

# Foreign language anxiety in relation to cultural intelligence and identity negotiation among English as a foreign language university learners

Ashraf Ragab Ibrahim<sup>1</sup>, Abdelaziz Abdelfattah Elfeky<sup>1</sup>, Asmaa Masoued Elblatey<sup>2</sup>,  
Mohammed Hassanin AbuAl-Saoud<sup>3</sup>, Mohamed Ali Nemt-allah<sup>1</sup>, Radwa Hassan Yacoub<sup>4</sup>

<sup>1</sup>Department of Educational Psychology and Statistics, Faculty of Education, Al-Azhar University, Tafhna Al-Ashraf, Egypt

<sup>2</sup>Department of Psychology, Faculty of Humanities, Al-Azhar University, Tafhna Al-Ashraf, Egypt

<sup>3</sup>Department of Curriculum and Instruction, Faculty of Education, Al-Azhar University, Tafhna Al-Ashraf, Egypt

<sup>4</sup>Department of Psychological Sciences, Faculty of Education for Early Childhood, Damanhour University, Damanhour, Egypt

## Article Info

### Article history:

Received Nov 16, 2025

Revised Feb 2, 2026

Accepted Feb 23, 2026

### Keywords:

Cultural intelligence

EFL learners

Foreign language anxiety

Identity negotiation

University learners

## ABSTRACT

This study examined relationships among foreign language anxiety (FLA), cultural intelligence, and identity negotiation strategies—constructs rarely investigated together—among 1,045 Egyptian English as a foreign language (EFL) university learners from Al-Azhar University and Damanhour University. Participants completed the short-form foreign language classroom anxiety scale (S-FLCAS), the cultural intelligence scale, and the identity negotiation experiences and strategies scale (INES). Correlation analyses revealed significant negative relationships between FLA and both cultural intelligence dimensions: internalized cultural knowledge (ICK) ( $r = -.233, p < .01$ ) and effective cultural flexibility (ECF) ( $r = -.208, p < .01$ ). FLA showed positive correlations with identity-related strain ( $r = .177, p < .01$ ), vigilance ( $r = .157, p < .01$ ), and compartmentalization ( $r = .108, p < .01$ ). Conversely, identity resources demonstrated a protective effect ( $r = -.160, p < .01$ ). Multiple regression analyses indicated that cultural intelligence dimensions predicted 5.9% of FLA variance, while identity negotiation strategies explained 8.7%. These findings suggest that interventions targeting cultural intelligence training and identity negotiation resources can effectively reduce FLA. The study advances theoretical understanding by demonstrating how cultural competence and identity management jointly influence psychological experiences in language learning. Results carry important pedagogical implications: educators should implement intercultural awareness programs, create identity-affirmative classroom environments, and develop learners' adaptive coping strategies to address anxiety comprehensively beyond traditional linguistic approaches.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



## Corresponding Author:

Mohamed Ali Nemt-allah

Department of Educational Psychology and Statistics, Faculty of Education, Al-Azhar University

Tafhna Al-Ashraf, Egypt

Email: mohamednamatallah.2026@azhar.edu.eg

## 1. INTRODUCTION

Foreign language anxiety (FLA) is a distinct psychological phenomenon characterized by feelings of tension, apprehension, and worry specifically associated with language learning contexts [1], [2]. Unlike general anxiety, FLA manifests as a situation-specific response triggered by tasks such as speaking, listening, or writing in a foreign language [3], [4]. This complex construct encompasses emotional reactions including

apprehension and fear, cognitive effects such as mental blocks and reduced concentration, and behavioral responses like communication avoidance [5], [6]. Research consistently demonstrates that FLA significantly impairs English language learners' academic performance, reduces their willingness to communicate, and diminishes their confidence in language abilities [7]–[9].

Understanding FLA among English as a foreign language (EFL) learners is essential due to its profound impact on language acquisition and academic success. Research consistently demonstrates a strong negative correlation between FLA and language performance [3], [10], [11]. High anxiety levels impede proficiency development across all language skills, particularly speaking and oral communication [8], [12], [13]. Recent evidence from diverse cultural contexts—including Morocco [13], China [14], and global online learning environments [15]—confirms that FLA remains a persistent challenge affecting both learner motivation and achievement outcomes [14], [16], [17]. Consequently, investigating FLA enables educators to implement targeted interventions that foster supportive learning environments, ultimately enhancing both motivation and achievement outcomes.

Cultural intelligence has emerged as a critical construct in EFL education, encompassing four interconnected components: metacognitive, cognitive, motivational, and behavioral dimensions [18]. This multifaceted ability enables learners to function effectively across culturally diverse contexts, directly influencing their capacity to navigate both linguistic and cultural challenges [19], [20]. Recent studies demonstrate that EFL learners with enhanced cultural intelligence exhibit not only superior communication skills and intercultural competence [21], [22], but also experience greater foreign language enjoyment and reduced anxiety [23]. Moreover, cultural intelligence significantly correlates with language proficiency, fostering learners' confidence, motivation, and overall academic achievement [20], [24]. Emerging research suggests that cultural intelligence promotes positive emotional states that buffer against language learning stress [23], positioning it as a potentially crucial protective factor against FLA.

Identity negotiation constitutes a dynamic and multifaceted process through which EFL learners construct, adapt, and reconcile their sense of self while navigating new linguistic and cultural environments [25], [26]. This ongoing process involves shifting between multiple identities—native, learner, and global citizen—influenced by social, emotional, and contextual factors [27], [28]. For EFL learners, successful identity negotiation significantly enhances language investment, classroom participation, and integration into target language communities [29]. Conversely, identity conflicts may result in withdrawal, reduced engagement, and emotional distress [30], [31]. Recent qualitative investigations reveal that the emotional impacts of identity negotiation during language learning can be profound, affecting learners' psychological wellbeing and persistence [31]. The negotiation process is fundamentally shaped by language ideologies, classroom practices, and learners' agency in utilizing their linguistic and cultural capital [32], [33].

FLA manifests most prominently during speaking activities and oral assessments, where learners face heightened apprehension about making mistakes and peer judgment [15], [34]–[38]. Listening tasks also trigger substantial anxiety, particularly among less proficient learners who struggle with comprehension and fear missing critical information [39], [40]. Additionally, high-stakes examinations intensify anxiety levels due to performance pressure and test-related stress [41], [42]. These anxiety-provoking situations are further amplified by contextual factors such as task complexity, audience presence, and learners' proficiency levels [43].

FLA represents a multifaceted psychological phenomenon influenced by personal, pedagogical, and sociocultural dimensions that collectively impede EFL learners' performance and motivation. Personal traits constitute primary contributors to FLA, with low self-confidence, perfectionism, and concerns about peer judgment emerging as dominant internal factors [5], [44], [45]. Additionally, personality characteristics such as neuroticism correlate with heightened anxiety levels, while extraversion and openness tend to mitigate FLA manifestations [46]. Classroom dynamics further exacerbate anxiety through teacher-student interactions, peer pressure, and test-related stress [47]–[49]. External pressures, including cultural differences, family expectations, and limited target language exposure, compound these challenges by creating additional psychological barriers [45], [50]. Understanding these interconnected factors provides essential groundwork for examining how cultural intelligence and identity negotiation strategies may influence anxiety management among EFL university learners.

Despite extensive research documenting the detrimental effects of FLA on EFL learners, a critical gap exists in understanding how cultural intelligence and identity negotiation jointly influence FLA. While recent studies have independently examined cultural intelligence as a predictor of language enjoyment [23] and identity negotiation as a source of emotional challenge [31], no empirical research has systematically investigated their combined relationships with FLA. This represents a significant theoretical gap: cultural intelligence may equip learners with adaptive strategies for managing cross-cultural communication challenges, while identity negotiation processes may either exacerbate or mitigate anxiety depending on available coping resources. The absence of research examining these constructs simultaneously limits our understanding of the complex psychological and sociocultural mechanisms underlying FLA. Understanding these relationships is essential for developing comprehensive theoretical frameworks and evidence-based

interventions that address not only the symptoms of FLA but also its underlying determinants. Therefore, this study aims to bridge this gap by investigating the relationships among FLA, cultural intelligence, and identity negotiation strategies among Egyptian EFL university learners. Specifically, the present research seeks to answer the following questions:

- What are the relationships between FLA, cultural intelligence dimensions, and identity negotiation strategies among EFL university learners?
- To what extent do cultural intelligence and identity negotiation strategies predict FLA levels in this population?

## 2. METHOD

### 2.1. Participants

The study sample comprised 1,045 EFL university students from two Egyptian universities: Al-Azhar University and Damanhour University. Participants were recruited using convenience sampling from accessible student populations across three faculties. The majority of participants were enrolled at Al-Azhar University, while the remainder attended Damanhour University. Participants were recruited from three faculties: the Faculty of Education for Boys in Tafhna Al-Ashraf, Dakahlia; the Faculty of Humanities for Girls in Tafhna Al-Ashraf, Dakahlia; and the Faculty of Early Childhood Education in Damanhour. The age range for the main sample was 19–22 years ( $M=20.64$ ,  $SD=1.21$ ). A subsample of 615 participants was utilized to establish the psychometric properties of the study instruments. This psychometric validation sample ranged in age from 19 to 22 years ( $M=20.57$ ,  $SD=1.13$ ). The demographic characteristics of both the main sample and the psychometric sample are comprehensively detailed in Table 1. While convenience sampling facilitated efficient data collection and access to diverse student populations, we acknowledge potential limitations including sampling bias, reduced generalizability beyond the sampled universities, and possible overrepresentation of motivated or accessible students.

The large sample size ( $N=1,045$ ) was determined based on multiple considerations: i) ensuring adequate statistical power ( $>.80$ ) for detecting small-to-medium effect sizes in correlation and regression analyses; ii) providing sufficient cases-per-parameter ratios ( $>10:1$ ) for robust confirmatory factor analyses across multiple instruments; iii) enabling stable parameter estimates in multiple regression models with several predictors, and iv) enhancing generalizability of findings across diverse student subgroups (gender, academic year, residential background). Power analysis using G\*Power 3.1 indicated that a minimum sample of 550 participants would be required to detect small effects ( $f^2=.02$ ) in multiple regression with six predictors at  $\alpha=.05$  and  $power=.80$ ; our achieved sample substantially exceeded this threshold, ensuring robust statistical conclusions.

Table 1. Demographic characteristics of study participants

Variable	Category	Psychometric sample (N=615)		Main sample (N=1,045)	
		N	%	N	%
Academic year	First year	109	17.7	224	21.4
	Second year	161	26.2	200	19.1
	Third year	140	22.8	194	18.4
	Fourth year	205	33.3	429	41.1
Residence	Urban	209	34.0	366	35.0
	Rural	406	66.0	679	65.0
Gender	Male	303	49.3	639	61.1
	Female	312	50.7	406	38.9

### 2.2. Instruments

The cultural intelligence scale developed by B cker *et al.* [51] was employed to assess participants' ability to interact effectively in multicultural environments. The scale consists of two primary dimensions measured through a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The first dimension, internalized cultural knowledge (ICK), evaluates the extent to which individuals have integrated cultural understanding into their cognitive framework. The second dimension, effective cultural flexibility (ECF), measures the ability to adapt behavioral responses appropriately across diverse cultural contexts. The scale demonstrated strong psychometric properties in the current study, with confirmatory factor analysis revealing acceptable model fit indices (Chi-square to degrees of freedom ratio ( $\chi^2/df$ )=4.607, goodness of fit index (GFI)=.924, comparative fit index (CFI)=.924, root mean square error of approximation (RMSEA)=.079). Reliability coefficients indicated excellent internal consistency for both dimensions (ICK:  $\omega=.843$ ,  $\alpha=.844$ ; ECF:  $\omega=.827$ ,  $\alpha=.824$ ) and for the total scale ( $\omega=.881$ ,  $\alpha=.881$ ).

The identity negotiation experiences and strategies scale (INES), developed by Galliher *et al.* [52] was utilized to measure participants' experiences and strategies when navigating conflicts between different aspects of their identity, such as religion, nationality, profession, and social roles. The instrument comprises four dimensions assessed on a 5-point Likert scale ranging from 1 (does not apply at all) to 5 (applies completely). The strain dimension measures the degree of distress experienced due to conflicting identity aspects. The vigilance dimension assesses fear and hesitation in expressing one's identity. The compartmentalization dimension evaluates the individual's ability to shift self-presentation according to situational demands. The resources dimension measures positive strategies available to individuals for resolving identity-related difficulties. Confirmatory factor analysis supported the four-factor structure with adequate fit indices ( $\chi^2/df=3.140$ , GFI=.903, CFI=.923, RMSEA=.059). All dimensions demonstrated satisfactory to excellent internal consistency (strain:  $\omega=.912$ ,  $\alpha=.910$ ; vigilance:  $\omega=.828$ ,  $\alpha=.825$ ; compartmentalization:  $\omega=.808$ ,  $\alpha=.806$ ; resources:  $\omega=.807$ ,  $\alpha=.807$ ).

The short-form foreign language classroom anxiety scale (S-FLCAS), validated by Botes *et al.* [53], was employed to assess FLA in classroom settings. This brief instrument consists of eight items measured on a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). The scale provides an efficient assessment of anxiety specifically related to foreign language learning contexts, capturing emotional, cognitive, and behavioral manifestations of language-related apprehension. Confirmatory factor analysis demonstrated excellent model fit ( $\chi^2/df=2.518$ , GFI=.982, CFI=.982, RMSEA=.050), and the scale exhibited good internal consistency ( $\omega=.798$ ,  $\alpha=.798$ ).

### 2.3. Procedures

Data collection was conducted during the second semester of the 2024/2025 academic year. All instruments were administered in Arabic, the participants' native language, to ensure accurate comprehension and response quality. The translation process involved three specialists in English language who independently translated the instruments from English to Arabic and subsequently back-translated them to verify linguistic equivalence and maintain the original meaning of the items. Participants completed the questionnaires through both electronic and paper-based formats using Google Forms, allowing for flexible and convenient data collection methods that accommodated participants' preferences and accessibility. Electronic administration facilitated efficient data entry and reduced transcription errors, while paper-based options ensured inclusivity for participants with limited internet access. The study received appropriate ethical approval, and all participants provided informed consent prior to their involvement. Participation was voluntary, and confidentiality of responses was ensured throughout the data collection process. No incentives were provided for participation, minimizing potential response bias related to external rewards.

### 2.4. Data analysis

Statistical analyses were performed using SPSS-27 and AMOS-26. Confirmatory factor analysis was conducted to verify the factorial structure of each instrument, with model fit evaluated against established thresholds:  $\chi^2/df < 5.0$  (acceptable) or  $< 3.0$  (good), GFI and CFI  $> .90$  (good fit) or  $> .95$  (excellent fit), and RMSEA  $< .08$  (acceptable) or  $< .06$  (good fit). Pearson correlation coefficients were computed to explore relationships among study variables. Multiple regression analyses were performed to examine the predictive relationships between cultural intelligence, identity negotiation strategies, and FLA.

## 3. RESULTS

Prior to examining the research questions, preliminary analyses were conducted to ensure data quality and assess the assumptions for parametric statistical procedures. As presented in Table 2, all variables demonstrated adequate variability and approximated normal distributions, meeting the requirements for correlation and regression analyses. FLA scores averaged 24.75 (SD=5.07), while cultural intelligence composite scores averaged 51.84 (SD=12.25). Among identity negotiation dimensions, strain showed the highest mean score (M=18.24, SD=6.81), followed by vigilance (M=16.22, SD=5.14), resources (M=14.91, SD=4.01), and compartmentalization (M=14.33, SD=4.27). The descriptive statistics revealed that participants' scores spanned the full range of possible values across all measures, indicating sufficient variation for examining relationships among the constructs.

To address the first research question concerning the relationships between FLA, cultural intelligence dimensions, and identity negotiation strategies, Pearson correlation coefficients were computed among all study variables. As presented in Table 3, the correlation analysis revealed several significant relationships. FLA demonstrated significant negative correlations with both ICK ( $r=-.233$ ,  $p<.01$ ) and ECF ( $r=-.208$ ,  $p<.01$ ), as well as with overall cultural intelligence ( $r=-.242$ ,  $p<.01$ ), indicating that higher cultural competence is associated with lower anxiety levels. Regarding identity negotiation dimensions, FLCAS showed significant positive correlations with strain ( $r=.177$ ,  $p<.01$ ), vigilance ( $r=.157$ ,  $p<.01$ ), and

compartmentalization ( $r=.108$ ,  $p<.01$ ), suggesting that identity-related distress and management challenges are linked to heightened FLA. Conversely, FLCAS was negatively correlated with resources ( $r=-.160$ ,  $p<.01$ ), indicating that adaptive coping strategies buffer against anxiety. The two cultural intelligence dimensions demonstrated a strong positive correlation with each other ( $r=.670$ ,  $p<.01$ ), while among identity negotiation dimensions, strain and vigilance showed the strongest association ( $r=.527$ ,  $p<.01$ ).

Table 2. Descriptive statistics for study variables

Variable	Minimum	Maximum	M	SD
FLCAS	8.00	40.00	24.75	5.07
ICK	7.00	49.00	29.32	7.38
ECF	5.00	35.00	22.51	6.00
Cultural intelligence	12.00	84.00	51.84	12.24
Strain	8.00	40.00	18.23	6.80
Vigilance	6.00	30.00	16.22	5.13
Compartmentalization	5.00	25.00	14.33	4.27
Resources	5.00	25.00	14.90	4.01

Table 3. Correlations between FLA, cultural intelligence, and identity negotiation strategies

Variable	1	2	3	4	5	6	7	8
FLCAS	1							
ICK	-.233**	1						
ECF	-.208**	.670**	1					
Cultural intelligence	-.242**	.932**	.894**	1				
Strain	.177**	-.079*	-.108**	-.101**	1			
Vigilance	.157**	.044	.060	.056	.527**	1		
Compartmentalization	.108**	.079*	.139**	.115**	.330**	.475**	1	
Resources	-.160**	.194**	.255**	.242**	.083**	.285**	.363**	1

Note: N=1,045. \*\* $p<.01$ . \* $p<.05$ .

To address the second research question regarding the extent to which cultural intelligence and identity negotiation strategies predict FLA, two multiple regression analyses were conducted. The first regression model examined cultural intelligence dimensions as predictors of FLCAS scores. As shown in Table 4, the overall model was statistically significant,  $F(2, 1,042)=32.673$ ,  $p<.001$ , and explained 5.9% of the variance in FLA ( $R^2=.059$ , adjusted  $R^2=.057$ ). Both ICK ( $\beta=-.170$ ,  $t=-4.198$ ,  $p<.001$ ) and ECF ( $\beta=-.094$ ,  $t=-2.314$ ,  $p=.021$ ) emerged as significant negative predictors, with ICK demonstrating a stronger predictive relationship with anxiety. The second regression analysis examined identity negotiation strategies as predictors of FLA. As displayed in Table 5, this model was statistically significant,  $F(4, 1,039)=24.711$ ,  $p<.001$ , and demonstrated greater explanatory power, accounting for 8.7% of the variance ( $R^2=.087$ , adjusted  $R^2=.083$ ). All four identity negotiation dimensions contributed significantly to the prediction model. Strain ( $\beta=.099$ ,  $t=2.813$ ,  $p=.005$ ), vigilance ( $\beta=.122$ ,  $t=3.206$ ,  $p=.001$ ), and compartmentalization ( $\beta=.102$ ,  $t=2.901$ ,  $p=.004$ ) emerged as positive predictors, while resources ( $\beta=-.242$ ,  $t=-7.513$ ,  $p<.001$ ) functioned as a negative predictor, demonstrating the strongest effect among all dimensions.

Table 4. Multiple regression analysis: cultural intelligence dimensions predicting FLA

Variable	B	SE B	$\beta$	t	p
(Constant)	29.960	.663	---	45.169	.000
ICK	-.117	.028	-.170	-4.198	.000
ECF	-.079	.034	-.094	-2.314	.021

Note: N=1,045.  $R^2=.059$ , adjusted  $R^2=.057$ ,  $F(2, 1,042)=32.673$ ,  $p<.001$ .

Table 5. Multiple regression analysis: identity negotiation strategies predicting FLA

Variable	B	SE B	$\beta$	t	p
(Constant)	24.270	.725	---	33.492	.000
Strain	.074	.026	.099	2.813	.005
Vigilance	.121	.038	.122	3.206	.001
Compartmentalization	.122	.042	.102	2.901	.004
Resources	-.307	.041	-.242	-7.513	.000

Note: N=1,045.  $R^2=.087$ , adjusted  $R^2=.083$ ,  $F(4, 1,039)=24.711$ ,  $p<.001$ .

#### 4. DISCUSSION

The findings reveal meaningful relationships between FLA, cultural intelligence, and identity negotiation among Egyptian EFL university learners. The significant negative correlations between FLA and both cultural intelligence dimensions suggest that learners with enhanced intercultural competence experience reduced anxiety in language learning contexts. This relationship can be theoretically explained through several mechanisms: culturally intelligent learners possess greater confidence in navigating cross-cultural communication due to their ICK, demonstrate enhanced adaptability when encountering unfamiliar linguistic contexts, and exhibit intercultural empathy that reduces fear of judgment from culturally diverse interlocutors. These cognitive and emotional capacities collectively buffer against the uncertainty and apprehension that typically trigger FLA. Conversely, the positive associations between FLA and identity-related strain, vigilance, and compartmentalization indicate that learners experiencing identity conflicts face heightened psychological distress during language learning. Notably, resources emerged as a protective factor, demonstrating that learners equipped with adaptive coping strategies effectively manage anxiety. These patterns underscore the complex interplay between psychological, cultural, and identity-related factors in shaping language learners' emotional experiences.

The present findings align with established literature documenting the debilitating effects of anxiety on language performance and learner engagement [2], [8], [49]. The negative relationship between cultural intelligence and FLA extends previous research demonstrating that enhanced cultural intelligence promotes positive emotional states and reduces anxiety in language learning contexts [20], [24]. Furthermore, the association between identity negotiation difficulties and heightened anxiety corroborates findings that identity conflicts result in withdrawal, reduced engagement, and emotional distress [30], [31]. The prominence of apprehension about evaluation and performance-related concerns reflects documented patterns wherein FLA manifests most intensely during speaking activities and high-stakes assessments [34], [36], [37].

It is important to acknowledge that the regression models explained modest portions of FLA variance (5.9% for cultural intelligence, 8.7% for identity negotiation). While these effect sizes are statistically significant and comparable to other psychological predictors in educational research, they indicate that the majority of variance remains unexplained. Other unmeasured factors likely contribute substantially to FLA, including: specific teaching methodologies and pedagogical approaches, classroom climate and peer support networks, individual personality traits (particularly neuroticism and introversion), prior language learning experiences and trauma, family attitudes toward English learning, and learners' general self-efficacy beliefs. Future research incorporating these additional variables would provide more comprehensive models of FLA determinants.

These findings carry significant pedagogical implications for EFL education. Educators should prioritize developing learners' cultural intelligence through targeted interventions incorporating intercultural communication activities and cross-cultural awareness training. Concrete classroom strategies include: i) structured role-play activities simulating cross-cultural encounters where learners practice perspective-taking and adaptive communication; ii) intercultural project-based learning requiring collaboration with peers from diverse backgrounds or analyzing cultural artifacts; iii) explicit instruction in cultural frameworks and metacognitive strategies for recognizing cultural assumptions; and iv) reflective journaling on intercultural experiences to internalize cultural knowledge. Creating supportive classroom environments that reduce apprehension about evaluation while fostering positive peer interactions may mitigate anxiety manifestations. Universities should institutionalize these findings by integrating cultural intelligence modules and identity negotiation workshops into EFL curricula, training faculty in identity-affirming practices, and establishing peer support programs.

Furthermore, institutions should implement identity-affirmative pedagogies that acknowledge learners' multiple identities and provide structured opportunities for identity exploration and negotiation. Specific identity-affirming classroom strategies include: i) multilingual identity texts where learners create autobiographical narratives integrating their native and target language identities; ii) cultural show-and-tell sessions allowing learners to share aspects of their heritage while connecting to English learning; iii) explicit discussion of language identity challenges normalizing the negotiation process; and iv) peer mentoring programs pairing students at different stages of identity integration. These activities validate learners' complex identities while building the resources dimension that strongly predicted lower anxiety. Developing learners' coping resources through stress management workshops, mindfulness training, and metacognitive strategy instruction represents another crucial intervention avenue. By addressing both cultural competence and identity-related challenges simultaneously, educators can create comprehensive support systems that enhance learners' psychological wellbeing and ultimately improve their language acquisition outcomes and academic success.

Several limitations warrant consideration when interpreting these findings. The cross-sectional design precludes causal inferences regarding directional relationships among variables, necessitating longitudinal investigations to establish temporal precedence. The reliance on self-report measures introduces

potential response biases, including social desirability and subjective interpretation variations. The sample comprised exclusively Egyptian university students, limiting generalizability to other cultural contexts and educational settings where different sociocultural dynamics may influence anxiety experiences. Additionally, the modest variance explained by the regression models suggests that unmeasured variables contribute substantially to FLA. Future research should employ mixed-methods approaches incorporating behavioral observations and qualitative data to capture the nuanced experiences underlying these quantitative relationships.

Future investigations should adopt longitudinal designs tracking anxiety trajectories alongside cultural intelligence and identity negotiation development throughout learners' academic progression. Experimental studies examining specific interventions targeting cultural competence enhancement and identity negotiation support would establish causal relationships and intervention efficacy. Research should expand to diverse cultural contexts, including multicultural classrooms and study-abroad settings, where identity negotiation processes may differ substantially. Incorporating additional variables such as teaching methodologies, classroom climate, proficiency levels, and personality characteristics would provide comprehensive models explaining anxiety variation. Qualitative methodologies including interviews and ethnographic observations could illuminate subjective experiences underlying quantitative patterns. Furthermore, investigating potential moderating variables—such as gender, academic level, or cultural background—would reveal conditions under which cultural intelligence and identity resources most effectively buffer against anxiety.

## 5. CONCLUSION

This study contributes valuable insights into the psychological and sociocultural mechanisms influencing FLA among EFL university learners. The findings demonstrate that cultural intelligence serves as a protective factor against FLA, while identity-related strain and vigilance exacerbate anxiety manifestations. Conversely, identity negotiation resources function as adaptive mechanisms mitigating psychological distress. These relationships underscore the necessity of comprehensive pedagogical approaches addressing not merely linguistic competence but also learners' cultural intelligence development and identity negotiation processes. By recognizing the interconnected nature of anxiety, cultural competence, and identity dynamics, educators can implement evidence-based interventions fostering supportive learning environments. Ultimately, addressing these multifaceted dimensions promises to enhance learners' psychological wellbeing, motivation, and language acquisition success in increasingly globalized educational contexts.

The present study makes three distinct contributions to the field. Theoretically, this research extends FLA scholarship by systematically integrating cultural intelligence and identity negotiation as predictive constructs—two dimensions previously examined independently but rarely investigated in relation to FLA. By demonstrating their unique and combined relationships with FLA, this study advances a more comprehensive theoretical framework that incorporates psychological, cultural, and identity-related mechanisms underlying anxiety experiences. Practically, the findings inform the development of multidimensional interventions in EFL classrooms, suggesting that effective anxiety reduction requires simultaneous attention to cultural competence training and identity-affirmative pedagogies alongside traditional language instruction. For future research directions, the study highlights critical needs for longitudinal investigations tracking developmental trajectories of these constructs over time, cross-cultural replications examining whether these relationships hold across diverse educational contexts beyond Egypt, and experimental intervention studies testing the causal efficacy of targeted cultural intelligence and identity negotiation programs in reducing FLA. These future directions will further strengthen both theoretical understanding and practical application of this integrated approach to FLA.

## ACKNOWLEDGMENTS

The authors sincerely thank the students who participated in this study.

## FUNDING INFORMATION

The authors declare that they received no funding.

## AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Ashraf Ragab Ibrahim	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Abdelaziz Abdelfattah Elfeky	✓	✓	✓		✓	✓		✓		✓		✓	✓	✓
Asmaa Masoued Elblatey	✓	✓		✓		✓		✓		✓	✓	✓		✓
Mohammed Hassanin AbuAl-Saoud	✓	✓	✓			✓	✓	✓	✓	✓		✓		✓
Mohamed Ali Nemtallah	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓
Radwa Hassan Yacoub	✓	✓	✓			✓		✓		✓	✓	✓	✓	✓

C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

## CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

## INFORMED CONSENT

Informed consent was obtained from all participants and their parents after explaining the study's purpose, procedures, risks, and benefits, following ethical guidelines and institutional approval.

## ETHICAL APPROVAL

The study protocol was approved by the Research Ethics Committee of the Faculty of Education, Al-Azhar University, Egypt (Ref. No. EDU-REC-2024-0562).

## DATA AVAILABILITY

The data are available from the corresponding author, [MAN], upon reasonable request.

## REFERENCES





- [1] E. Şenel, "Foreign language anxiety of students studying English language and literature: a sample from Turkey," *Educational Research and Reviews*, vol. 11, no. 6, pp. 219–228, Mar. 2016, doi: 10.5897/ERR2015.2507.
- [2] R. Liang, Y. Yu, and Y. Zhang, "A review on foreign language anxiety," *Journal of Education, Humanities and Social Sciences*, vol. 26, pp. 1038–1042, Mar. 2024, doi: 10.54097/6vt3hn35.
- [3] M. Dikmen, "EFL learners' foreign language learning anxiety and language performance: a meta-analysis study," *International Journal of Contemporary Educational Research*, vol. 8, no. 3, pp. 206–222, Oct. 2022, doi: 10.33200/ijcer.908048.
- [4] M. Nilsson, "Foreign language anxiety," *Apples-Journal of Applied Language Studies*, vol. 13, no. 2, pp. 1–21, Mar. 2019, doi: 10.17011/apples/urn.201902191584.
- [5] F. Sadighi and M. Dastpak, "The sources of foreign language speaking anxiety of Iranian English language learners," *International Journal of Education and Literacy Studies*, vol. 5, no. 4, pp. 111–115, Oct. 2017, doi: 10.7575/aiac.ijels.v.5n.4p.111.
- [6] T. Svitlana, "Overcoming language anxiety among the English language learners: psycho-pedagogical aspect," *Science and Education*, vol. 23, no. 7, pp. 102–106, Jul. 2017, doi: 10.24195/2414-4665-2017-7-16.
- [7] S. Bai, "The predictive effects of foreign language anxiety and boredom on willingness to communicate among Chinese struggling EFL learners," *Heliyon*, vol. 9, no. 9, p. e19610, Sep. 2023, doi: 10.1016/j.heliyon.2023.e19610.
- [8] B. W.-Y. Chow, H. T. Chiu, and S. W. L. Wong, "Anxiety in reading and listening English as a foreign language in Chinese undergraduate students," *Language Teaching Research*, vol. 22, no. 6, pp. 719–738, Nov. 2018, doi: 10.1177/1362168817702159.
- [9] C. Pan and X. Zhang, "A longitudinal study of foreign language anxiety and enjoyment," *Language Teaching Research*, vol. 27, no. 6, pp. 1552–1575, Nov. 2023, doi: 10.1177/1362168821993341.
- [10] Aridah, D. Masruroh, and D. Rusmawaty, "Foreign language anxiety and its impact on English achievement: a study of gender variations in EFL learners," *Voices of English Language Education Society*, vol. 9, no. 1, pp. 86–95, Apr. 2025, doi: 10.29408/veles.v9i1.28279.
- [11] M. Zhang, "The relationship between foreign language classroom anxiety, motivation and their predictive effects on Chinese university students' English learning achievement," *Journal of Education, Humanities and Social Sciences*, vol. 29, pp. 208–213, Apr. 2024, doi: 10.54097/ejw2fs16.
- [12] Y. Lin, "Review of the effects of foreign language classroom anxiety on learners' development of a second language acquisition," *Journal of Education, Humanities and Social Sciences*, vol. 26, pp. 979–985, Mar. 2024, doi: 10.54097/nhtaa488.

- [13] S. Sibouhi, A. Noury, and A. Ghaicha, "Exploring the impact of language anxiety on English language proficiency among Moroccan EFL students," *International Journal of Social Science and Human Research*, vol. 8, no. 5, pp. 2928–2943, May 2025, doi: 10.47191/ijsshr/v8-i5-36.
- [14] Z. Luo and Y. Xiong, "Is anxiety always harmful? An exploration of the impact of language anxiety on EFL learning motivation, EFL competence and EFL academic performance," *BMC Psychology*, vol. 13, no. 1, p. 674, Jul. 2025, doi: 10.1186/s40359-025-03017-z.
- [15] M. Véliz-Campos, C. Villegas, and L. Veliz, "Foreign language anxiety in online and in-person learning environments: a case from Chile," *Language Teaching Research Quarterly*, vol. 35, pp. 37–56, Oct. 2023, doi: 10.32038/ltrq.2023.35.03.
- [16] E. Ahmetovic, S. Becirovic, and V. Dubravac, "Motivation, anxiety and students' performance," *European Journal of Contemporary Education*, vol. 9, no. 2, pp. 271–289, Jun. 2020, doi: 10.13187/ejced.2020.2.271.
- [17] M. Mahmoodi and M. A. Yavuz, "The relationship among EFL learners' anxiety, motivation, and achievement," *Cultural Conflict and Integration*, vol. 1, no. 1, pp. 26–40, Jun. 2025, doi: 10.55121/cci.v1i1.242.
- [18] V. Karami and S. Izadpanah, "Cultural intelligence in EFL and ESP learners: metacognitive, cognitive, motivational, and behavioral knowledge," *Education Research International*, vol. 2022, no. 1, pp. 1–12, Mar. 2022, doi: 10.1155/2022/4730338.
- [19] S. Bećirović, "The relationship between cooperative learning, cultural intelligence, EFL motivation and students' performance: a structural equation modeling approach," *Sage Open*, vol. 13, no. 4, pp. 1–16, Oct. 2023, doi: 10.1177/21582440231208975.
- [20] Z. Wang and S. Yu, "Does foreign language learning influence EFL learners' cultural intelligence (CQ)? A mixed-methods approach to exploring EFL learning as a contributor to CQ," *Acta Psychologica*, vol. 256, p. 104991, Jun. 2025, doi: 10.1016/j.actpsy.2025.104991.
- [21] G. Chen, "Enhancing cross-cultural communication skills and cultural sensitivity in EFL students," *International Journal of Computer-Assisted Language Learning and Teaching*, vol. 13, no. 1, pp. 1–16, Nov. 2023, doi: 10.4018/IJCALLT.333716.
- [22] L. EL Harras, "The cultivation of cultural intelligence in the EFL classroom: requirements, outcomes and implications for language teaching and learning: an interpretive meta-synthesis study," *International Journal of Language and Literary Studies*, vol. 7, no. 3, pp. 226–244, May 2025, doi: 10.36892/ijlls.v7i3.2133.
- [23] Z. Wang, "Exploring the correlation between foreign language enjoyment (FLE) and culture intelligence (CQ)," *Journal of Higher Education Teaching*, vol. 2, no. 1, pp. 205–209, Feb. 2025, doi: 10.62517/jhet.202515130.
- [24] I. J. Mohammed and S. A. Al-Bakri, "Iraqi EFL university students' cultural intelligence and language proficiency: a correlational study," *Journal of Language Studies*, vol. 5, no. 3, pp. 313–323, Jul. 2022, doi: 10.25130/jls.5.3.18.
- [25] P. A. Duff, "Social dimensions and processes in second language acquisition: multilingual socialization in transnational contexts," *The Modern Language Journal*, vol. 103, no. S1, pp. 6–22, Jan. 2019, doi: 10.1111/modl.12534.
- [26] B. Norton and P. I. de Costa, "Research tasks on identity in language learning and teaching," *Language Teaching*, vol. 51, no. 1, pp. 90–112, Jan. 2018, doi: 10.1017/S0261444817000325.
- [27] L. Fisher, M. Evans, K. Forbes, A. Gayton, and Y. Liu, "Participative multilingual identity construction in the languages classroom: a multi-theoretical conceptualisation," *International Journal of Multilingualism*, vol. 17, no. 4, pp. 448–466, 2020, doi: 10.1080/14790718.2018.1524896.
- [28] F. Gao, "Negotiation of native linguistic ideology and cultural identities in English learning: a cultural schema perspective," *Journal of Multilingual and Multicultural Development*, vol. 42, no. 6, pp. 551–564, Jul. 2021, doi: 10.1080/01434632.2020.1857389.
- [29] N. Zhou, "Identity negotiation in Chinese University English classroom," *Higher Education Studies*, vol. 10, no. 2, pp. 1–12, Jan. 2020, doi: 10.5539/hes.v10n2p1.
- [30] N. Aljasir, "Identity negotiation and construction among Saudi learners of English as a second language," *BAU Journal - Society, Culture and Human Behavior*, vol. 2, no. 1, p. 7, Aug. 2020, doi: 10.54729/2789-8296.1040.
- [31] O. Isik, "Emotional impacts of language learning: the journey of adult English learners," *International Journal of Advanced Multidisciplinary Research and Studies*, vol. 5, no. 1, pp. 1011–1019, Feb. 2025, doi: 10.62225/2583049X.2025.5.1.3755.
- [32] R. P. Dumlaio, "Language socialization through an oral academic presentation in an EFL environment: a qualitative study," *The Qualitative Report*, vol. 25, no. 2, pp. 416–440, Feb. 2020, doi: 10.46743/2160-3715/2020.4213.
- [33] C. C. M. Sung, "International students' negotiation of identities during transnational studies in Hong Kong: the role of language," *Compare: A Journal of Comparative and International Education*, vol. 51, no. 5, pp. 764–781, Jul. 2021, doi: 10.1080/03057925.2019.1674635.
- [34] M. Bashori, R. van Hout, H. Strik, and C. Cucchiari, "Web-based language learning and speaking anxiety," *Computer Assisted Language Learning*, vol. 35, no. 5–6, pp. 1058–1089, Jul. 2022, doi: 10.1080/09588221.2020.1770293.
- [35] F. Djafri and S. Wimbari, "Measuring foreign language anxiety among learners of different foreign languages: in relation to motivation and perception of teacher's behaviors," *Asian-Pacific Journal of Second and Foreign Language Education*, vol. 3, no. 1, p. 17, Dec. 2018, doi: 10.1186/s40862-018-0058-y.
- [36] Y. Jin, J.-M. Dewaele, and P. D. MacIntyre, "Reducing anxiety in the foreign language classroom: a positive psychology approach," *System*, vol. 101, p. 102604, Oct. 2021, doi: 10.1016/j.system.2021.102604.
- [37] J. Lu, "Exploring the studies on speaking anxiety in second/foreign language learning," *Journal of Education, Humanities and Social Sciences*, vol. 26, pp. 788–794, Mar. 2024, doi: 10.54097/36v69309.
- [38] M. Szyszka, P. Peltonen, and P. Lintunen, "Unravelling the relationship between language anxiety and foreign language speech fluency in a monologue production," *Journal of Multilingual and Multicultural Development*, vol. 47, no. 1, pp. 323–337, Jan. 2026, doi: 10.1080/01434632.2024.2387149.
- [39] X. Hu, X. Zhang, and S. McGeown, "Foreign language anxiety and achievement: a study of primary school students learning English in China," *Language Teaching Research*, vol. 28, no. 4, pp. 1594–1615, Jul. 2024, doi: 10.1177/13621688211032332.
- [40] C. Ran, Y. Wang, and W. Zhu, "Comparison of foreign language anxiety based on four language skills in Chinese college students," *BMC Psychiatry*, vol. 22, no. 1, p. 558, Aug. 2022, doi: 10.1186/s12888-022-04201-w.
- [41] B. Elov, I. Abdullayeva, L. Raupova, A. Kholikov, and M. Mirkasimova, "Speaking exams with less anxiety in intelligent computer-assisted language assessment (ICALA): mirroring EFL learners' foreign language anxiety, shyness, autonomy, and enjoyment," *Language Testing in Asia*, vol. 15, no. 1, p. 3, Jan. 2025, doi: 10.1186/s40468-024-00340-x.
- [42] M. Fu and S. Li, "The associations between foreign language anxiety and the effectiveness of immediate and delayed corrective feedback," *Foreign Language Annals*, vol. 57, no. 1, pp. 201–228, Mar. 2024, doi: 10.1111/flan.12708.
- [43] J. C. Mora, I. Mora-Plaza, and G. Bermejo Miranda, "Speaking anxiety and task complexity effects on second language speech," *International Journal of Applied Linguistics*, vol. 34, no. 1, pp. 292–315, Feb. 2024, doi: 10.1111/ijal.12494.
- [44] E. S. Alnuzaili and N. Uddin, "Dealing with anxiety in foreign language learning classroom," *Journal of Language Teaching and Research*, vol. 11, no. 2, pp. 269–273, Mar. 2020, doi: 10.17507/jltr.1102.15.





- [45] S. Weda and A. E. F. Sakti, "Factors influencing students' anxiety in English as a foreign language classroom," *Journal of Physics: Conference Series*, vol. 1028, p. 012100, Jun. 2018, doi: 10.1088/1742-6596/1028/1/012100.
- [46] A. Erzhanova, A. Kharkhurin, and V. Koncha, "The influence of big five personality traits on foreign language classroom anxiety," *Psychology. Journal of the Higher School of Economics*, vol. 21, no. 1, pp. 184–201, 2024, doi: 10.17323/1813-8918-2024-1-184-201.
- [47] S. Aydin, F. D. Akkaş, T. Tümmük, A. B. Beydilli, and İ. Saydam, "Test anxiety among foreign language learners: a qualitative study," *The Qualitative Report*, vol. 25, no. 12, pp. 4289–4309, Dec. 2020, doi: 10.46743/2160-3715/2020.4686.
- [48] C. Li, J. Huang, and B. Li, "The predictive effects of classroom environment and trait emotional intelligence on foreign language enjoyment and anxiety," *System*, vol. 96, p. 102393, Feb. 2021, doi: 10.1016/j.system.2020.102393.
- [49] C. Zhang, "Analysis of classroom environmental factors and teaching strategies for foreign language learning anxiety," *Journal of Education and Educational Research*, vol. 7, no. 3, pp. 261–263, Mar. 2024, doi: 10.54097/5v410a54.
- [50] A. M. Boukranaa, R. A. Mjihad, and Z. A. E. A. Z. El Abidine, "Factors and effects of foreign language anxiety in EFL classrooms: Sidi Mohamed Ben Abdellah University as a case study," *Journal of World Englishes and Educational Practices*, vol. 6, no. 1, pp. 217–226, Feb. 2024, doi: 10.32996/jweep.2024.6.1.10.
- [51] J. Bücker, O. Furrer, and Y. Lin, "Measuring cultural intelligence (CQ)," *International Journal of Cross Cultural Management*, vol. 15, no. 3, pp. 259–284, Dec. 2015, doi: 10.1177/1470595815606741.
- [52] R. V. Galliher, J. G. Parmenter, L. R. Pradell, and T. Klimstra, "Development and validation of the identity negotiation experiences and strategies scale," *Identity*, vol. 25, no. 3, pp. 373–391, Jul. 2025, doi: 10.1080/15283488.2024.2377171.
- [53] E. Botes, L. van der Westhuizen, J.-M. Dewaele, P. MacIntyre, and S. Greiff, "Validating the short-form foreign language classroom anxiety scale," *Applied Linguistics*, vol. 43, no. 5, pp. 1006–1033, Nov. 2022, doi: 10.1093/applin/amac018.

## BIOGRAPHIES OF AUTHORS







**Ashraf Ragab Ibrahim**     is a lecturer at Department of Educational Psychology and Statistics, Faculty of Education, Al-Azhar University, Tafhna Al-Ashraf, Egypt. He earned his Ph.D. in Educational Psychology with specialization in Measurement and Evaluation. His research portfolio encompasses psychometrics, scale development, and investigating the psychological impacts of educational technologies, including artificial intelligence applications in educational environments. Ibrahim's scholarly work examines academic and psychological variables within educational contexts, contributing valuable insights to educational assessment and evaluation methodologies. He can be contacted at email: AshrafIbrahim.26@azhar.edu.eg.






**Abdelaziz Abdelfattah Elfeky**     is an assistant professor of Educational Psychology and Educational Statistics, Faculty of Education, Al-Azhar University, Egypt. He has extensive research on psychological empowerment, cognitive flexibility, academic stress, and special education needs. Elfeky has over 24 years of academic experience, including serving as assistant professor of Special Education at Jazan University and directing the Sahl Center for Family Counseling. He has supervised graduate research and contributed to advancing assessment methodologies in educational psychology. He can be contacted at email: AbdelzezeElfiky.2026@azhar.edu.eg.






**Asmaa Masoued Elblatey**     is an assistant professor in Department of Psychology, Faculty of Humanities for Girls, Tafhna Al-Ashraf, Al-Azhar University, Egypt. She serves as coordinator of the Psychology Program and deputy head of the Psychological Counseling Unit. Her actively contributes to quality assurance initiatives, having helped the department achieve national accreditation. She has published numerous research papers, authored a book on developmental psychology, and participates extensively in international conferences and community service through various Egyptian scientific associations and educational institutions. She can be contacted at email: asmaaelblaty.7119@azhar.edu.eg.






**Mohammed Hassanin AbuAl-Saoud**    is a lecturer at Department of Curriculum and Instruction, Faculty of Education, Al-Azhar University. He is interested in teaching English as a foreign language. Teaching TEFL methodology courses to EFL students at Faculty of Education for boys and Faculty of Humanities for girls, Al-Azhar University. He is interested in employing new technologies and AI applications in EFL learning contexts. Participating in the Curriculum and Instruction Department research seminars and supervising (TEFL) MA and Ph.D. research students. He can be contacted at email: MohammedAbuAl-Saoud.2619@azhar.edu.eg.



**Mohamed Ali Nemt-allah**    is a lecturer at Department Educational Psychology and Statistics, Faculty of Education, Al-Azhar University, Tafhna Al-Ashraf, Egypt. His expertise centers on the intersection of psychology and education, emphasizing statistical method applications in educational research and practice. His professional responsibilities encompass teaching, research, and academic development of students in educational psychology and statistics. He contributes to advancing quantitative methodologies in educational research, helping bridge theoretical psychological concepts with practical educational applications through rigorous statistical analysis and interpretation. He can be contacted at email: mohamednamatallah.2026@azhar.edu.eg.



**Radwa Hassan Yacoub**    holds a Ph.D. in Early Childhood Education from Damanhour University, Egypt, has a master's degree in Education focusing on therapeutic education for kindergarten children with developmental learning disabilities. She contributes to early childhood education through teaching and research, focusing on therapeutic education, conceptual skill development, and educational activities for visually impaired children. She has published research on administrative practices in kindergartens and their impact on teachers' morale, demonstrating a commitment to improving early childhood education through innovative programs and evidence-based practices. She can be contacted at email: Radwa.hassan@kgr.dmu.edu.eg.