Modeling the contribution of anxiety, enjoyment, and classroomenvironment to boredom among students of English as a Foreign Language

Sami Alanazi
Department of Languages and Translation
Northern Border University, Arar, Saudi Arabia
sami.alenezi@nbu.edu.sa

Elias Bensalem
Department of Languages and Translation
Northern Border University, Arar, Saudi Arabia
elias.bensalem@nbu.edu.sa

Abstract

Over the past few years, there has been a noticeable increase in scholarly attention about the role of emotions in second-language acquisition. There is a consensus among researchers that emotions play a crucial part in learning a new language. The emotional experiences of language learners, such as anxiety, enjoyment, and motivation, have been studied. Strategies to promote positive emotions and decrease negative emotions have been identified. Motivated by a recent academic interest in boredom which is one of the most intense emotions, this study examined the effects of foreign language enjoyment (FLE), foreign language classroom anxiety (FLCA), and classroom environment (CE) on learners' foreign language learning boredom (FLLB). A sample of 481 college students enrolled in English classes in Saudi Arabia participated in the study. There were significant correlations of FLCA, FLE, and FLLB with CE. Structural equation modeling (SEM) analysis revealed that students' FLCA, FLE, and CE were significant predictors of their FLLB, with FLCA being the strongest predictor, followed by FLE and CE. The individual predictive effects of enjoyment, anxiety, and classroom environment outweighed the interactive effects between classroom environment and anxiety, classroom environment and enjoyment, and anxiety and enjoyment. Pedagogical implications are discussed based on the results.

Keywords: anxiety, boredom, classroom environment, enjoyment.

Resumen

En los últimos años ha habido un aumento de la atención académica en el estudio del papel de las emociones en la adquisición de un segundo idioma. Existe un consenso entre los investigadores de que las emociones juegan un papel crucial en el aprendizaje de un nuevo idioma. Se han estudiado las experiencias emocionales de los estudiantes de lenguas, como la ansiedad, el disfrute y la motivación, y se han identificado estrategias para promover las emociones positivas y disminuir las negativas. Motivado por un interés académico reciente en el aburrimiento, este estudio investigó los efectos del disfrute del idioma extranjero (FLE), la ansiedad en el aula de idiomas extranjeros (FLCA) y el ambiente del aula (CE) en el aburrimiento del aprendizaje de lenguas extranjeras de los estudiantes (FLLB). Una muestra de 481 estudiantes universitarios matriculados en clases de inglés participaron en el estudio. Los análisis de correlación de Pearson revelaron que había correlaciones significativas entre los tres constructos (FLCA, FLE y FLLB) y CE. Los hallazgos del análisis de modelos de ecuaciones estructurales (SEM) revelaron que FLCA, FLE y CE de los estudiantes fueron predictores significativos de su FLLB, siendo FLCA el predictor más fuerte, seguido de FLE y CE. Los efectos predictivos independientes de la ansiedad, el disfrute y el entorno del aula superaron los efectos interactivos entre el entorno del aula y la ansiedad, el entorno del aula y el disfrute y la ansiedad y el disfrute. Se discuten las implicaciones pedagógicas a partir de los resultados.

Palabras clave: ansiedad, aburrimiento, ambiente del aula, disfrute, ecuaciones estructurales.

1. Introduction

In the past, there was a lack of scholarly focus on investigating the role of emotions in the process of acquiring a foreign language (Dewaele, 2019; Prior, 2019), with the exception of anxiety (Dewaele & Li, 2018; Li, 2022). This is because emotions were viewed as less important than cognitive factors in language learning (Richards, 2022). Researchers now agree that learners undergo a diverse array of emotions when acquiring a new language, just as they do in other areas of their education (Kruk, 2019; Teimouri, 2018). This shift in view is grounded in the broaden-and-build theory (BBT), which distinguishes between the effects of positive and negative emotions in fostering learners' development (Fredrickson, 2003). The impact of these emotional experiences can be significant, affecting both the learning process and the overall performance of students (e.g., Li & Dewaele, 2021; Li & Wei, 2022; Shao, Pekrun, Marsh, & Loderer, 2020). In light of the seminal research conducted by Dewaele and MacIntyre (2014), which pioneered the examination of both positive and negative

emotions, a subsequent proliferation of empirical studies on emotions in the field of second language acquisition (SLA) has occurred. This body of research includes positive emotions, particularly enjoyment, joy, and hope (Dewaele, Botes, & Greiff, 2023; Huang, 2022; Johnson, 2019; MacIntyre, Mercer, Gregersen, & Hay, 2022; Zhao, 2023), along with negative emotions such as anxiety, anger, distress, sadness, and shame (Teimouri, Goetze, & Plonsky, 2019). However, other emotions commonly experienced by learners, such as foreign language learning boredom (FLLB), have received less attention in the literature and remain underexplored (Li, 2022; Li & Dewaele, 2020; Li & Wei, 2022; Zhao & Wang, 2023). Some second language (L2) educators may underestimate the importance of boredom in the classroom and view it as a minor issue caused by learners' lack of interest in learning the target language (Pawlak, Kruk, Zawodniak, & Pasikowski, 2020).

Nevertheless, FLLB is an emotion that merits greater consideration in the field of SLA because it has been extensively examined in the domain of educational psychology and has been found to have various effects on learning, as demonstrated in research (Li & Han, 2022; Putwain & Pescod, 2018). Increasing our understanding of boredom will help develop awareness of the factors that may affect students' emotional well-being and their language development (Li & Lu, 2022).

The examination of the interplay between positive and negative emotions has received significant scholarly interest within the field of SLA in recent years (e.g., Li, Dewaele, Pawlak, & Kruk, 2022; Li & Wei, 2022; Zhao & Wang, 2023). MacIntyre and Gregersen (2012) suggest that L2 learners experience a simultaneous presence of both negative and positive emotions. Investigating the coexistence of many emotions in L2 learning is deemed necessary, as proposed by Li and Wei (2022). The focus has been primarily on examining the relationship between FLE and FLA. Nevertheless, it is crucial to broaden the existing research by demonstrating a correlation between boredom and enjoyment (Zhao & Wang, 2023). Previous scholarly research has provided evidence to substantiate the credibility of this proposition. These investigations have indicated that the correlation between enjoyment and boredom in the context of SLA is comparable to, or even more significant than, the association between anxiety and enjoyment (Dewaele & Li, 2021; Li et al., 2022). Scholars argue that students' emotions within the educational setting play a significant role in shaping the overall CE (Harvey, Bimler, Evans, Kirkland, & Pechtel, 2012).

Several empirical studies have documented a positive association between CE and FLE as well as a negative link between CE and FLCA among Iranian students (Khajavy, MacIntyre, & Barabadi, 2018). Li, Huang, and Li (2021) conducted a study in a Chinese setting and discovered that FLCA as well as FLE were significantly influenced by CE. The conceptual assumptions and findings reported by previous studies provide

solid proof for the correlations between the classroom environment and emotions experienced by learners (Li & Dewaele, 2021). Within the same vein, Li et al. (2022) argue that FLE, FLCA, CE, and FLLB are interconnected within a complicated feedback loop. Each variable influences the others and is, in turn, influenced by them as the lesson unfolds.

A few studies, however, have investigated the combined impact of FLCA, FLE, and CE on the newly explored concept of FLLB. This type of investigation using mediation analysis can contribute to a deeper understanding of the pathways by which these variables affect FLLB and their implications for language pedagogy. Furthermore, the majority of studies pertaining to boredom in the area of SLA were conducted in China and Poland. It is important to study FLLB in various contexts, including that of the Arabian Peninsula, since different settings might yield different outcomes. This investigation addressed the following two research questions:

Research question (RQ) 1: What are the interrelationships between anxiety, enjoyment, the classroom environment, and boredom?

Research question (RQ) 2: To what extent do anxiety, enjoyment, and the classroom environment contribute to boredom among English Language Learners?

2. Literature review

2.1. Foreign Language Enjoyment and Foreign Language Classroom Anxiety

The predominant focus of research in the domain of second language (L2) acquisition for over forty years has been on the examination of negative emotions, with a specific emphasis on anxiety. The trend toward using positive psychology in SLA has motivated scholars to investigate the significance of positive emotions, particularly enjoyment, in the enhancement of L2 proficiency among learners. The broad-and-build hypothesis proposed by Fredrickson (2003) serves as the fundamental principle underlying the positive psychology movement in the field of language learning. This theoretical framework places significant emphasis on the advantageous impact of pleasant emotions on the development of second language (L2) skills among those engaged in language acquisition. The concept of foreign language enjoyment was developed by Dewaele and MacIntyre (2014). Dewaele and Li (2021) define FLE as "a positive affective state that combines challenge, happiness, interest, fun, sense of pride, and sense of meaning" (p. 5). The experience of enjoyment is particularly prominent in situations when individuals have a certain degree of independence and encounter unforeseen or demanding elements (Dewaele & MacIntyre, 2014).

Two dimensions underneath the construct of FLE have been identified in the literature: private and social. The private dimension is characterized by feelings of happiness, interest, and pride. The social dimension is characterized by shared legends among learners, meaningful engagements with peers and instructors, and the creation of an atmosphere that fosters a sense of learning (Dewaele & MacIntyre, 2016).

FLE can be attributed to a variety of factors, including learners' internal factors such as language background, gender, and age (Dewaele & Dewaele, 2018), as well as teacher-related aspects such as personality and the extent to which teachers employ the target language (Dewaele et al., 2019; Li et al., 2021). Additionally, the classroom environment also plays a role in FLE (Wei, Gao, & Wang, 2019; Li et al., 2021).

The FLCA construct, as originally conceptualized by Horwitz, Horwitz, and Cope (1986), encompasses a collection of self-perceptions, emotions, and convictions that emerge in response to the distinctive attributes of the language acquisition process inside a formal educational environment. It is regarded as a "distinct complex" associated with the experience of learning a language in a classroom setting (p. 128). According to Horwitz (2017), FLCA occurs when learners experience distress due to their incapacity to express their true selves and establish genuine connections with others as a result of the constraints imposed by the new language (p. 41). In fact, the process of introducing oneself to others using a newly acquired language that is not yet fully mastered intrinsically induces anxiety in certain individuals (Horwitz, 2017). Anxiety is characterized by the presence of worries pertaining to communication apprehension, test anxiety, and fear of negative evaluation (Horwitz, 2017). The investigation of FLCA is driven by a scholarly interest in gaining a deeper comprehension of this phenomena, with the ultimate goal of enhancing pedagogical approaches by mitigating its adverse impact (Li & Dewaele, 2021).

Recent research in the field of positive psychology has undertaken investigations on the correlation between anxiety and enjoyment, along with several other emotions. Dewaele and MacIntyre (2014) were among the pioneering researchers who investigated the association between FLE and FLCA. Their study involved a sample of 1,746 foreign language learners with varied linguistic origins. The findings of their research revealed a moderate negative association between FLE and FLCA, implying that these constructs are distinct and relatively autonomous rather than being in direct opposition to one other. Higher levels of FLE and lower levels of FLCA were found to be connected with factors such as increased language competency, older age, Western cultural background, and higher degrees of multilingualism. The study found that there were little differences between genders in both FLE and FLCA. However, it was observed that female participants tended to report somewhat elevated levels of both emotions compared to their male counterparts. The participants identified

the social dimension of FLE as being linked to positive interactions with peers and teachers, which were characterized by humor, praise, encouragement, trust, and respect. Additionally, classroom activities that allowed for greater autonomy were also associated with higher levels of FLE.

In the Saudi context, Dewaele and Alfawzan (2018) found that there were interactions between the individuals' experiences of FLCA and FLE in their language lessons. A similar pattern of relationship between anxiety and enjoyment corresponds to the one uncovered in Bensalem's (2021) study with Saudi EFL students.

In a recent meta-analysis of 56 studies from different educational settings, Botes, Dewaele, and Greiff (2022) found a moderately negative correlation between FLE and FLCA ($r = -.31$, $k = 46$, $N = 20,946$) (p. 3). The authors concluded that the association between FLE and FLCA is most likely circular, as the alleviation of anxiety can lead to more enjoyment in the FL classroom, which in turn leads to an even lower level of anxiety, as discussed in previous research (Botes, Dewaele, & Greiff, 2020).

2.2. Classroom environment

The classroom environment (CE) refers to the collective ambiance, atmosphere, or affective tone that is present inside the confines of the classroom setting (Dorman, Fisher, & Waldrip, 2006). The impact of CE on students' cognitive, emotional, and behavioral dimensions within the educational setting has been highlighted by Li et al. (2021). In their study, Peng and Woodrow (2010) identified three dimensions of classroom environment, namely teacher support, student cohesion, and task orientation. The aforementioned elements are exemplified by favorable features of classroom environment, such as student cohesion, teacher assistance, student engagement, goal-oriented behavior, collaborative efforts, and equitable treatment (Li, Dewaele, & Hu, 2023).

Prior research in the field of general education has investigated the correlations between CE and students' emotional states, as well as their levels of involvement and motivation. Research has shown that a positive CE is associated with positive emotions, heightened motivation, and active participation in the learning process. Conversely, a negative CE is correlated with negative emotions, decreased motivation, and a lack of interest in learning activities (Reyes, Brackett, Rivers, White, & Salovey, 2012).

One of the early studies that investigated the potential association between CE and the emotional experiences of students among 1,528 Iranian secondary school students (Khajavy et al., 2018). The results showed a connection between a positive CE and FLE. Additionally, the researchers found a negative correlation between a positive

CE and FLCA. Li et al. (2021) completed a study within the context of English as a Foreign Language (EFL) in China. The findings of their research indicated that both FLCA and FLE were influenced by CE. This implies that the presence of a supportive classroom atmosphere and the cultivation of emotional intelligence have the potential to enhance FLE and reduce FLCA in EFL students. In their study, Li, Dewaele, Pawlak, and Kruk (2022) employed a large sample of Chinese college students to examine the interconnections among CE, FLE, FLCA, FLLB, and the willingness to engage in English. The findings revealed statistically significant associations between communicative anxiety, the emotional states of students, and their willingness to communicate in the target language. The results of this study offer compelling support for a significant association between the classroom environment and the range of emotions, both positive and negative, that students experience.

2.3. Foreign Language Learning Boredom

Boredom refers to "a state of disengagement" (Kruk & Zawodniak, 2020, p. 16). According to Li, Dewaele, and Hu (2021), boredom in the context of L2 acquisition can be defined as "a negative emotion with an extremely low degree of activation/arousal that arises from ongoing activities…[that] are typically over- or under-challenging and/ or of little significance, relevance, or meaning to the learners" (p. 12).

Boredom is a multidimensional construct (Pekrun Goetz, Frenzel, Barchfeld, & Perry, 2010). The experience of boredom encompasses various dimensions, including affective aspects characterized by an unpleasant feeling, cognitive aspects involving a perception of time passing slowly, motivational aspects encompassing a desire to change or escape from the source of boredom or engage in alternative activities, expressive aspects involving postural, facial, and vocal expressions, and physiological aspects characterized by decreased arousal levels. Pekrun's (2006) three-dimensional taxonomy can be utilized to articulate the several dimensions of boredom, which include valence, activation, and objective focus. Valence pertains to the degree of positive or negative affectivity connected with an emotional experience. Activation refers to the degree of physiological or cognitive activation or deactivation that accompanies the experience of an emotion. The concept of objective focus pertains to the orientation of emotion towards either activity or outcome. In other words, boredom arises as a result of a continuous activity or is triggered by its past or future results (Wang, 2023).

Boredom has long been a neglected area of research. Early studies examining FLLB among L2 learners were conducted in the Polish context (e.g., Kruk & Zawodniak, 2018, 2020; Pawlak, Kruk, & Zawodniak, 2020; Pawlak, Kruk, Zawodniak, et al., 2020; Pawlak, Zawodniak, & Kruk, 2020). Then FLLB has garnered significant attention in recent years (e.g., Derakhshan, Kruk, Mehdizadeh, & Pawlak, 2021; Dewaele,

Albakistani, & Ahmed, 2022; Dewaele, Botes, & Greiff, 2023; Dewaele, Botes, & Meftah, 2023; Kruk, Pawlak, Shirvan, & Soleimanzadeh, 2023; Li, 2021, 22; Wang & Li, 2022). The identification of boredom as an adverse emotion that is frequently experienced by language learners (Zhao & Wang, 2023) has paved the way for studies that examined the connection between boredom and other constructs, namely FLCA and FLE. Previous research has identified a noteworthy observation that the correlation between FLE and FLLB is either equivalent to or more significant than the connection between FLE and FLCA in the field of L2 acquisition (Dewaele & Li, 2021; Li et al., 2022).

In a study with the participation of 880 college level students in China enrolled in online English courses, Wang, & Li (2022) discovered a negative medium to high negative correlation between FLLB and FLCA and with a medium positive correlation between FLLB and FLE, suggesting that students who reported higher levels of enjoyment tended to display lower levels of anxiety and boredom, whereas those who reported lower levels of enjoyment tended to exhibit higher levels of anxiety and boredom. Similar type of correlation was reported between FLLB and FLE in the Chinese face-to-face context (Li, 2022).

Other studies have examined the FLLB and its associations with various emotions in underexplored contexts. For example, in a unique study that involved a group of 332 FL learners from different countries, Dewaele, Botes, and Greiff (2023) examined the relationships between FLLB, FLCA, and FLE. The findings revealed that students with greater levels of FLE had considerably lower levels of FLCA and FLLB than students with lower levels of FLE. In addition, learners who had higher levels of FLCA experienced greater levels of boredom. The positive relationships between FLLB, FLE, and FLCA confirm the results reported by Dewaele, Botes, and Meftah (2023), as well as Dewaele and Meftah (2023), who found a significant positive correlation between FLCA and FLLB among EFL learners in Morocco.

Finally, one of the rare studies that examined the correlation of anxiety, enjoyment, boredom, CE, and willingness to communicate with a large sample of 2,268 university-level students (Li et al., 2022) revealed that FLLB was negatively correlated with FLE while FLLB was positively correlated with FLCA, corroborating the findings reported by Li (2022) and Li and Wei (2022). In addition, Li et al. (2022) reported that students who were pleased with their classroom environment experienced higher FLE, as reported by previous studies (Dewaele, 2019; Dewaele & Dewaele, 2018). One major finding is that FLCA is outweighed by FLLB, indicating that boredom is more prone to negatively impact the entire classroom climate in comparison to anxiety.

3. Method

3.1. Participants and setting

A total of 481 EFL students at various campuses of a public university in Saudi Arabia participated in the study. Females made up the majority of the sample (80.26%), with males accounting for the remaining 19.8%. The majors of the students were English (61.5%) and medicine (38.5%). Students of medicine took courses in English that were designed and taught by the same teaching staff as the English major courses. The main reason for involving medical students was to increase the study sample size. Other reasons were the convenience and availability of the participants, as one of the researchers had direct access to medical students. The ages of the students varied between 18 and 27. The average age was 21.76 (SD = 2.56). Most of the participants (35.8%) were in their first year of college, and 33.4% were in their second year. The rest of the students included in the study were in their third year (18.7%) or fourth year (12.1%) of their Bachelor program.

3.2. Instruments

The data were gathered using a composite questionnaire (see Appendix). The first section contains background information about the participants (age, gender, major, and year of study). The second section includes scales measuring the main constructs: FLCA, FLE, and FLLB, as well as the CE. All items in the survey were in both English and Arabic to make sure that all items were clear to all students. Bensalem (2021) validated the Arabic versions of FLCA and FLE. Two professors of translation whose native language is Arabic translated the FLLB and CE scales.

3.2.1. Foreign Language Enjoyment

The researchers measured FLE using an adapted version of Botes, Dewaele, and Greiff's (2021) Short Form of the Foreign Language Enjoyment Scale (S-FLES), with each item containing the term English class. This scale is based on Dewaele and MacIntyre's (2014) original 21-item scale, including nine items that assess positive emotions in second-language learning. The S-FLES takes into account three aspects: instructor appreciation, personal enjoyment, and social enjoyment. The scale was scored on a 5-point Likert scale, with 1 indicating "strongly disagree" and 5 indicating "strongly agree". Cronbach's alpha internal consistency coefficient of the scale was 0.92.

3.2.2. Foreign Language Classroom Anxiety

The assessment of FLCA was conducted using the 8-item Short-Form Foreign Language Anxiety Scale (S-FLCAS), a measurement tool developed and validated by Botes et al. (2021). The initial version of the FLCAS consisted of a total of 33 components. The assessment of FLCA was conducted using the 8-item Short-Form Foreign Language Anxiety Scale (S-FLCAS), a measurement tool developed and validated by Botes et al. (2021). The initial version of the FLCAS consisted of a total of 33 components. The participants used a five-point Likert scale to indicate their level of agreement or disagreement with the survey items, with 1 representing "strongly disagree" and 5 representing "strongly agree". The Scale of Foreign Language Classroom Anxiety (S-FLCAS) comprises two items that are reverse-coded: "I do not experience apprehension regarding errors made in English class" and "I possess a sense of assurance when engaging in oral communication in English class". This implies that those who express great agreement with these assertions will obtain a lower score on that particular item, hence indicating a lower level of anxiety. The present study demonstrated acceptable internal consistency, as evidenced by the scale's Cronbach's alpha coefficient of .71.

3.2.3. Foreign Language Learning Boredom

The measurement of FLLB was conducted using a set of eight items derived from the Achievement Emotions Questionnaire developed by Pekrun, Goetz, Frenzel, Barchfeld, and Perry (2011). The questionnaire items were modified to align with the specific context of EFL learning. The participants were instructed to express their degree of concurrence with the assertions using a five-point scale encompassing the options of "strongly disagree" to "strongly agree". The findings demonstrated strong internal consistency for the scale, as shown by a Cronbach's alpha coefficient of .92.

3.2.4. Classroom environment

The researchers employed a modified version of the classroom environment portion from the "What Is Happening In This Class?" (WIHIC) questionnaire developed by Peng and Woodrow (2010) to evaluate the construct of classroom environment. The scale comprises 10 items that have been adapted for application in an EFL context. The survey items encompass three distinct domains: task orientation (e.g., "The tasks implemented in this course are of practical value"), student cohesion (e.g., "I effectively collaborate with my peers in this class"), and teacher support (e.g., "The English instructor demonstrates patience in their teaching approach"). According to the research conducted by Peng and Woodrow (2010), the alpha reliability coefficient for the three sub-factors was found to be .80. The current investigation yielded a coefficient alpha value of .90.

3.3. Procedure

The data collection was conducted during the fall semester of 2022, subsequent to obtaining approval from the Institutional Review Board (IRB) of Northern Border University. The survey was built using Google Forms. A link to the survey, which includes participants' background information and the four scales (FLCA, FLE, FLLB, and CE), was sent to students via email. The participants were informed about the study's goal and objectives, as well as the confidentiality of their responses and their ability to withdraw from the study at any time. They freely completed the questionnaire, which required around 20 minutes to finish.

3.4. Data analysis

To evaluate the correlations between FLCA, FLE, CE, and FLLB, Pearson correlation analysis was carried out in SPSS 25. Hair, Sarstedt, Pieper, and Ringle (2012) proposed using confirmatory factor analysis (CFA) to assess the validity of the scales. The hypothesized model was then evaluated using goodness-of-fit indices utilizing structural equation modeling (SEM) with maximum likelihood. To assess model fit, four indices were used: normed chi-square (i.e., 2/df), CFI, TLI, and RMSEA. The Hu and Bentler (1999) criteria were used to determine whether the model had a satisfactory fit. An RMSEA value of less than 0.06 (0.06 to 0.08 indicates a moderate or adequate fit), as well as CFI and NNFI (or TLI) values more than or equal to 0.95 (0.90 indicates a moderate or adequate fit), are examples. Furthermore, a normed chi-square of 2/df 2 is regarded as a good match when the sample size is greater than 200, although a normed chi-square of 2/df 5 is deemed acceptable (Bentler, 1990).

4. Results

The data were first screened for normality and outliers. The data's normality was evaluated using skewness and kurtosis values that were between -2 and +2, showing normality (Kunnan, 1998). Furthermore, the reliability of each scale was calculated using the scales' coefficient alphas. The results were greater than 0.70, indicating a satisfactory level of internal consistency. Table 1 shows descriptive statistics and normality.

Table 1: Descriptive statistics (means and SDs) and normality (N = 481)

	Mean	SD	Skewness	Kurtosis
1. Anxiety	3.38	0.58	.06	-.19
2. Enjoyment	3.76	0.77	-.98	1.15
3. ClassroomEnvironment	4.05	0.85	-.24	-.59
4. Boredom	2.62	.98	.21	-.65

**Indicates significance at the 0.01 level.

Following that, the scales were investigated for their construct validity using confirmatory factory analysis (CFA). The goodness of fit indices fell within the acceptable range, as seen in Table 2.

Table 2: Measurement Model of the Latent Variables

	χ^2	DF	χ^2/df	CFI	TLI	RMSEA	Cronbach's α
Anxiety	37.37	19	1.96	.99	.99	.04	.71
Enjoyment	199.21	25	7.97	.94	.92	.02	.92
Classroom Environment	442.84	31	14.28	.96	.94	.03	.90
Boredom	118.83	19	6.25	.96	.94	.02	.92

The Pearson correlation analysis results, as shown in Table 3, demonstrated a significant and negative association between FLLB and FLE, as well as between FLLB and CE, with moderate effect sizes (r = -.527, p.001; r = -.468, p < .001). FLLB was found to have a moderately significant relationship with FLCA, with a medium effect size (r =.521, p < .001). Furthermore, FLCA was revealed to be negatively associated with both CE (r = -.231, p < .001) and FLE (r = -.170, p < .001). FLE and CE, on the other hand, had a significant positive correlation with a large effect size (r =.622, p < .001).

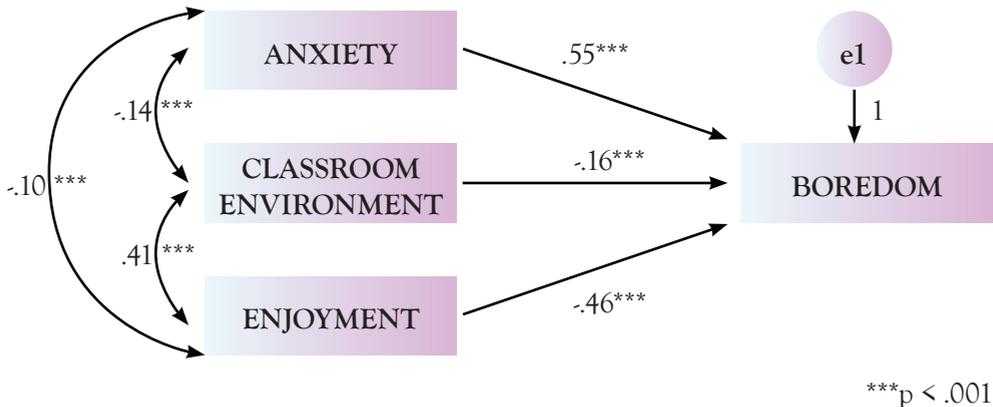**Table 3:** The relationships between FLCA, FLE, CE, and FLLB

	Correlations			
	1	2	3	4
1. Anxiety	1.0			
2. Enjoyment	-.170**	1.0		
3. ClassroomEnvironment	-.231**	.622**	1.0	
4. Boredom	.521**	-.527**	-.468**	1.0

**Indicates significance at the 0.01 level.

AMOS 26 was then used to test the hypothesized model. Variance-covariance matrices were employed as input, and the maximum likelihood technique was used. All of the coefficients were significant (p < .05), and the fit indices were within acceptable limits (see Figure 1). FLCA had the biggest effect on FLLB (β = .55, R2 =. 16, f2 =.19) with a medium effect size, according to SEM data. Additionally, the SEM findings revealed that FLE predicted FLLB negatively and significantly (β =. 46, R2 =.10, f2 =.11) with a small effect size. In addition, FLE predicted FLLB negatively and significantly CE (β = .16, R2 = .07, f2 =.07) bigger effect size.

The associations among the predictors were also explored, and it was found that FLCA had a significant and negative relationship with CE (r = .14, p < .001) and FLE (r = .10, p < .005). Moreover, a significant data-driven correlational path was identified between CE and FLE (r = 0.41, p < 0.001), as well as between FLE and FLCA (r = 0.10, p < 0.001). Overall, the SEM analysis suggests that FLCA, CE, and FLE, are significant predictors of FLLB in EFL students, with FLCA being the strongest predictor, followed by FLE and CE. Notably, the independent predictive effects of FLCA, FLE, and CE were more substantial than the interactive effects between general CE and FL, CE and FLE, and FLCA and FLE.

Figure 1: The Final Model of Anxiety, Enjoyment, Classroom Environment, and Boredom

5. Discussion

The first RQ examined the associations of FLCA, FLE, and CE with FLLB. The results indicated a positive association between FLLB and FLCA, suggesting that there is a tendency for students who report greater boredom to also experience higher levels of anxiety. Similar results were reported by Li et al. (2021) and Wang and Li (2022). A poor classroom environment can increase the probability of students' concurrent experiences of anxiety and boredom (Li et al., 2022). This explains the negative correlation between boredom and the current study participants' perceptions of the classroom environment. This finding offers additional support for the significant contribution made by teachers in creating a cooperative learning environment and designing engaging tasks, which can facilitate positive emotions and impede negative emotions in the process of SLA (Khajavy et al., 2018; Li, 2022; Li et al., 2023).

In addition, the study revealed a significant negative relationship between FLLB and FLE, indicating that students who do not enjoy learning their foreign language are more likely to get bored. This result is not surprising, confirming previous studies (Dewaele, Albakistani, et al., 2022; Dewaele, Botes, & Greiff, 2023; Dewaele, Botes, & Meftah, 2023; Li et al., 2022; Wang & Li, 2022; Zhao & Wang, 2023). The positive correlation between boredom and enjoyment provides additional support for the validation of the "undo hypothesis" proposed by the BBT (Fredrickson, 2004, p. 1371). Specifically, it suggests that the presence of positive emotions, such as enjoyment has the potential to counteract the negative impacts of boredom-induced negative emotions. This process is thought to occur by expanding an individual's range of cognitive and behavioral responses. However, it is important to acknowledge that positive emotions may not necessarily completely eradicate bad emotions, despite their significance in mitigating negative emotional experiences (Li & Han, 2022).

The second RQ investigated the influence of FLCA, FLE, and CE on Saudi EFL students' FLLB. The SEM analysis revealed that FLCA positively and significantly predicted FLLB with the greatest impact. Conversely, FLE and CE negatively and significantly predicted FLLB. These findings suggest that FLCA and FLLB are closely related, with heightened FLCA being associated with higher levels of FLLB. This could be due to personal tendencies, such as being more prone to boredom, as described in Pawlak et al.'s (2020) study, or the influence of personality on FLCA, as noted by Horwitz et al. (1986). Personality traits "refer to consistent patterns in the way individuals behave, feel, and think" (Pervin & Cervone, 2010, p. 228). The taxonomy of personality traits, which is called the Big Five, Conscientiousness, Extraversion, Agreeableness and Neuroticism (2010, p. 228). According to a study conducted by Dewaele and Al-Saraj (2015), it was found that Saudi EFL students who displayed

higher levels of emotional stability and extraversion tended to have lower levels of anxiety. The results reported by the current study demonstrate the complex interplay between emotions and variables that contribute to the experience of FLLB.

The construct of enjoyment was found to be the second-biggest negative predictor of FLLB. This outcome supports claims that positive emotions such as enjoyment can potentially play a preventive or protective role in mitigating unpleasant emotions endured by L2 learners (Li & Wei, 2022; MacIntyre, 2017) and foster behaviors such as play, creativity, curiosity, and exploration, which are widely regarded as advantageous to learning (Boudreau, MacIntyre, & Dewaele, 2018). Furthermore, learners who derive enjoyment from their learning experience tend to exhibit increased interest and engagement in the L2 (MacIntyre & Gregersen, 2012). Consequently, the level of FLLB will likely decrease when teachers prioritize the optimization of their curriculum planning and enhance the delivery of their lessons to ensure a more engaging and captivating experience for students since FLLB is associated with a sense of disengagement and a lack of interest in the target language. The findings can be explained by Fredrickson's (2003) BBT, which posits that encountering positive emotions may foster the cultivation of individual resources that can boost one's state of well-being and resilience in the long run. When students enjoy the English language learning process, they may exhibit a greater propensity to engage in classroom activities and are more prone to experiencing positive affective states, such as curiosity and excitement. These positive emotions, in turn, may broaden their perspectives and build personal resources, leading to lower levels of FLLB. Moreover, it has been observed that the presence of positive emotions, such as enjoyment, can potentially mitigate the adverse consequences of anxiety, which in turn is positively associated with boredom. The experience of positive emotions can potentially enhance learners' ability to effectively manage the stressors and difficulties that arise in the process of acquiring a foreign language.

The classroom environment emerged as a significant predictor of boredom. This result corroborates the results reported by Li et al. (2022). Thus, it seems that the events taking place during a lesson, such as the teacher's behavior and the type of interaction between students, as well as the implementation of tasks, are related to students' experiences of FLLB (Dewaele & MacIntyre, 2014, 2019). The instructor plays a pivotal role in establishing a conducive learning environment in the classroom. Moskowitz and Dewaele (2019) suggest that the passion displayed by instructors might exert a favorable influence on students, resulting in an enhancement of enjoyment. When students share positive emotional experiences, it can reduce negative emotions such as fear and FLLB while promoting positive emotions (Li & Dewaele, 2021; Sadoughi & Hejazi, 2021), establishing a positive and engaging CE, and encouraging

participation in class activities (Sadoughi & Hejazi, 2021). These findings are consistent with educational psychology research, which shows a link between positive emotions and increased engagement on the one hand and negative emotions and disengagement on the other (Oga-Baldwin, 2019; Philp & Duchesne, 2016).

6. Conclusion

Structural equation modeling revealed that FLCA, FLE, and CE all had an impact on EFL students' FLLB. The current study extended our comprehension of the connections between FLLB and two major emotions (FLCA and FLE), as well as the CE, in the understudied context of Saudi Arabia. FLCA was the strongest positive predictor, while FLE was the strongest negative predictor of students' FLLB. The current study provides additional quantitative evidence that FLE also plays a role in reducing the effects of negative emotions. Positive emotions may help to counteract or reduce the negative impact of negative emotions (Li & Wei, 2022). The CE has been identified as a potential predictor of student FLLB, emphasizing the importance of teachers in creating an environment that promotes enjoyment, reduces FLCA, and prevents FLLB. As a result, teachers play an important role in shaping the learning environment to promote student engagement and success. Such a classroom environment will result not only in linguistic progress but also in fostering the emotional well-being of learners. Learners experience different types of emotions while learning a second language. Future research could investigate how other emotions such as shame, resilience, and grit affect the relationship between FLLB and students. By exploring these potential mediators, researchers have the opportunity to enhance their comprehension of the intricate elements that contribute to student FLLB.

The findings of this study provide implications for language practitioners. Undoubtedly, the establishment of a stimulating and interactive classroom setting, characterized by the development of strategies aimed at mitigating anxiety and preventing boredom (Li & Wei, 2022), is crucial for the enhancement of language proficiency (Li et al., 2021). In order to help students reduce the lingering effects of FLLB, which are related to FLCA, a lack of FLE, and the CE, language teachers should consider adopting a variety of strategies that make learning more interactive, interesting, and meaningful. This could be achieved by creating a positive learning environment that fosters a sense of community, which is crucial to keeping students engaged. Teachers can encourage students to feel comfortable sharing their ideas and opinions by creating a supportive and nonjudgmental atmosphere. Providing regular feedback and praise also helps students stay motivated and engaged. In this regard, Li and Dewaele (2021) asserted that the use of humor and sensible praise from teachers, in conjunction with language challenges that are neither extremely

difficult nor overly easy, can increase the level of enjoyment experienced by learners and help anxious students overcome the paralyzing effects of anxiety. Finally, teachers need to continuously adapt and modify their lessons to suit students' interests and needs. Personalizing the learning experience makes it more relevant to learners, which in turn makes it more interesting and engaging. By making the learning experience relevant, teachers can help students overcome FLLB and stay motivated throughout the language learning journey.

The present study has a number of limitations. First, the researchers utilized only quantitative data, which limits the extent and variety of observations that can be drawn regarding the connections among CE, FLE, FLCE, and FLLB. A more comprehensive understanding of the connections and underlying factors between these variables could be gained by conducting in-depth research that involves interviews or classroom observations. Second, this study did not examine other possible factors, such as learner-internal variables related to age, gender, and self-perceived proficiency in English, that may contribute to boredom beyond the quality of the CE and the two emotions it triggers. Third, the boredom scale that was used did not include items that reflect the different dimensions of boredom. In order to enhance the accuracy of capturing learners' different emotional experiences, it is recommended that future research use more comprehensive scales that encompass both in-class and out-of-class activities (Li & Wei, 2022). This approach is supported by scholars such as Kruk (2022) and Kruk & Pawlak (2022). In addition, the study sample included participants from two different majors, namely English and medicine, with different levels of proficiency. Even though all courses that were offered to medical students were designed and taught by faculty members from the English program, the study outcomes might have been affected. Participants from various majors may have varying levels of motivation and interest, which could lead to disparities in findings. Finally, the outcomes of this study are context-specific, focusing on university students in Saudi Arabia. In order to enhance comprehension of the extent to which the findings may be applied to various educational settings, it would be beneficial to investigate the applicability of the results to alternative educational contexts, diverse language learning environments, and varying educational levels, such as primary or secondary schools. Conducting further research in these areas would yield a more comprehensive understanding of the relationships between CE, emotions, and FLLB.

Acknowledgement

7. References

Bensalem, E. (2021). Classroom enjoyment and anxiety among Saudi undergraduate EFL students: Does gender matter? *Vigo International Journal of Applied Linguistics, 18*, 9–34. https://doi.org/10.35869/vial.v0i18.3363

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246. http://dx.doi.org/10.1037/0033-2909.107.2.238

Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The foreign language classroom anxiety scale and academic achievement: An overview of the prevailing literature and a meta-analysis. *Journal for the Psychology of Language Learning, 2*(1), 26–56. https://doi.org/10.52598/jpll/2/1/3

Botes, E., Dewaele, J.-M. & Greiff, S. (2021) The development of a short-form foreign language enjoyment scale. *The Modern Language Journal, 105*(4), 858-876. https://doi.org/10.1111/modl.12741

Botes, E., Dewaele, J.-M., & Greiff, S. (2022). Taking stock: A meta-analysis of the effects of foreign language enjoyment. S*tudies in Second Language Learning and Teaching, 12*(2), 205-232. https://doi.org/10.14746/ssllt.2022.12.2.3

Boudreau, C., MacIntyre, P. D., & Dewaele, J.-M. (2018). Enjoyment and anxiety in second language communication: An idiodynamic approach. *Studies in Second Language Learning and Teaching, 8*(1), 149–170. https://doi.org/10.14746/ssllt.2018.8.1.7

Derakhshan, A., Kruk, M., Mehdizadeh, M., & Pawlak, M. (2021). Boredom in online classes in the Iranian EFL context: Sources and solutions. *System, 101*, 102556. https://doi.org/10.1016/j.system.2021.102556

Dewaele, J.-M. (2019). The Effect of classroom emotions, attitudes toward English, and teacher behavior on willingness to communicate among English foreign language learners. *Journal of Language and Social Psychology, 38*(4), 523–535. https://doi.org/10.1177/0261927x19864996

Dewaele, J.-M., Albakistani, A., & Ahmed, I. K. (2022). Levels of foreign language enjoyment, anxiety and boredom in emergency remote teaching and in in-person classes. *The Language Learning Journal,* 1–14. https://doi.org/10.1080/09571736.2022.2110607

Dewaele, J.-M., & Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching, 8*(1), 21–45. https://doi.org/10.14746/ssllt.2018.8.1.2

Dewaele, J.-M., & Al-Saraj, T. M. (2015). Foreign Language Classroom Anxiety of Arab learners of English: The effect of personality, linguistic and sociobiographical variables. *Studies in Second Language Learning and Teaching, 5*(2), 205–228. https://doi.

org/10.14746/ssllt.2015.5.2.2

Dewaele, J.-M., Botes, E. & Greiff, S. (2023). Sources and effects of foreign language enjoyment, anxiety and boredom: A structural equation modelling approach. *Studies in Second Language Acquisition, 45*(2), 461 – 479. https://doi.org/10.1017/S0272263122000328

Dewaele, J.-M., Botes, E., & Meftah, R. (2023). A three-body problem: The effects of foreign language anxiety, enjoyment, and boredom on academic achievement. *Annual Review of Applied Linguistics*, 1–16. https://doi.org/10.1017/s0267190523000016

Dewaele, J.-M., & Dewaele, L. (2018). Learner-internal and learner-external predictors of Willingness to Communicate in the FL Classroom. *Journal of the European Second Language Association, 2*(1), 24. https://doi.org/10.22599/jesla.37

Dewaele, J.-M., & Li, C. (2018). Editorial. *Studies in Second Language Learning and Teaching, 8*(1), 15–19. https://doi.org/10.14746/ssllt.2018.8.1.1

Dewaele, J.-M., & Li, C. (2021). Teacher enthusiasm and students' social-behavioral learning engagement: The mediating role of student enjoyment and boredom in Chinese EFL classes. *Language Teaching Research, 25*(6), 922–945. https://doi.org/10.1177/13621688211014538

Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching, 4*(2), 237–274. https://doi.org/10.14746/ssllt.2014.4.2.5

Dewaele, J.-M., & MacIntyre, P. D. (2016). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of the language learner. In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 215–234). Bristol: Multilingual Matters.

Dewaele, J.-M., & MacIntyre, P. D. (2019). The predictive power of multicultural personality traits, learner and teacher variables on foreign language enjoyment and anxiety. In M. Sato & S. Loewen (Eds.), *Evidence-based second language pedagogy: A collection of instructed second language acquisition studies* (pp. 263-286). London: Routledge.

Dewaele, J.-M., & Meftah, R. (2023). The trajectory of English foreign learners' emotions and motivation from the start to the end of their learning journey: A Pseudo-longitudinal investigation. *Journal of the European Second Language Association, 7*(1), 16–30. https://doi.org/10.22599/jesla.94

Dorman, J. P., Fisher, D. L., & Waldrip, B. G. (2006). Learning environments, students' perceptions of assessment, academic efficacy and attitudes to science: A LISREL analysis. In D. Fisher, & M. S. Khine (Eds.), *Contemporary approaches to research on learning environments* (pp. 1 - 28). World Scientific Publishing.

Fredrickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. *American Scientist, 91*, 330-335.

Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: A review of past practices and recommendations for future applications. *Long Range Planning, 45*(5–6), 320–340. https://doi.org/10.1016/j.lrp.2012.09.008

Harvey, S. T., Bimler, D., Evans, I. M., Kirkland, J., & Pechtel, P. (2012). Mapping the classroom emotional environment. *Teaching and Teacher Education, 28*(4), 628–640. https://doi.org/10.1016/j.tate.2012.01.005

Horwitz, E. K. (2017). On the Misreading of Horwitz, Horwitz and Cope (1986) and the Need to Balance Anxiety Research and the Experiences of Anxious Language Learners. *New Insights into Language Anxiety*, 31–48. https://doi.org/10.21832/9781783097722-004

Horwitz, E. K., Horwitz, M. B., & Cope, J. A. (1986). Foreign language classroom anxiety. *The Modern Language Journal, 70*(2), 125-132. http://dx.doi.org/10.2307/327317

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*, 1-55. http://dx.doi.org/10.1080/10705519909540118

Huang, C. (2022). Self-regulation of learning and EFL learners' hope and joy: A review of literature. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.833279

Johnson, M. K. (2019). Joy: a review of the literature and suggestions for future directions. *The Journal of Positive Psychology, 15*(1), 5–24. https://doi.org/10.1080/17439760.2019.1685581

Khajavy, G. H., MacIntyre P. D., & Barabadi, E. (2018). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition, 40*, 605–624. https://doi.org/10.1017/s0272263117000304

Kruk, M. (2019). Dynamicity of perceived willingness to communicate, motivation, boredom and anxiety in Second Life: the case of two advanced learners of English. *Computer Assisted Language Learning, 35*(1–2), 190–216. https://doi.org/10.1080/09588221.2019.1677722

Kruk, M. (2022). Dynamicity of perceived willingness to communicate, motivation, boredom and anxiety in second life: The case of two advanced learners of English.

Computer Assisted Language Learning, 35, 190–216. https://doi.org/10.1080/0958822 1.2019.1677722

Kruk, M., Pawlak, M., Shirvan, M. E., & Soleimanzadeh, S. (2023). Revisiting boredom in practical English language classes via exploratory structural equation modeling. *Research Methods in Applied Linguistics, 2*(1), 100038. https://doi. org/10.1016/j.rmal.2022.100038

Kruk, M., Pawlak, M., & Zawodniak, J. (2021). Another look at boredom in language instruction: The role of the predictable and the unexpected. *Studies in Second Language Learning and Teaching, 11*(1), 15–40. https://doi.org/10.14746/ ssllt.2021.11.1.2

Kruk, M., & Zawodniak, J. (2018). Boredom in practical English language classes: Insights from interview data. In L. Szymański, J. Zawodniak, A. Łobodziec, & M. Smoluk (Eds.), *Interdisciplinary views on the English language, literature and culture* (pp. 177–191). Zielona Góra: Uniwersytet Zielonogórski.

Kruk, M., & Zawodniak, J. (2020). A Comparative study of the experience of boredom in the L2 and L3 classroom. *English Language & Learning, 44*, 417-437. https://doi.org/10.1007/s42321-020-00056-0

Kunnan, A. J. (1998). An introduction to structural equation modelling for language assessment research. *Language Testing, 15*, 295-332. https://doi. org/10.1177/026553229801500302

Li, C. (2021). A Control–Value Theory Approach to boredom in English classes among university students in China. *The Modern Language Journal, 105*(1), 317–334. https://doi.org/10.1111/modl.12693

Li, C. (2022). Foreign language learning boredom and enjoyment: The effects of learner variables and teacher variables. *Language Teaching Research,* 136216882210903. https://doi.org/10.1177/13621688221090324

Li C., & Dewaele J.-M. (2020). The predictive effects of trait emotional intelligence and online learning achievement perceptions on foreign language class boredom among Chinese university students. *Foreign Languages and Foreign Language Teaching, 5,* 33-44. https://doi.org/10.13458/j.cnki.flatt.004711

Li, C., & Dewaele, J.-M. (2021). How classroom environment and general grit predict foreign language classroom anxiety of chinese efl students. *Journal for the Psychology of Language Learning, 3*(2), 86-98. Retrieved from https://www.jpll.org/index.php/journal/article/view/71

Li, C., Dewaele, J.-M. & Hu, Y. (2023). Foreign language learning boredom: conceptualization and measurement. *Applied Linguistics Review, 14*(2), 223-249. https://doi.org/10.1515/applirev-2020-0124

Li, C., Dewaele, J.-M., Pawlak, M., & Kruk, M. (2022). Classroom environment and willingness to communicate in English: The mediating role of emotions experienced by university students in China. *Language Teaching Research*, 136216882211116. https://doi.org/10.1177/13621688221111623

Li, C., & Han, Y. (2022). Learner-internal and learner-external factors for boredom amongst Chinese university EFL students. *Applied Linguistics Review.* https://doi.org/10.1515/applirev-2021-0159

Li, C., Huang, J., & Li, B. (2021). The predictive effects of classroom environment and trait emotional intelligence on foreign language enjoyment and anxiety. *System, 96*, 1-11. https://doi.org/10.1016/j.system.2020.102393

Li, C. & Lu, X. (2022). Foreign language learning boredom: A scoping review. *Foreign Language Education, 43*(6), 70-77.

Li, C., & Wei, L. (2022). Anxiety, enjoyment, and boredom in language learning amongst junior secondary students in rural China: How do they contribute to L2 achievement? *Studies in Second Language Acquisition, 45*(1), 93-108. https://doi.org/10.1017/s0272263122000031

MacIntyre, P. D., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching, 2*(2), 193-213. https://doi.org/10.14746/ssllt.2012.2.2.4

MacIntyre, P. D., Mercer, S., Gregersen, T., & Hay, A. (2022). The role of hope in language teachers' changing stress, coping, and well-being. *System, 109*, 102881. https://doi.org/10.1016/j.system.2022.102881

Moskowitz, S., & Dewaele, J.-M. (2019). Is teacher happiness contagious? A study of the link between perceptions of language teacher happiness and student attitudes. *Innovation in Language Learning and Teaching, 15*(2), 117–130. https://doi.org/10.1080/17501229.2019.1707205

Oga-Baldwin, W. L. Q. (2019). Acting, thinking, feeling, making, collaborating: The engagement process in foreign language learning. *System, 86*, 102128. https://doi.org/10.1016/j.system.2019.102128

Pawlak, M., Derakhshan, A., Mehdizadeh, M., & Kruk, M. (2021). Boredom in online English language classes: Mediating variables and coping strategies. *Language Teaching Research*, 136216882110649. https://doi.org/10.1177/13621688211064944

Pawlak, M., Kruk, M., & Zawodniak, J. (2020). Investigating individual trajectories in experiencing boredom in the language classroom: The case of 11 Polish students of English. *Language Teaching Research, 26*(4), 598-616. https://doi.org/10.1177/1362168820914004

Pawlak, M., Kruk, M., Zawodniak, J., & Pasikowski, S. (2020). Investigating factors responsible for boredom in English classes: The case of advanced learners. *System, 91*, 102259. https://doi.org/10.1016/j.system.2020.102259

Pawlak, M., Zawodniak, J., & Kruk, M. (2020). The neglected emo¬tion of boredom in teaching English to advanced learners. *International Journal of Applied Linguistics, 30*(3), 497–509. https:// doi.org/10.1111/ijal.12302

Pekrun, R. (2006). The Control-Value Theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review, 18*(4), 315–341. https://doi.org/10.1007/s10648-006-9029-9

Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement emotions questionnaire (AEQ). *Contemporary Educational Psychology, 36*(1), 36–48. https://doi.org/10.1016/j.cedpsych.2010.10.002

Peng, J.-E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language Learning, 60*(4), 834–876. https://doi.org/10.1111/j.1467-9922.2010.00576.x

Pervin, L. A., & Cervone, D. (2010). *Personality: Theory and research. Hoboken*, NJ: John Wiley.

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics, 36*, 50–72. https://doi.org/10.1017/s0267190515000094

Piniel, K., & Albert, Á. (2018). Advanced learners' foreign language-related emotions across the four skills. *Studies in Second Language Learning and Teaching, 8*(1), 127–147. https://doi.org/10.14746/ssllt.2018.8.1.6

Prior, M. T. (2019). Elephants in the Room: An "affective turn," or just feeling our way? *The Modern Language Journal, 103*(2), 516–527. https://doi.org/10.1111/modl.12573

Putwain, D. W., & Pescod, M. (2018). Is reducing uncertain control the key to successful test anxiety intervention for secondary school students? Findings from a randomized control trial. *School Psychology Quarterly, 33*(2), 283–292. https://doi.org/10.1037/spq0000228

Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology, 104*(3), 700–712. https://doi.org/10.1037/a0027268

Richards, J. C. (2022). Exploring Emotions in Language Teaching. *RELC Journal, 53*(1), 225–239. https://doi.org/10.1177/0033688220927531

Sadoughi, M., & Hejazi, S. Y. (2021). Teacher support and academic engagement among EFL learners: The role of positive academic emotions. *Studies in Educational Evaluation, 70*, 101060. https://doi.org/10.1016/j.stueduc.2021.101060

Shao, K., Pekrun, R., Marsh, H. W., & Loderer, K. (2020). Control-value appraisals, achievement emotions, and foreign language performance: A latent interaction analysis. *Learning and Instruction, 69*, 101356. https://doi.org/10.1016/j.learninstruc.2020.101356

Teimouri, Y. (2018). Differential Roles of shame and guilt in L2 learning: How bad is bad? T*he Modern Language Journal, 102*(4), 632–652. https://doi.org/10.1111/modl.12511

Teimouri, Y., Goetze, J., & Plonsky, L. (2019). Second language anxiety and achievement: A meta-analysis – erratum. *Studies in Second Language Acquisition, 41*(2), 489–489. http://dx.doi.org/10.1017/s0272263119000445

Wang, Y. (2023). Probing into the boredom of online instruction among Chinese English language teachers during the Covid-19 pandemic. *Current Psychology*. https://doi.org/10.1007/s12144-022-04223-3

Wang, X., & Li, Y. (2022). The predictive effects of foreign language enjoyment, anxiety, and boredom on general and domain-specific English achievement in online English classrooms. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.1050226

Wei, H., Gao, K., & Wang, W. (2019) Understanding the relationship between grit and foreign language performance among middle school students: The roles of foreign language enjoyment and classroom environment. *Frontiers in Psychology, 10*, 1508. https://doi.org/10.3389/fpsyg.2019.01508

Zhao, Y. (2023). On the relationship between second language learners' grit, hope, and foreign language enjoyment. Heliyon, *9*(3), e13887. https://doi.org/10.1016/j.heliyon.2023.e13887

Zhao, X., & Wang, D. (2023). The role of enjoyment and boredom in shaping English language achievement among ethnic minority learners. J*ournal of Multilingual and Multicultural Development*, 1–13. https://doi.org/10.1080/01434632.2023.2194872

Appendix: FLA Questionnaire

To what extent do you agree with the following statements?

1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree, 0 = Not sure

Short Form of the Foreign Language Enjoyment Scale (S-FLES)

1. I enjoy my English class
2. I've learnt interesting things in my English class
3. In class, I feel proud of my accomplishments in my English class
4. The teacher is encouraging in my English class
5. The teacher is friendly in my English class
6. The teacher is supportive in my English class
7. We form a tight group in my English class
8. We have common "legends", such as running jokes in my English class
9. We laugh a lot in my English class

Short-form Foreign Language Classroom Anxiety Scale (S-FLCAS)

1. Even if I am well prepared for my English class, I feel anxious about it
2. I always feel that the other students speak English better than I do
3. I can feel my heart pounding when I'm going to be called on in my English class
4. I don't worry about making mistakes in my English class (reverse coded)
5. I feel confident when I speak in my English class (reverse coded)
6. I get nervous and confused when I am speaking in my English class
7. I start to panic when I have to speak without preparation in my English class
8. It embarrasses me to volunteer answers in my English class

Foreign Language Learning Boredom (FLLB)

1. I get bored in my English class
2. The lecture bores me in my English class
3. I think about what else I might be doing rather than sitting in this boring English class
4. I get restless because I can't wait for the English class to end
5. Studying for my English courses bores me
6. The material in my English class is so boring that I find myself daydreaming
7. I would rather put off this boring work for my English class till tomorrow
8. While studying for my English class I seem to drift off because it's so boring

Classroom Environment (CE)
1. Tasks designed in my English class are useful
2. Tasks designed in my English class are attracting
3. Activities in my English class are clearly and carefully planned
4. Class assignments are clear so everyone knows what to do in my English class
5. I work well with other class members in my English class
6. I make friends among students in my English class
7. I help other class members who are having trouble with their work in my English class
8. The teacher provides a timely response to students' concerns in my English class
9. The teacher is patient in teaching in my English class
10. The teacher asks questions that solicit viewpoints or opinions in my English class