the context of language learning and educational psychology, anxiety is marked by various negative self-perceptions and beliefs associated with classroom language learning (Horwitz et al., 1986; Kim, 2010).

Moreover, it is important to differentiate between trait-, state-, and situation-related anxiety. Trait anxiety relates to an individual's predisposition to experiencing anxiety (Chen & Chang, 2004; Gardner, 1985). State anxiety indicates apprehension or fear occurring during a specific period of time and is delineated from more general trait anxiety, meaning that people who experience state anxiety do not necessarily have a pronounced predisposition toward anxiety. Situation-related anxiety is usually encountered in clearly defined situations (Sarason, 1980). It has been argued that both state- and situation-related anxiety are direct responses to certain conditions (Peng, 2007).

In the field of second language acquisition, anxiety is routinely measured using the FLCAS questionnaire (Horwitz et al., 1986). Initially, the questionnaire was developed with three distinct types of anxiety 'symptoms' in mind: communication apprehension, test anxiety, and fear of negative evaluation. Horwitz (2016) emphasised that these aspects are not necessarily the key factors involved. This was also pointed out by Park (2014), who has perhaps undertaken the most methodical and systematic exploration of the FLCAS factor structure. More concretely, Park (2014) utilised both exploratory and confirmatory factor analysis and concluded that the FLCAS involves two interrelated factors: communication apprehension and understanding and communication apprehension and confidence (Park, 2014). These factors accounted for 32.3% of the total extracted variance in the scale. The similarity in factor names points to an intrinsic connection between the factors, which indeed correlate (.71; $p < .01$). Park (2014) opted for maximum likelihood extraction and direct oblimin rotation. Aida (1994) used a principal component analysis (PCA) and varimax rotation and identified four factors captured by the FLCAS, which accounted for 54% of the total variance. While Aida's (1994) pioneering study on the structure of the FLCAS is important, it nevertheless has certain flaws relating to the choice of data analysis methods. PCA is not the most appropriate method to identify the latent structure of a dataset (Costello & Osborne, 2005), and orthogonal rotations are not suitable for describing a fairly unitary concept such as foreign language anxiety.

Furthermore, Aida (1994) summarised several different studies in different contexts (e.g., French as a second language, Spanish as a second language) and found significant negative correlations between the FLCAS scores and final foreign language grades (from -0.49 to -0.54). Specifically, the FLCAS scores correlated significantly with final exam scores and oral exam scores (-0.29 and -0.27, respectively; Aida, 1994). Similar results were reported in a sample of United States students who were learning Arabic (-0.54 for the final grade and -0.53 for reading comprehension; Park, 2014).

In the Saudi context, numerous authors have utilised the FLCAS to assess anxiety levels (Al-Saraj, 2014; Alshahrani, 2016; Alrabai, 2014; Tanielian, 2020). Alrabai's study (2014) seems to be one of the few Saudi studies of the FLCAS that aimed to identify the factor structure of this scale. This author undertook an exploratory factor analysis with principal component analysis and varimax rotation and concluded that a four-factor solution explained the data most appropriately. The four-factor solution accounted for 65% to 68% of the total variance across three studies. The factors were described as follows:

1. Communication anxiety
2. Comprehension apprehension
3. Attitudes toward English class
4. Lack of anxiety

It should be noted that Alrabai (2014) employed a PCA. Unlike factors extracted via factor extraction methods, PCA covers the total variance and inevitably includes error variation, while the factors identified account for only the common variance of a dataset (Suhr, 2005). More specifically, PCA employs a correlation matrix with diagonals equating to 1, while factor extraction methods utilise an adjusted correlation matrix, with diagonals being adjusted for unique factors (Suhr, 2005). As whether the components identified by Alrabai (2014) would also be identified using a different extraction method remains unclear, this study aimed to clarify this matter.

Additionally, Ahmad et al. (2020) found a significant negative correlation (Pearson's $r = -0.242$, $p < .000$) between raw FLCAS test scores and a speaking achievement test, which was apparently developed specifically for the purposes of their study. It is unclear what this text involved and what type of items it included, as the researchers provide very limited details. The specificity of the speaking achievement test could have acted as a confounding variable. This study aimed to account for this issue by operationalising language achievement via college grades.

B. Aspects of Foreign Language Anxiety

It has been noted that communication apprehension plays a significant role in determining the presence of anxiety among language learners (Foster & Skehan, 1996; Khan & Al-Mahrooqi, 2015). This type of anxiety in language learning is associated with students' personal knowledge when they expect to experience significant challenges in understanding other people and making themselves understood (Horwitz et al., 1986). Thus, it is not surprising that language learners who exhibit signs of communication apprehension prefer to remain silent in their language classes (Eysenck, 1979; Jones, 2004).

Furthermore, students who experience test anxiety have been reported to usually have unrealistic demands and goals related to their language performance and achievement (Iwashita et al., 2001; Masgoret & Gardner, 2003). More

specifically, test anxiety has been identified as one of the most crucial aspects of anxiety related to language learning and can eventually affect the entire learning process (Khalaf, 2017; Koizumi, 2002; Oxford & Ehrman, 1992). Test anxiety is frequently described as an unpleasant feeling marked by cognitive, physiological, and behavioural symptoms (Zeidner, 2020). Cognitive symptoms include excessive worry, obsessive/irrelevant thoughts, and difficulty concentrating. Behaviourally, test anxiety can be expressed as avoidance, procrastination, and counterproductive actions. Finally, in the physiological domain, test anxiety is marked by tension, increased arousal, and bodily reactions, such as tremors, sweating, and weakness (Zeidner, 2020).

In the language learning context, considering a person's fear of receiving a negative evaluation is also important. However, a similar fear may occur in different situations, not only in test-taking scenarios (Iwashita et al., 2001). For example, it is possible for a person to demonstrate the same type of fear when being interviewed for a job (Çapan & Karaca, 2013). Therefore, it can be concluded that the fear of negative evaluation is more general than that expressed as test anxiety.

III. Research Methodology

A. Instruments

Two types of instruments were used in this study. First, the FLCAS questionnaire developed by Horwitz et al. (1986) was used to examine the English learning anxiety levels of students at the end of the second semester (May 2021). The FLCAS has 33 items. All items consist of a short statement denoting various classroom situations that might give rise to foreign language anxiety and a five-point Likert-style scale, with the following responses: SA = *strongly agree*, A = *agree*, N = *neither agree nor disagree*, D = *disagree*, and SD = *strongly disagree*. The FLCAS questionnaire has nine negative (reverse) items that needed to be recoded in the analysis. The following are examples of FLCAS items: 'I am usually at ease during tests in my language class' (test anxiety, reverse formulation), 'I feel very self-conscious about speaking the foreign language in front of other students' (communication apprehension), and 'Language class moves so quickly, I worry about getting left behind' (fear of negative evaluation).

The questionnaire was translated into Arabic by two independent translators. The two translations were then compared by the author of this article to determine the most suitable translation for the participants. Finally, the questionnaire was sent to an English professor and an Arabic professor to be checked for any mistranslation or inconsistencies.

The second set of measures related to college exams, as these provided specific information about Saudi EFL students' English language achievement. These grades were used as a measure of Saudi EFL students' achievement, and the results were examined in detail, which was useful in highlighting specific trends related to the link between English language anxiety and language achievement. The total evaluation process consisted of two midterm exams (40 points), two homework tasks (20 points), and a final exam (40 points), as this resulted in a total of 100 points. Permission was obtained from the college in which all the participants were enrolled to undertaken and complete data collection (May 2021). The participants also provided their consent to participate in the study.

B. Sampling and Data Collection

The sample consisted of 257 19–21-year-old students (127 males and 130 females). The study was conducted in Saudi Arabia at a community college. Both purposive and convenience sampling were undertaken. Two classes of students participated in this study. The first class consisted of students majoring in accounting, while the second class was represented by students majoring in business administration. All of the participants were second-semester bachelor students, attending an English language course called 'English language 2'; this was also an eligibility criterion. Additionally, all the students were sent an invitation through their telegram groups to participate and complete the questionnaire online.

Data were collected online during the second semester (in May 2021) using Survey Monkey software.

C. Data Analysis

Data analysis was performed using SPSS software, involving factor analysis (maximum likelihood extraction) with direct oblimin rotation and linear regression analysis with the FLCAS factors as predictors and the final grade as the dependent variable.

IV. Results

Basic descriptive statistics referring to the language anxiety test scores and language achievement scores are shown in Table 1.

TABLE 1
DESCRIPTIVE STATISTICS FOR THE FLCAS AND FINAL GRADES

	N	Minimum	Maximum	Mean	SD	Variance	Skewness	Skewness SE	Kurtosis	Kurtosis SE
FLCAS Score	257.00	38	149	89	22.24	495	0.26	0.152	-3.15	0.303
Final Grade	257.00	32	98	82	10.56	110	-1.42	0.152	2.985	0.303

Note: FLCAS, Foreign Language Classroom Anxiety Scale

The Kolmogorov-Smirnov test indicated that the FLCAS test scores were normally distributed (KS = 0.71; $p < .003$). High values of skewness and kurtosis for final grades would warrant further testing; however, the final grades were also normally distributed (KS = 0.81; $p < .000$).

In addition, skewness and kurtosis for each of the 33 FLCAS items fell between -2 and 2, indicating that further tests regarding multivariate normality were unnecessary. Importantly the Keiser-Meyer-Olkin measure of sampling adequacy was .93, which was well within the desired range, while the value of Bartlett's test of sphericity (3,980) indicated that factor analysis was suitable for the data collected in this study. Furthermore, Cronbach's alpha (0.932) showed that the scale had high reliability.

Moreover, the independent sample t-tests showed that, while men and women did not differ significantly with respect to FLCAS scores, the difference between genders concerning the final grade in English class was statistically significant (t = 5.366; $p < .000$). More specifically, women achieved better results than men, with mean grades of 86 and 79, respectively, in English class.

Following Park (2014), the maximum likelihood extraction method with direct oblimin rotation was performed. After rotation, four factors had eigenvalues greater than 1. When examining the scree plot and pattern matrix, it became evident that the fourth factor did not have any high loadings and was uninterpretable; therefore, a three-factor solution was retained. Loadings in the pattern matrix greater than .2 were taken into consideration for the interpretation of factors (Table 2).

TABLE 2
PATTERN MATRIX FOR FACTORS 1–3

Item	Factor 1	Factor 2	Factor 3
1	.213	.384	
3		.552	
4		.366	-.484
7	.562		
9	.259	.333	-.236
10			-.501
12	.233	.388	-.241
13	.225	.591	
15			-.485
16	.244	.374	
17		.433	
19		.547	
20		.639	
21	.276		
23	1,113		
24	.231	.574	
25	.217		
26		.367	
27		.531	
29		.315	-.500
30			-.244
31	.299	.478	
32			-.312
33			.214

Note: Only loadings > 0.2 were included

Factors 1, 2, and 3 were found to account for 17.5%, 18.6%, and 4.1%. of the extracted variance of FLCAS scores, respectively. The correlations between the factors are provided in Table 3.

TABLE 3
FACTOR CORRELATION MATRIX

Factor	1	2	3
1	1,000		
2	.550**	1,000	
3	-278**	-166**	1,000

Note: **.01 significance level, two-tailed

Additionally, the chi-square goodness of fit for this model was 441.659 (df = 345), which was statistically significant (p = .000). The chi-square goodness of fit test tends to yield significant results in samples larger than 200, and in such cases, other fit indices can be used, such as the ratio between chi-square results and degrees of freedom (Kenny, 2020; Wu et al., 2009). A ratio below 2 is considered an indicator of a good fit. The chi-square/df ratio for this study's dataset was 1.21.

It is evident from the pattern matrix that a simple structure was not the best descriptor of the factors obtained in this analysis. Factor 1, for instance, encompassed a significant proportion of the FLCAS items; however, items 1, 9, 12, 13, 16, 24, and 32 all had equally high or higher loadings than the other two factors. Factor 2 possibly had the simplest structure, as it had the highest proportion of items with zero (or close to zero) loadings compared with Factors 1 and 3. Comparing the content of items that loaded on Factors 1 and 2, and considering the high correlation between the two (.5), it was found that the only significant differences were in relation to items 7 ('I keep thinking that the other students are better at languages than I am') and 23 ('I always feel that the other students speak the foreign language better than I do'). These items might be indicative of trait anxiety as they are rather general and do not exclusively relate to the classroom context. These were also the highest loadings of Factor 1, whereas they had zero loadings on the other two factors, which supports our decision to describe this factor as trait anxiety.

Factor 2 seemed to be most similar to the factor labelled by Park (2014) as communication apprehension and understanding. This could encompass foreign language anxiety, which involves practically all manifestations of anxiety (including test anxiety) in the classroom context. Therefore, Factor 2 was described as situation-specific anxiety. Finally, Factor 3 was quite similar to what Park (2014) labelled communication apprehension and confidence, as all the significant item loadings were negative, and the factor itself correlated negatively with the other two factors; therefore, Park's term was used to denote Factor 3 as identified in this study.

To examine the relationship between FLCAS factors and language achievement, regression analysis was performed, and all three factors were regressed onto the dependent variable, that is, the final English grade. The multiple R was .07, which was not statistically significant (F = 0.479; p = 0.685). Thus, the model with the three factors obtained in this research was unable to predict English language achievement, which means that FLCAS scores in our sample were not related to language achievement.

V. DISCUSSION

The results showed that the FLCAS scores obtained from a Saudi Arabian sample of students had a latent structure roughly comparable to that identified by Park (2014), although not identical. Cross-cultural variance in the latent structure of the FLCAS is not unexpected. As Horwitz (2016) noted, 'It is also likely that foreign language anxiety (FLA) varies in different cultural groups', and '[findings referring to cultural differences in FLA] are not surprising given the substantial amount of research that supports cultural differences in many psychological constructs' (p.3).

Therefore, it is not surprising that the factors identified in this study differed from those obtained by Park (2014), despite that the same extraction method and rotation were used. It is possible that in Saudi culture, trait-level anxiety (Factor 1) is more independent of situation-specific anxiety (Factor 2), whereas the two correlated highly and were indistinguishable in Park's cultural context of South Korea, possibly due to differing educational practices and upbringing. However, this hypothesis should be explored in future studies aiming to examine the relationship between different FLCAS factors and traits, as assessed by widely accepted instruments, such as the Revised Neuroticism Extroversion and Openness Personality Inventory (NEO-PI-R; Costa & McCrae, 2008) or the Honesty/Humility Emotionality eXtroversion Agreeableness and COnscientiousness Personality Inventory Revised (HEXACO-PI-R; Ashton & Lee, 2010). The trait anxiety factor of the FLCAS may be found to correlate more with neuroticism than situation-specific anxiety (Factor 2). Khouya (2018) has indeed shown that NEO-PI-R neuroticism correlated positively with the FLCAS score. However, the author utilised an older classification of items without performing a factor analysis, so the hypothesis that trait-level anxiety differs from situation-specific anxiety requires assessment in a study that includes both the NEO-PI-R and factor analysis of FLCAS scores.

Moreover, Factors 1, 2, and 3 only accounted for approximately one-third of the total extracted FLCAS variance. There are several possible interpretations for this finding. It is possible that the FLCAS is a heterogeneous measure that cannot provide adequate understanding in terms of only a limited number of factors or that the factor analysis method

chosen here simply did not allow for an ideal extraction of factors. The first explanation appears more plausible as Park (2014), in using the same method of factor extraction and rotation, identified two main factors of the FLCAS, which accounted for 32% and 6% of the total variance. Similar findings were obtained in this research, suggestive of the FLCAS's heterogeneity and complex latent structure. Toth's (2008) study in a Hungarian context found two main factors (global foreign language ability and fear of inadequate performance) that explained 42% of the total variance, further showing that the FLCAS involves a fairly heterogeneous set of items and that the main factors cannot explain most of the total variance of FLCAS scores.

Importantly, Horwitz (2016) emphasised that 'the items were chosen to represent the range of anxiety experiences that had been identified' (P.2). Thus, the construction of the FLCAS focused on all possible manifestations of language anxiety. However, while there are many aspects involved in language anxiety, such as listening, reading, speaking, and writing, the FLCAS mainly focuses on listening and speaking (Horwitz, 2016). Therefore, cross-cultural validations and repeated measures in the same cultural contexts are necessary to better understand how the factor structure changes at different levels of language proficiency and in different language learning contexts (e.g., formal and informal). Moreover, the FLCAS is most often administered and researched among university students. However, many more people learn foreign languages outside a university context; therefore, future research should consider these groups.

Furthermore, the relationship between the FLCAS and the final foreign language grade could also be subject to cultural differences, although most researchers have found a significant correlation between these two variables, regardless of any such potential differences. Although various researchers (Al-Shboul et al., 2013; Amiri & Ghonsooly, 2015; Oruç & Demirci, 2020) have found that summative FLCAS scores correlated significantly with language achievement, this was not found to be the case in the current study. Assessing the relationship between foreign language anxiety and academic achievement is possibly the most important way to externally validate the FLCAS. Without assessment and understanding of this relationship, the value of the FLCAS is questionable because, by definition, anxiety decreases the capacity to perform well.

One possible limitation of this study is that translating the FLCAS into Arabic may have changed the original meaning and negatively affected its external validity, which has otherwise been routinely shown in other studies (Aida, 1994; Horwitz, 1986). The author translated the test into Arabic under the supervision of an English professor, but in future studies, the translator intends to follow the advice of Van de Vijver and Hambleton (1996) and apply their comprehensive set of suggestions for cross-cultural translations in the context of psychological testing.

Another, more important limitation of the study refers to the dependent variable, namely, language achievement, as measured by college grades. In Saudi Arabia, the quality of the English language evaluation system is questionable, as this system does not 'assess students' abilities but basically helps them to pass the final examination' (Reda, 2013, p. 222). Consequently, this is perhaps why a correlation between FLCAS factors and language achievement was not found, as college grades in Saudi Arabia might not be a valid measure of real language acquisition. Future studies aiming to investigate the relationship between the FLCAS and language achievement in the Saudi context will need to use a validated and reliable English test to remove the potentially confounding Saudi language achievement evaluation system variable.

In addition, the structure of the sample was not representative of the population of Saudi university students, as the sample consisted only of students majoring in accounting and business administration. Future studies of the FLCAS factor structure in Saudi Arabia should include more diverse samples, involving students from multiple academic fields.

The choice of the FLCAS can also be brought into question. Even though the FLCAS is widely used to assess foreign language anxiety, there are other tests used for this purpose, such as the Input, Processing, and Output Anxiety scales (Onwuegbuzie et al., 2008). An appropriate assessment of foreign language anxiety needs to include scales other than the FLCAS.

Finally, there are certain recommendations that follow from our research. Teachers are considered the best placed to address the issue of foreign language anxiety in Saudi Arabia (Alrabai, 2014; Hakim, 2019). The latent structure of the FLCAS identified in this study provides indications of some ways that English language teachers in Saudi Arabia can help alleviate foreign language anxiety in students, namely, through addressing specific components of situation-specific anxiety (Factor 2), such as test anxiety (Khalaf, 2017) and its elements such as unrealistic demands and goals (Iwashita et al., 2001; Masgoret & Gardner, 2003).

Moreover, as noted, test anxiety has cognitive, behavioural, and physiological aspects (Zeidner, 2020). English language teachers in Saudi Arabia should engage with all these aspects in relation to their students and help to determine specific person-centred techniques that can be used to reduce the intensity of test anxiety. For instance, physiological tension can be alleviated by progressive muscle relaxation (Toussaint et al., 2021) or via breathing control exercises (Kalra et al., 2015). For obsessive thoughts, which comprise a cognitive element of test anxiety (Zeidner, 2020), certain cognitive behavioural techniques can be used, such as association splitting (Moritz et al., 2007), for which English teachers might need help from the school's psychologist. Further, behavioural aspects of test anxiety, such as procrastination and avoidance, can be reduced with the help of smartphone apps such as the 'mindtastic procrastination app' (MT-PRO; Lukas & Berking, 2018), which has been shown to be effective in students.

Similarly, communication apprehension can be addressed via different techniques, such as computer-mediated communication (Çapan & Karaca, 2013), which may help reduce communication apprehension in highly anxious

speakers. Additionally, communication apprehension can be addressed via more traditional techniques, such as public speaking instruction (Al-Tamimi, 2014).

Finally, it is unlikely that trait anxiety in Saudi Arabia can be appropriately addressed only by English teachers. In this respect, school psychologists should work in close coordination with teachers to ensure that the effects of trait anxiety on academic achievement are attenuated.

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