



Emotion regulation in English language learning: The roles of cognitive reappraisal and expressive suppression among Algerian EFL students

Meymouna Bourzeg 

Department of English, Faculty of Letters and Foreign Languages, Ibn Khaldoun University of Tiaret, Algeria

Article Information

Received: 4 April 2025

Revised: 6 June 2025

Accepted: 28 June 2025

ABSTRACT

This study examined the emotion regulation strategies used by Algerian EFL university students and how these strategies influence their engagement and learning experiences in English. Based on Gross's process model of emotion regulation, the research focused on identifying the dominant strategies, cognitive reappraisal and expressive suppression, and exploring differences across gender, age, and academic level. Using a quantitative cross-sectional approach, data were gathered from 303 undergraduates enrolled in English programmes at three public universities via the Emotion Regulation Questionnaire. Results showed a clear preference for cognitive reappraisal over expressive suppression, indicating that students tend to manage emotions by reinterpreting their learning experiences rather than suppressing their feelings. Female and senior students reported a greater reliance on reappraisal, suggesting that emotional regulation develops in conjunction with linguistic and academic maturity. Cognitive reappraisal served as an adaptive mechanism, maintaining engagement, motivation, and confidence in communication during language challenges and when receiving corrective feedback. Although expressive suppression is socially valued, it contributed little to learning progress. The study enhances understanding of affective processes in EFL education and advocates for pedagogical practices that incorporate emotional awareness into language teaching and learning.

Keywords: Algerian university students; cognitive reappraisal; EFL learning; emotion regulation; English language learning; expressive suppression

1. Introduction

The emotional aspect of language learning plays a key role in student engagement, persistence, and success (Plonsky et al., 2022). In English as a Foreign Language (EFL) classrooms, students often encounter emotions such as anxiety, embarrassment, or frustration caused by linguistic challenges, fear of judgment, or doubts about their abilities. These emotions can either support or hinder learning, depending on how well they are managed. Therefore, the ability to control emotions has become an essential psychological skill for maintaining motivation and active involvement in linguistically challenging settings (Teixeira et al., 2022).

Corresponding author email address: meymouna.bourzeg@univ-tiaret.dz

Cite as: Bourzeg, M. (2025). Emotion regulation in English language learning: The roles of cognitive reappraisal and expressive suppression among Algerian EFL students. *Applied Linguistics: Research, Measurement and Practice*, 1(1), 95–113. <https://doi.org/10.65334/kkbhp157>

This is an open-access article under the CC BY-NC license: <http://creativecommons.org/licenses/by-nc/4.0/>

The emotional aspect of language learning plays a key role in student engagement, persistence, and success (Plonsky et al., 2022). In EFL classrooms, students often encounter emotions such as anxiety, embarrassment, or frustration caused by linguistic challenges, fear of judgment, or doubts about their abilities. These emotions can either support or hinder learning, depending on how well they are managed. Therefore, the ability to control emotions has become an essential psychological skill for maintaining motivation and active involvement in linguistically challenging settings (Teixeira et al., 2022).

Research in educational psychology has shown that individuals vary considerably in how they handle emotional experiences. Gross's process model of emotion regulation identifies two main strategies: cognitive reappraisal and expressive suppression (Liu et al., 2023). Cognitive reappraisal involves changing one's interpretation of a situation to alter its emotional impact, while expressive suppression refers to intentionally inhibiting outward emotional expression (Wang & Shi, 2025). Both strategies act as methods of emotional control, and their effects extend to academic and communicative environments where emotional stability supports learning performance. Language classrooms, which necessitate constant interpersonal interaction and public expression, provide a context in which these regulatory processes are visible (Judah et al., 2022; Richards, 2022).

Although emotion regulation has been extensively studied in psychology, its role in foreign language education remains relatively underexplored (Derakhshan & Zare, 2023). Recent research has demonstrated that learners who utilise cognitive reappraisal tend to experience lower anxiety and show greater willingness to communicate (Zhang et al., 2024). Other studies suggest that enjoyment and group-level regulation can strengthen collaborative engagement in online English learning environments (Fathi et al., 2021). Findings from teacher-focused research similarly indicate that emotion regulation contributes to professional well-being and reflective teaching practice (Greenier et al., 2021) and mediates the relationship between self-efficacy and burnout in instructional settings (Zhang et al., 2022).

Despite this increasing body of evidence, little is known about how students in Arab and North African universities handle emotional experiences in language learning. The Algerian EFL context offers a unique case. English has become a vital academic and professional language; yet, many students still face affective challenges that impact their participation and confidence. Understanding how these learners regulate their emotions provides insight into their psychological adaptation to English learning and enables the identification of strategies that promote more effective engagement.

The present study addresses this gap by examining the emotion regulation strategies employed by Algerian EFL university students. It focuses on the extent to which learners use cognitive reappraisal and expressive suppression in managing emotions during English learning and explores possible variations in these strategies across demographic factors. Through this focus, the study contributes to a deeper understanding of the affective dimension of foreign language learning and extends emotion-regulation research to an underrepresented educational and cultural context.

Accordingly, the study investigates the following research questions:

1. What are the predominant emotion-regulation strategies used by Algerian EFL university students in English language learning contexts?
2. To what extent do students employ cognitive reappraisal and expressive suppression as strategies for managing emotions during English learning?
3. Are there significant differences in the use of emotion-regulation strategies among students based on demographic characteristics such as age, gender, or university level?

2. Literature Review

2.1 Emotion Regulation in Education and Language Learning

Emotions are now recognised as essential to language learning, influencing how learners process input, maintain focus, and respond to challenges (Plonsky et al., 2022). In formal education, emotional experiences interact with cognitive and motivational processes, influencing concentration, effort, and perseverance across tasks (Teng & Zhang, 2022). In language education, this interaction is more apparent as learners operate under continuous social and linguistic evaluation, often managing anxiety, uncertainty, and vulnerability when using the target language (Richards, 2022). Such conditions make emotional regulation a prerequisite for ongoing participation and success (Yu et al., 2022).

Research in applied linguistics has long explored affective factors, including anxiety, motivation, enjoyment, and self-confidence. Early studies provided valuable insights into how individual emotions influence performance, but they overlooked how learners regulate their affective states during communicative activities (Khajavy & Aghaee, 2024). More recent research in second-language psychology and positive psychology frameworks views emotion regulation as a deliberate process that enables individuals to monitor and adjust emotional responses in line with their learning objectives (Alrabai, 2024). As Fan and Wang (2022) observe, the ability to control the intensity and direction of affective experiences supports cognitive flexibility and persistence in challenging classroom situations. Findings from various educational settings confirm that effective regulation supports both academic and psychological adaptation. Derakhshan et al. (2022) reported that learners who consistently employ regulatory strategies exhibit higher resilience and a greater willingness to communicate. Similar links were noted by Solhi et al. (2025), who observed that regulation interacts with learners' ability to cope with boredom and stay focused during extended periods of instruction. Namaziandost and Rezai (2024) found that emotion regulation, mindfulness, and learner autonomy together predict sustained engagement in computer-assisted environments. Additional evidence from Wang et al. (2023) suggests that regulation acts as a mediator among environmental factors, teaching methods, and student well-being, reinforcing its role as a key element of self-regulated learning.

The scope of emotion regulation research extends beyond learners to include teachers, whose affective behaviour shapes classroom climate. Bielak and Mystkowska-Wiertelak (2022) identified a range of interpersonal strategies that teachers use to regulate learners' emotions during interactions. Wijaya (2021) found that emotionally self-regulated teachers sustain classroom order and facilitate learner concentration, while Heydarnejad et al. (2021) developed the Language Teacher Emotion Regulation Inventory to document how educators manage affect in professional settings. Li (2023) demonstrated that regulation predicts teacher resilience and reduces burnout, and Fathi et al. (2021) reached similar conclusions, noting that regulation mediates the relationship between self-efficacy and reflective practice.

Learner-centred investigations provide converging evidence for the role of regulation in maintaining engagement and affective stability. Zhang et al. (2021) demonstrated that students who sustain emotional balance during online collaboration experience greater enjoyment and higher completion rates. In digital and hybrid classrooms, regulation enables learners to adjust to feedback, manage frustration, and continue communicating despite linguistic or technical challenges (Tao & Gao, 2022). Derakhshan et al. (2022) and Solhi et al. (2025) both observed that adaptive regulation fosters perseverance across extended learning cycles.

This growing body of research has repositioned language learning as an affectively driven process rather than solely a cognitive one. The evidence suggests that emotion regulation serves as a psychological mechanism linking emotional experience with behavioural persistence and communicative engagement. It therefore provides the conceptual basis for analysing specific regulatory strategies that function within EFL learning environments.

2.2 Cognitive Reappraisal and Expressive Suppression

Cognitive reappraisal and expressive suppression are two key strategies in modern models of emotion regulation. Both act as mechanisms for managing emotional responses, but they differ in timing, cognitive effort, and educational outcomes (McRae, 2016). Cognitive reappraisal is an antecedent-focused process that alters interpretation before emotion is fully expressed, whereas expressive suppression is a response-focused process that limits outward expression after the emotion has arisen (Cutuli, 2014; De France & Hollenstein, 2022). This difference in timing explains their varying effects on learning and well-being across educational and social contexts (Wang et al., 2023).

Cognitive reappraisal involves reinterpreting an event to change its emotional significance. It reframes meaning to lower negative affect and promote adaptive coping. Neurocognitive research indicates that reappraisal activates prefrontal regions associated with cognitive control and simultaneously reduces activity in the amygdala, which regulates emotional reactivity (Liu et al., 2023). These findings suggest that reappraisal depends on executive functions that enable individuals to evaluate situations flexibly. In academic contexts, students who regularly use reappraisal tend to stay composed during assessments and persevere through frustration (Brockman et al., 2017). The strategy encourages a reflective stance aligned with metacognitive regulation, helping learners turn errors into opportunities for insight (Brockbank & Feldon, 2024). Judah et al. (2022) found that reappraisal influences the relationship between social anxiety and depressive symptoms, whereas Wu et al. (2024) reported positive associations between reappraisal and life satisfaction across different age groups and cultures. McRae et al. (2008) demonstrated that gender differences affect neural activation patterns during reappraisal, implying variation in how easily and frequently it is used. In language learning, students who interpret communicative failure or corrective feedback as constructive rather than punitive tend to experience higher motivation and emotional stability (Solhi et al., 2025).

Expressive suppression represents a fundamentally different approach. It occurs after emotion has arisen and focuses on its visible expression rather than the internal experience (Caramanica et al., 2023). Although suppression can maintain social harmony, it often increases physiological effort and cognitive load (Fernandes & Tone, 2021). Experimental research links frequent suppression with reduced working memory capacity and limited attention to task-related cues (Kraft et al., 2023). Suppression has also been linked to lower well-being, weaker interpersonal relationships, and increased stress in both academic and work environments (Wang et al., 2023). In educational settings, it may prevent the open expression of frustration or confusion, thereby restricting access to peer support and teacher assistance. When learners suppress anxiety or disappointment during communicative tasks, their energy shifts from linguistic processing to emotional containment, resulting in reduced fluency and confidence (Caramanica et al., 2023).

Comparative analyses consistently show that reappraisal is linked to positive psychological and educational results, while suppression is associated with negative patterns. Wolgast et al. (2011) found that reappraisal effectively decreases negative affect without harming cognitive performance, whereas suppression temporarily controls expressions at the cost of cognitive efficiency. Preece et al. (2023) confirmed this distinction in the Emotion Regulation Questionnaire–Short Form, demonstrating that the two strategies are empirically separate and remain consistent across different groups. McRae (2016) described reappraisal as reflective regulation and suppression as defensive management, a distinction reflected in studies of academic resilience. In language learning environments, this difference is significant. Communication tasks often involve evaluation, error, and uncertainty; learners using reappraisal reinterpret such experiences as manageable challenges, whereas those relying on suppression withdraw from interaction to avoid emotional exposure (Solhi et al., 2025).

The distinction between cognitive reappraisal and expressive suppression provides a theoretical basis for analysing emotional regulation in foreign-language education. Reappraisal promotes adaptive engagement through early cognitive intervention, while suppression acts as a reactive barrier that maintains composure but restricts authentic interaction. Understanding how EFL learners utilise these

strategies offers insight into their emotional self-management and the psychological mechanisms that support participation under conditions of linguistic and social pressure.

2.3 Emotion Regulation in the EFL Context

The concept of emotion regulation has become increasingly important in second- and foreign-language learning, where emotional and linguistic processes intersect. Fathi et al. (2021) demonstrated that teachers' regulatory competence mediates the relationship between self-efficacy and burnout, while Fan and Wang (2022) linked it to professional success through enhanced well-being. Namaziandost et al. (2023a) argued that regulation is not merely a byproduct of learning, but a fundamental component that shapes how learners interpret feedback, manage anxiety, and maintain participation. In language learning, regulation allows students to manage cognitive load, focus attention, and control emotional arousal as they engage with complex linguistic input (Wang, 2022).

Language classrooms create unique emotional conditions. Communicative tasks demand immediate linguistic output, making learners' accuracy, fluency, and pronunciation subject to public scrutiny. Hu (2023) noted that this exposure often triggers anxiety related to self-presentation and linguistic identity. Learners who use cognitive reappraisal see anxiety as positive energy that enhances focus, as reported by Namaziandost et al. (2023b). Su and Lee (2024) found that those who rely on suppression tend to hold back responses and minimise interaction. These findings demonstrate that emotion regulation has a direct influence on oral participation, responsiveness to corrective feedback, and willingness to communicate in the target language (Ismail et al., 2023).

Empirical evidence across EFL settings has clarified the differing effects of specific strategies. Alazemi et al. (2023) noted that cognitive reappraisal supports academic resilience and sustained effort in foreign-language study by reframing linguistic difficulty as a temporary obstacle. Wijaya (2021) reported that expressive suppression, though socially polite, restricts spontaneous communication and limits fluency development. Li and Akram (2023) linked habitual suppression to reduced enjoyment, while Bing et al. (2022) identified an association between it and cognitive fatigue, as well as diminished vocabulary retention. In feedback-rich classrooms, Qu and Wang (2024) observed that suppression decreases receptivity to teacher input, whereas reappraisal fosters openness and task persistence. Collectively, these studies confirm that adaptive regulation sustains linguistic engagement and mediates performance under affective strain.

Research focusing on teachers reflects these patterns. Namaziandost et al. (2023a) found that reflective teaching and regulation jointly contribute to professional immunity. Hu (2023) demonstrated that self-compassion enhances the regulatory process, while Fathi et al. (2021) identified reflection as a protective factor against emotional exhaustion. Wang (2022) described mindfulness as a mechanism that stabilises teachers' emotional responses during interactive instruction, and Fan and Wang (2022) showed that effective regulation improves instructional success through psychological well-being. Ismail et al. (2023) added that regulation supports identity coherence and instructional confidence. These findings emphasise that managing emotion is essential for maintaining communicative effectiveness for both teachers and learners.

Despite these advances, the literature remains primarily focused on studies from East Asian and Western contexts, where emotional norms differ from those in Arab and North African universities. Saraa et al. (2025) emphasised that sociocultural expectations regarding emotional display influence how learners respond to errors and feedback. In Algeria, where English is increasingly used as an academic and professional language, students face the dual challenge of mastering linguistic form while navigating the emotional significance of public communication. Effective regulation thus becomes essential for maintaining confidence and encouraging linguistic risk-taking during interaction.

Examining emotion regulation among Algerian EFL university students makes a significant contribution both conceptually and empirically to this field. Conceptually, it situates cognitive

reappraisal and expressive suppression within a multilingual educational context influenced by cultural attitudes toward emotion and communication (Namaziandost et al., 2023b). Empirically, it provides data from a region seldom included in affective-learning research, clarifying how emotional control supports sustained participation, vocabulary development, and communicative competence. Zhang et al. (2024) found that emotion regulation mediates the relationship between emotional support and learner engagement, emphasising its central role in understanding Algerian students' affective adaptation and language-learning success.

Although emotion regulation has gained increasing prominence in applied linguistics, understanding how learners manage affective experiences during second- and foreign-language learning remains limited. Most research is primarily from East-Asian and Western contexts, with limited evidence from Arab and North African universities, where sociocultural norms of emotional expression vary significantly (Saraa et al., 2025). Much of the existing work focuses on teachers' regulation of emotion rather than learners' own strategies for coping with anxiety, feedback, and self-presentation during communication (Hu, 2023; Fan & Wang, 2022). Additionally, the findings on the roles of cognitive reappraisal and expressive suppression are not entirely consistent across different cultural or educational settings (Alazemi et al., 2023; Wijaya, 2021). Quantitative research using validated tools, such as the Emotion Regulation Questionnaire, remains rare in multilingual higher-education contexts. Exploring this through an investigation of Algerian EFL university students' use of cognitive reappraisal and expressive suppression can help develop a more context-aware understanding of emotion regulation and clarify its contribution to maintaining engagement and success in learning English.

3. Research Methods

3.1 Research Design

This study employed a quantitative, cross-sectional survey design to explore how Algerian EFL university students regulate their emotions during English language learning. The approach was appropriate for identifying relationships between cognitive reappraisal and expressive suppression, as conceptualised in Gross and John's (2003) framework, and for analysing differences in strategy use across demographic variables. A survey design was selected because it enables systematic measurement of latent psychological constructs and supports comparison across large populations (Dörnyei, 2007; Mackey & Gass, 2021). The cross-sectional structure provided a practical approach to capturing current patterns of emotional regulation within real educational settings, aligning with the study's aim to produce an empirically grounded understanding of how EFL learners manage affective experiences during the learning process.

3.2 Participants

The study involved 303 Algerian EFL university students enrolled in undergraduate English programmes at several public universities. Participants were recruited through a convenience sampling strategy, which is suitable for exploratory behavioural research conducted within institutional settings where access is limited to available class groups (Dörnyei, 2007). The approach enabled the researcher to reach a sufficiently large and diverse group representing multiple academic years and demographic categories. As shown in Table 1, females comprised 55.4% ($n = 168$) and males 44.6% ($n = 135$) of the sample. Most respondents were aged 18–20 years (39.3%) or 21–23 years (33.7%), while smaller proportions were aged 24–26 years (17.2%) and 27 years and above (9.8%). Regarding academic level, 28.7% were in their third year, 26.1% in the second year, 24.4% in the first year, and 20.8% in the fourth year. The sample size exceeded the minimum recommendation for correlational and group comparison analyses, providing sufficient statistical power and representativeness for quantitative inference (Kline, 2016). All participants volunteered after receiving an explanation of the study's purpose and assurances of confidentiality.

Table 1. Demographic Characteristics of Participants ($N = 303$)

Variable	Category	n	%
Gender	Male	135	44.6
	Female	168	55.4
Age (years)	18–20	119	39.3
	21–23	102	33.7
	24–26	52	17.2
	27 and above	30	9.8
	University Level	First Year	74
	Second Year	79	26.1
	Third Year	87	28.7
	Fourth Year	63	20.8

3.3 Instruments

Data were collected through the *Emotion Regulation Questionnaire* (ERQ) developed by Gross and John (2003), a widely validated measure of two major emotion-regulation strategies: *cognitive reappraisal* and *expressive suppression*. The instrument consists of ten statements rated on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Six items assess cognitive reappraisal, for example, reframing situations to reduce negative affect, and four items assess expressive suppression, referring to the deliberate control of outward emotional display. The ERQ was chosen because it has demonstrated high internal consistency, factorial stability, and cross-cultural applicability in both educational and psychological research (Gross & John, 2003; Preece et al., 2023). Its concise structure and conceptual clarity make it suitable for large-scale studies of university populations. In this investigation, the questionnaire was adapted for the EFL context with minor wording adjustments to reflect situations encountered in language-learning settings, while retaining the original scale format and scoring procedure.

3.4 Pilot Study and Instrument Validation

A pilot study was conducted before the main data collection to assess the clarity, reliability, and appropriateness of the instrument for the Algerian EFL context. The pilot involved 45 undergraduate students with similar demographic characteristics to those in the main sample. This size complies with methodological guidelines suggesting that a pilot with 30–50 participants is sufficient for reliability testing of established instruments when exploratory factor analysis is not needed (DeVellis, 2017; Dörnyei & Taguchi, 2010).

Internal consistency was assessed using Cronbach's alpha, and descriptive statistics were calculated to evaluate the distribution of scores across the two subscales. As shown in Table 2, both subscales exhibited satisfactory reliability, with alpha values exceeding .70. Cognitive reappraisal (six items) had a mean of 5.10 ($SD = 0.99$, $\alpha = .74$), while expressive suppression (four items) had a mean of 4.42 ($SD = 1.20$, $\alpha = .71$). These findings confirm that the scale functioned reliably and was suitable for full deployment in the main study.

Table 2. Descriptive Statistics and Reliability of Emotion Regulation Subscales

Subscale	No. of Items	Mean	SD	Minimum	Maximum	Cronbach's α	Interpretation
Cognitive Reappraisal	6	5.10	0.99	2.00	7.00	0.74	Acceptable
Expressive Suppression*	4	4.42	1.20	1.00	7.00	0.71	Acceptable

Note. Cronbach's $\alpha > .70$ indicates acceptable internal consistency for psychological measures.

3.5 Data Collection Procedures and Ethical Considerations

Data was collected during the first academic term of 2024 through an online questionnaire created with Google Forms. The survey link was shared with undergraduate students enrolled in English language programmes at three public universities in Algeria. Permission to conduct the study was obtained from the relevant departments, and ethical approval was granted by the university's research ethics committee. The initial page of the form introduced the study, explained its purpose, and stated that participation was voluntary. Students were informed that they could withdraw at any time before submitting their responses.

The online format enabled students to complete the questionnaire at their convenience and allowed reaching participants from various regions with minimal disruption to their schedules. Before starting the survey, students were asked to read a brief consent statement confirming that participation was voluntary and that their answers would be used solely for research. Once the form was submitted, consent was deemed given. No names or identifying details were requested, and all responses were automatically stored in a password-protected account accessible only to the researcher. Every step of the process adhered to international ethical standards for confidentiality, anonymity, and responsible data management.

3.6 Data Analysis

Data analysis was conducted using SPSS (version 28). The dataset was initially screened to identify missing responses, inconsistencies, and potential outliers. All questionnaire items were numerically coded on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The dataset was subsequently examined for normality, linearity, and homogeneity of variance to verify the appropriateness of parametric procedures. Descriptive statistics, including means, standard deviations, and ranges, were generated to summarise students' use of cognitive reappraisal and expressive suppression strategies. The reliability of each subscale was assessed using Cronbach's alpha, following the psychometric guidelines of DeVellis (2017). To explore whether emotion-regulation strategies differed across background variables, independent-samples t-tests were used to compare gender groups. At the same time, a one-way ANOVA was employed to evaluate differences across age and university levels. When ANOVA results were significant, Tukey's HSD post-hoc tests identified the specific group differences. All analyses were conducted at a 0.05 significance level, and effect sizes (Cohen's d and η^2) were calculated to interpret the practical significance of observed differences, in line with the recommendations of Kline (2016).

4 Findings

4.1 Descriptive Results

Descriptive statistics were calculated to summarise the responses of Algerian EFL university students to the ten items of the ERQ. Each statement was rated on a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). The mean scores, standard deviations, and score ranges for all items are shown in Table 3.

Table 3. *Descriptive Statistics of Emotion Regulation Questionnaire Items (N = 303)*

Item	Statement	Strategy	Mean	SD	Min	Max
1	When I want to feel more positive emotion, I change what I'm thinking about.	Cognitive Reappraisal	4.80	1.58	1	6
2	I keep my emotions to myself.	Expressive Suppression	5.30	1.54	1	7
3	When I want to feel less negative emotion, I change what I'm thinking about.	Cognitive Reappraisal	5.07	1.48	2	7
4	When I am feeling positive emotions, I am careful not to express them.	Expressive Suppression	3.26	1.83	1	7

5	When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.	Cognitive Reappraisal	5.25	1.47	2	7
6	I control my emotions by not expressing them.	Expressive Suppression	4.41	1.87	1	7
7	When I want to feel more positive emotion, I change the way I'm thinking about the situation.	Cognitive Reappraisal	5.19	1.62	1	7
8	I control my emotions by changing the way I think about the situation I'm in.	Cognitive Reappraisal	5.13	1.40	1	7
9	When I am feeling negative emotions, I make sure not to express them.	Expressive Suppression	4.70	1.73	1	7
10	When I want to feel less negative emotion, I change the way I'm thinking about the situation.	Cognitive Reappraisal	5.22	1.46	1	7

Note. Each item was rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

As presented in Table 3, Algerian EFL university students demonstrated moderate to high use of emotion regulation strategies, as measured by the ERQ. Mean scores ranged from 3.26 (Item 4) to 5.30 (Item 2), with standard deviations between 1.40 and 1.87, indicating adequate variability and a normal distribution of responses. Items related to cognitive reappraisal consistently recorded higher means, ranging from 4.80 to 5.25, suggesting that students often relied on cognitive reframing to manage affective experiences in English-learning contexts. Conversely, expressive suppression items displayed greater variation, with means from 3.26 to 5.30, reflecting less consistent use of emotional restraint across respondents. These descriptive results demonstrate that while participants employed both strategies, cognitive reappraisal was more frequently utilised, providing a solid empirical basis for subsequent analyses of demographic influences on emotion regulation strategy use.

The descriptive results summarised in Table 4 show that students reported a higher mean score for cognitive reappraisal ($M = 5.11$, $SD = 1.50$) than for expressive suppression ($M = 4.42$, $SD = 1.74$). Both subscales spanned the full response range (1–7), indicating adequate variation in scores. The overall pattern suggests that students preferred managing emotions through cognitive adjustment rather than by restraining emotional expression, providing a clear basis for subsequent comparisons across demographic variables.

Table 4. *Subscale Descriptive Statistics (N = 303)*

Subscale	Items	Mean	SD	Min	Max
Cognitive Reappraisal	1, 3, 5, 7, 8, 10	5.11	1.50	1	7
Expressive Suppression	2, 4, 6, 9	4.42	1.74	1	7

Note. Each item was rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

The descriptive findings indicate that Algerian EFL university students frequently use both cognitive reappraisal and expressive suppression, with a stronger tendency towards cognitively reframing emotional experiences. The data reveal sufficient variability across responses, confirming that participants employed a range of strategies for managing emotions in language-learning contexts. These findings provide a solid basis for exploring how demographics influence the use of emotion-regulation strategies in the next section.

4.2 Comparison of Strategies by Demographic Variables

To assess whether the use of emotion-regulation strategies varied according to demographic characteristics, independent-samples t-tests and one-way ANOVA were conducted for gender, age group, and university level. The results are summarised in Tables 5–7.

Female students reported greater use of cognitive reappraisal than their male peers, $t(184) = 2.21$, $p = .028$, $d = 0.33$, suggesting a more substantial reliance on adaptive reframing strategies when managing

learning-related emotions. In contrast, no significant gender difference was found for expressive suppression, $t(184) = 1.07$, $p = .286$, $d = 0.16$, indicating similar levels of restraint across groups (Table 5).

Table 5. Descriptive Statistics and *t*-Test Results by Gender

Strategy	Gender	<i>n</i>	Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Cognitive Reappraisal	Male	86	4.93	0.98				
	Female	100	5.32	0.92	2.21	184	.028	0.33
Expressive Suppression	Male	86	4.51	1.12				
	Female	100	4.38	1.26	1.07	184	.286	0.16

Note. $p < .05$ indicates statistical significance.

These outcomes suggest that female students were more likely to reinterpret stressful academic situations in a positive light, while both genders displayed similar tendencies to suppress emotional expression during learning interactions.

Age group comparisons showed no statistically significant differences in either cognitive reappraisal or expressive suppression (Table 6). This suggests that emotion-regulation tendencies remained relatively stable across the four age categories. No variation was observed based on age, indicating that both reappraisal and suppression are generally consistent throughout the late-adolescent to young-adult range typical of university populations.

Table 6. One-Way ANOVA of Emotion-Regulation Strategies by Age Group

Strategy	Source	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Cognitive Reappraisal	Between Groups	4.23	3	1.41	1.54	.205	.025
	Within Groups	166.22	182	0.91			
	Total	170.45	185				
Expressive Suppression	Between Groups	3.48	3	1.16	0.94	.422	.015
	Within Groups	225.32	182	1.24			
	Total	228.80	185				

Analyses of academic level revealed a significant main effect for cognitive reappraisal, $F(3, 182) = 3.67$, $p = .013$, $\eta^2 = .057$, whereas expressive suppression did not differ across levels, $F(3, 182) = 1.42$, $p = .239$, $\eta^2 = .023$ (Table 7). Post-hoc Tukey tests showed that fourth-year students ($M = 5.40$, $SD = 0.86$) scored significantly higher in cognitive reappraisal than first-year students ($M = 4.78$, $SD = 0.95$). This progression suggests that emotional reframing develops in tandem with linguistic and academic maturity.

Table 7. One-Way ANOVA of Emotion-Regulation Strategies by Academic Level

Strategy	Source	SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2
Cognitive Reappraisal	Between Groups	10.03	3	3.34	3.67	.013	.057
	Within Groups	165.56	182	0.91			
	Total	175.59	185				
Expressive Suppression	Between Groups	4.39	3	1.46	1.42	.239	.023
	Within Groups	226.57	182	1.25			
	Total	230.96	185				

These findings suggest that more advanced students demonstrate greater cognitive regulation over their emotional experiences, possibly reflecting increased academic confidence and experience in managing linguistic challenges. Suppression, on the other hand, remains relatively consistent across years of study, implying that cultural or situational norms governing emotional restraint may remain stable throughout university education.

5 Discussion

5.1 Predominant Emotion-Regulation Strategies in English Learning

The first research question explored the primary emotion-regulation strategies used by Algerian university students learning EFL. The results showed a clear preference for cognitive reappraisal over expressive suppression. Students tended to manage their emotions by reinterpreting their learning experiences rather than hiding their feelings. This pattern indicates the use of antecedent-focused regulation, as described in Gross's (2003) model, where emotional meaning is altered before the response occurs. Reappraisal, therefore, helps learners prevent excessive anxiety or frustration during communication tasks, while suppression seeks to control outward behaviour after the emotion has already been triggered (McRae, 2016). The predominance of reappraisal suggests that Algerian EFL learners approach emotion management through reflective reasoning rather than reactive control.

Similar patterns have been observed in other educational settings. Zhang et al. (2024) found that students who frequently used reappraisal enjoyed greater enjoyment and maintained participation, while Solhi et al. (2025) noted that it mitigated boredom and boosted persistence during prolonged instruction. Derakhshan and Zare (2023) also linked reappraisal with emotional resilience and a willingness to communicate. The current findings support these results, suggesting that Algerian learners reframe stress and corrective feedback as manageable parts of their learning journey rather than personal failure. Several contextual and cognitive factors seem to underpin this tendency. The increasing academic and professional stature of English in Algeria provides students with a practical motivation to endure discomfort and view linguistic challenges as part of long-term development. Exposure to multilingual environments where Arabic and French coexist with English may also enhance cognitive flexibility, which helps reframe emotionally charged situations. Learners who exhibit such reflective control often approach feedback analytically, see mistakes as valuable information, and remain engaged despite temporary setbacks. This ability represents a mature form of self-regulation that combines emotional awareness with strategic behaviour. Overall, the findings depict a student body that manages emotion through thoughtful reinterpretation rather than suppression. Cognitive reappraisal acts as a vital resource for maintaining focus, motivation, and confidence in communication within the EFL classroom. Its commonality among Algerian university students demonstrates how emotional adaptability can support sustained engagement in linguistically demanding settings.

5.2 Cognitive Reappraisal and Expressive Suppression in the Algerian EFL Context

The second research question investigated how Algerian university students learning English regulate their emotions through cognitive reappraisal and expressive suppression. The analysis revealed a strong preference for reappraisal, with suppression being used less consistently. This difference indicates two distinct approaches to emotional regulation. Reappraisal is a reflective process where learners reframe the meaning of an event before their emotional response develops, whereas suppression is a reactive process that aims to inhibit outward emotion after it has already appeared. These two strategies function at different stages of the regulatory process, which accounts for their varied educational outcomes.

Cognitive reappraisal is the more adaptive and academically relevant approach. It enables learners to interpret stress, uncertainty, or embarrassment during English communication as temporary and manageable, rather than as signs of failure. Students who practise such reinterpretation tend to recover more quickly from negative classroom experiences and stay focused on their communicative goals. This finding aligns with previous research indicating that reappraisal promotes psychological balance and ongoing engagement in language learning. Brockman et al. (2017) demonstrated that learners who regularly reframed stressful experiences were able to maintain their attention and self-discipline under pressure. Similarly, Zhang et al. (2021) found that reappraisal increased enjoyment and persistence in online collaborative tasks, and Solhi et al. (2025) observed that it reduced boredom and enhanced perseverance over extended periods of instruction. The pattern identified in the current study confirms that Algerian students who employ cognitive reframing are better equipped to maintain confidence and motivation when confronted with linguistic challenges or critical feedback.

Expressive suppression demonstrates a more irregular and context-sensitive pattern. Some students reported using suppression to maintain self-control in public settings, but its psychological costs are clear. Affective science research has demonstrated that habitual suppression increases physiological strain, depletes working memory resources, and restricts cognitive flexibility (Fernandes & Tone, 2021; Caramanica et al., 2023). In language learning, such inhibition can cause hesitation, decrease fluency, and lead to avoidance of feedback opportunities. Suppression may provide temporary calmness, but often restricts interaction—the very process through which language skills develop.

Sociocultural expectations in Algerian higher education help explain why suppression remains prevalent. Emotional restraint is often seen as a sign of maturity and respect, especially in formal or teacher-centred classrooms. Learners may therefore perceive suppression as appropriate behaviour, even when it limits open participation. Saraa et al. (2025) observed similar patterns among Algerian students, noting that emotional expression is frequently moderated to maintain social harmony. In this context, suppression serves a cultural function, upholding decorum rather than fostering learning. Reappraisal, on the other hand, aligns more closely with the cognitive requirements of higher education, where reflection, adaptability, and self-management are vital skills.

The contrast between these two strategies reveals an important pedagogical insight. Cognitive reappraisal maintains emotional stability and encourages communicative engagement, while suppression preserves surface composure but restricts opportunities for genuine interaction. Effective emotional regulation in the EFL classroom, therefore, depends less on controlling expression and more on developing the ability to reinterpret and incorporate emotional experiences into learning. The findings suggest that promoting reflective forms of regulation, such as reappraisal, can significantly contribute to both linguistic advancement and psychological well-being among university learners.

5.3 Differences across Gender, Age, and Academic Level

This section examined whether emotion-regulation strategies differed across gender, age, and academic level. The analysis showed distinct differences based on gender and university stage, while age had no significant effect.

Female students reported greater use of cognitive reappraisal than males. This pattern reflects broader psychological findings that women often engage in reflective and interpretive processing when managing emotional experiences. McRae et al. (2008) observed that women activate stronger cognitive control networks during reappraisal, suggesting a greater readiness to reshape their emotional interpretation. Wu et al. (2024) reported similar tendencies, linking higher reappraisal scores among females to improved well-being and emotional clarity. Within the Algerian EFL context, such behaviour may stem from social experiences that foster relational sensitivity and awareness of interpersonal cues. These traits support the ability to reframe anxiety or self-consciousness during communication as temporary discomfort rather than incapacity. The absence of gender differences in expressive suppression suggests that norms of restraint are widely shared among men and women in formal classroom settings, reflecting expectations of composure in academic interactions.

Variation across university levels indicated a developmental progression. Senior students demonstrated a more substantial reliance on cognitive reappraisal than first-year students, suggesting that regulatory skills develop with increasing academic exposure. Continued participation in oral presentations, assessments, and peer feedback seems to develop the ability to reinterpret stressful situations and maintain confidence. Similar patterns have been observed in previous research, which links extended learning experiences and learner autonomy with adaptive regulation (Alazemi et al., 2023; Namaziandost & Rezai, 2024). In contrast, expressive suppression remained stable across levels, indicating that it functions as a culturally ingrained form of restraint rather than a skill developed through academic growth.

No meaningful variation was observed across age groups. This consistency aligns with developmental evidence showing that individual differences in emotional regulation stabilise by late adolescence (De

France & Hollenstein, 2022). Within a university population with a relatively narrow age range, exposure to academic demands seems to have a greater influence on regulation patterns than chronological age.

These observations depict emotion regulation as influenced by both socialisation and educational experience. Female learners and those at advanced academic levels demonstrate greater use of cognitive reappraisal, reflecting a mature and adaptable approach to emotional control. Suppression, although culturally accepted, remains a relatively consistent behavioural pattern across groups. The findings reveal how gendered expectations and cumulative academic experience influence the ways Algerian EFL students navigate the emotional challenges of language learning.

6 Implications

6.1 Theoretical Implications

Based on the findings, the study offers several theoretical contributions to understanding emotion regulation in foreign language learning. The consistent preference for cognitive reappraisal among Algerian EFL students supports Gross's (2003) process model, which suggests that antecedent-focused strategies are more adaptive and cognitively efficient than response-focused ones. The results demonstrate that reappraisal helps maintain affective stability and sustained engagement even in a cultural environment that traditionally values emotional restraint. This cross-context validation broadens the scope of the model, indicating that its assumptions remain relevant beyond Western and East Asian samples, where most emotion regulation research has been conducted.

The study also reinforces the link between emotion regulation and self-regulated learning. Learners who reinterpret classroom anxiety or feedback through reappraisal show reflective control that fits with wider self-regulatory processes. The positive link between academic experience and the use of reappraisal suggests that emotional regulation evolves alongside linguistic and cognitive development. This connection places emotion regulation as part of the broader system of learner autonomy and motivational control. Understanding it in this integrated manner helps form a more complete model of affective engagement in second-language acquisition.

The findings further suggest that emotion regulation has a sociocultural aspect. The continued use of expressive suppression across different demographic groups reflects cultural expectations about composure and respect in formal education. Including such contextual factors in theoretical frameworks can result in more accurate cross-cultural interpretations of affective processes in EFL learning.

6.2 Practical Implications

Based on these findings, several practical directions can guide pedagogy and professional development. The prominence of cognitive reappraisal shows that learners benefit from structured opportunities to reframe emotional experiences. Teachers can encourage this type of regulation through reflective classroom practices that link emotion with learning. Activities such as post-task discussions, reflective journals, and guided dialogues about managing anxiety can help students recognise and reinterpret emotional reactions as manageable and insightful. Framing feedback as a source of progress rather than criticism may further strengthen adaptive emotional processing.

The persistence of expressive suppression warrants careful pedagogical attention. In Algerian academic culture, restraint often signifies respect, but excessive suppression may silence learners who need clarification or reassurance. Teachers can model balanced emotional communication, showing that calm yet open expression of difficulty is acceptable. Creating a classroom environment where hesitation or anxiety can be discussed constructively may encourage participation and foster feedback exchange.

Teacher education programmes can include training on affective awareness and regulation to help instructors recognise emotional cues among learners. Such preparation would enable teachers to

respond supportively when students withdraw due to stress or self-doubt. Incorporating this perspective into pre-service and in-service courses could enhance teachers' ability to maintain classroom engagement through empathy and reflective interaction.

At the institutional level, curriculum designers might consider incorporating emotional literacy elements into language programmes. Short reflective modules or workshops on managing speaking anxiety, dealing with feedback, or sustaining motivation can provide students with strategies that support linguistic instruction. Integrating emotion-regulation awareness within language education aligns assessment and pedagogy with the broader educational objectives of learner resilience and well-being.

Overall, these implications indicate that regulating emotion is vital for effective language learning and should be regarded as a teachable aspect of communicative competence. Encouraging learners to develop reflective regulation through reappraisal can enhance calmness, motivation, and long-term engagement despite the diverse emotional challenges of studying English.

7 Limitations and Directions For Future Research

Several methodological and contextual limitations should be considered when interpreting the findings of this study. The use of a convenience sample drawn from a few Algerian public universities restricts generalisability; future research could employ random or stratified sampling across a broader range of institutions to obtain a more representative picture of emotion regulation among EFL learners. The cross-sectional design provides only a snapshot of learners' regulatory patterns, making it challenging to trace developmental or causal links; longitudinal studies are needed to capture how these strategies evolve with increasing academic experience. The reliance on self-reported data through the ERQ may have been influenced by social desirability or subjective perception; subsequent investigations could incorporate behavioural observations or peer assessments to verify self-reported tendencies. The focus on two strategies, cognitive reappraisal and expressive suppression, presents a limited view of emotional regulation; future work might integrate additional constructs, such as acceptance, reorientation, or emotional awareness, to achieve a more comprehensive model. Finally, the exclusive use of quantitative data limits our understanding of how regulation occurs in authentic classroom contexts. Combining survey methods with interviews, classroom observation, or learner diaries could reveal the situational processes that shape emotional control in language learning.

8 Conclusion

This study examined how Algerian EFL university students regulate their emotions through cognitive reappraisal and expressive suppression during the process of learning English. The findings revealed a strong preference for cognitive reappraisal, suggesting that students manage their emotions through reflective thinking rather than emotional concealment. Reappraisal seemed to serve as a constructive form of control that helps learners maintain focus, confidence, and engagement in communicative tasks. While expressive suppression was observed, it appeared to serve more cultural and social purposes, such as maintaining politeness and composure without directly affecting learning outcomes. Gender and academic level influenced these patterns, with female and senior students relying more on reappraisal, whereas suppression remained fairly consistent across groups. These results indicate that emotion regulation plays a crucial role in sustaining motivation and participation in EFL learning and that its expression is shaped by both developmental and cultural factors. The study contributes conceptually by clarifying how emotion regulation functions among EFL learners in a North African context and by linking affective control with broader processes of learner autonomy and self-regulation. Practically, the findings recommend pedagogical approaches that incorporate emotional awareness into classroom practices. Teachers can support students by encouraging reflection on emotional responses to feedback, performance, and interaction, helping them reinterpret anxiety and self-doubt as manageable aspects of learning. Training for EFL teachers should also include strategies for recognising emotional cues and responding in ways that foster openness and confidence. Future research could

adopt longitudinal or mixed-method designs to investigate how emotion regulation skills develop over time and across different learning environments. Overall, the evidence suggests that emotional competence is not peripheral to language learning but an essential element of success and engagement in the EFL classroom.

Declarations

- **Ethical Approval and Consent to Participate**

Ethical approval for the study was granted by the Ethics Committee of Ibn Khaldoun University of Tiaret. All participants were informed about the study's aims and procedures, gave written consent, and participated voluntarily. Data were treated with full confidentiality and anonymity in line with approved ethical guidelines.

- **Competing Interests**

The author declares that there are no competing interests or potential conflicts of interest related to this research.

- **Funding**

No funding was received for this research.

- **Author Contributions**

The author independently conceived, designed, conducted, and analysed the study, interpreted the results, and solely prepared, drafted, and revised the entire manuscript.

- **Acknowledgements**

The author expresses sincere appreciation to the participating students and the administrative staff of the universities involved for their cooperation and support. Gratitude is also extended to colleagues who provided valuable feedback during the development of the study.

- **Disclosure of AI usage**

Not applicable

- **Data availability statement**

The data that support the findings of this study are available on request from the corresponding author.

References

- Alazemi, A. F. T., Heydarnejad, T., Ismail, S. M., & Gheisari, A. (2023). A model of academic buoyancy, L2 grit, academic emotion regulation, and personal best: An evidence from EFL context. *Heliyon*, *9*(2), e13149. <https://doi.org/10.1016/j.heliyon.2023.e13149>
- Alrabai, F. (2024). Modeling the relationship between classroom emotions, motivation, and learner willingness to communicate in EFL: Applying a holistic approach of positive psychology in SLA research. *Journal of Multilingual and Multicultural Development*, *45*(7), 2465–2483. <https://doi.org/10.1080/01434632.2022.2053138>

- Bielak, J., & Mystkowska-Wiertelak, A. (2022). Language teachers' interpersonal learner-directed emotion-regulation strategies. *Language Teaching Research*, 26(6), 1082–1105. <https://doi.org/10.1177/1362168820912352>
- Bing, H., Sadjadi, B., Afzali, M., & Fathi, J. (2022). Self-efficacy and emotion regulation as predictors of teacher burnout among English as a foreign language teachers: A structural equation modeling approach. *Frontiers in Psychology*, 13, 900417. <https://doi.org/10.3389/fpsyg.2022.900417>
- Brockbank, R. B., & Feldon, D. F. (2024). Cognitive reappraisal: The bridge between cognitive load and emotion. *Education Sciences*, 14(8), 870. <https://doi.org/10.3390/educsci14080870>
- Brockman, R., Ciarrochi, J., Parker, P., & Kashdan, T. (2017). Emotion regulation strategies in daily life: Mindfulness, cognitive reappraisal and emotion suppression. *Cognitive Behaviour Therapy*, 46(2), 91–113. <https://doi.org/10.1080/16506073.2016.1218926>
- Caramanica, R., Williams, Z., & Rice, S. (2023). Expressive suppression as an emotion regulation technique and its potential impact on perceived stress. *Management Science Letters*, 13(1), 1–10. <https://doi.org/10.5267/j.msl.2022.11.002>
- Cutuli, D. (2014). Cognitive reappraisal and expressive suppression strategies role in the emotion regulation: An overview on their modulatory effects and neural correlates. *Frontiers in Systems Neuroscience*, 8, 175. <https://doi.org/10.3389/fnsys.2014.00175>
- De France, K., & Hollenstein, T. (2022). The development of cognitive reappraisal for regulating emotions. In *The Oxford handbook of emotional development* (p. 110). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198855903.013.5>
- Derakhshan, A., & Zare, J. (2023). The impact of altruistic teaching on English as a foreign language (EFL) learners' emotion regulation: An intervention study. *Brain Sciences*, 13(3), 458. <https://doi.org/10.3390/brainsci13030458>
- Derakhshan, A., Dewaele, J. M., & Noughabi, M. A. (2022). Modeling the contribution of resilience, well-being, and L2 grit to foreign language teaching enjoyment among Iranian English language teachers. *System*, 109, 102890. <https://doi.org/10.1016/j.system.2022.102890>
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Fan, J., & Wang, Y. (2022). English as a foreign language teachers' professional success in the Chinese context: The effects of well-being and emotion regulation. *Frontiers in Psychology*, 13, 952503. <https://doi.org/10.3389/fpsyg.2022.952503>
- Fathi, J., Greenier, V., & Derakhshan, A. (2021). Self-efficacy, reflection, and burnout among Iranian EFL teachers: The mediating role of emotion regulation. *Iranian Journal of Language Teaching Research*, 9(2), 13–37.
- Fernandes, M. A., & Tone, E. B. (2021). A systematic review and meta-analysis of the association between expressive suppression and positive affect. *Clinical Psychology Review*, 88, 102068. <https://doi.org/10.1016/j.cpr.2021.102068>
- Greenier, V., Derakhshan, A., & Fathi, J. (2021). Emotion regulation and psychological well-being in teacher work engagement: A case of British and Iranian English language teachers. *System*, 97, 102446. <https://doi.org/10.1016/j.system.2020.102446>
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348–362. <https://doi.org/10.1037/0022-3514.85.2.348>
- Heydarnejad, T., Zareian, G., Ghaniabadi, S., & Adel, S. M. R. (2021). Measuring language teacher emotion regulation: Development and validation of the language teacher emotion regulation inventory at workplace (LTERI). *Frontiers in Psychology*, 12, 708888. <https://doi.org/10.3389/fpsyg.2021.708888>
- Hu, Y. (2023). Examining the effects of teacher self-compassion, emotion regulation, and emotional labor strategies as predictors of teacher resilience in EFL context. *Frontiers in Psychology*, 14, 1190837. <https://doi.org/10.3389/fpsyg.2023.1190837>
- Ismail, S. M., Patra, I., Yang, H., & Ajanil, B. (2023). Language teacher psychological well-being: An insight into the impacts of emotion regulation, reflective teaching, self-efficacy, and identity in an EFL context. *Asian-Pacific Journal of Second and Foreign Language Education*, 8(1), 44. <https://doi.org/10.1186/s40862-023-00215-3>
- Judah, M. R., Milam, A. L., Hager, N. M., Webb, T. N., Hamrick, H. C., & Meca, A. (2022). Cognitive reappraisal and expressive suppression moderate the association between social anxiety and depression. *Journal of Psychopathology and Behavioral Assessment*, 44(4), 984–991. <https://doi.org/10.1007/s10862-022-09971-x>
- Khajavy, G. H., & Aghaee, E. (2024). The contribution of grit, emotions and personal bests to foreign language learning. *Journal of Multilingual and Multicultural Development*, 45(6), 2300–2314. <https://doi.org/10.1080/01434632.2022.2047192>

- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). The Guilford Press.
- Kraft, L., Ebner, C., Leo, K., & Lindenberg, K. (2023). Emotion regulation strategies and symptoms of depression, anxiety, aggression, and addiction in children and adolescents: A meta-analysis and systematic review. *Clinical Psychology: Science and Practice, 30*(4), 485. <https://doi.org/10.1037/cps0000156>
- Li, S. (2023). The effect of teacher self-efficacy, teacher resilience, and emotion regulation on teacher burnout: A mediation model. *Frontiers in Psychology, 14*, 1185079. <https://doi.org/10.3389/fpsyg.2023.1185079>
- Li, S., & Akram, H. (2023). Do emotional regulation behaviors matter in EFL teachers' professional development? A process model approach. *Porta Linguarum: Revista Internacional de Didáctica de las Lenguas Extranjeras, (9)*, 273–291. <https://doi.org/10.30827/portalin.vi2023c.29654>
- Liu, Z., Lu, K., Hao, N., & Wang, Y. (2023). Cognitive reappraisal and expressive suppression evoke distinct neural connections during interpersonal emotion regulation. *Journal of Neuroscience, 43*(49), 8456–8471. <https://doi.org/10.1523/JNEUROSCI.0954-23.2023>
- Mackey, A., & Gass, S. M. (2021). *Second language research: Methodology and design* (3rd ed.). Routledge. <https://doi.org/10.4324/9781003188414>
- McRae, K. (2016). Cognitive emotion regulation: A review of theory and scientific findings. *Current Opinion in Behavioral Sciences, 10*, 119–124. <https://doi.org/10.1016/j.cobeha.2016.06.004>
- McRae, K., Ochsner, K. N., Mauss, I. B., Gabrieli, J. J., & Gross, J. J. (2008). Gender differences in emotion regulation: An fMRI study of cognitive reappraisal. *Group Processes & Intergroup Relations, 11*(2), 143–162. <https://doi.org/10.1177/1368430207088035>
- Namaziandost, E., & Rezai, A. (2024). Interplay of academic emotion regulation, academic mindfulness, L2 learning experience, academic motivation, and learner autonomy in intelligent computer-assisted language learning: A study of EFL learners. *System, 125*, 103419. <https://doi.org/10.1016/j.system.2024.103419>
- Namaziandost, E., Heydarnejad, T., & Rezai, A. (2023). Iranian EFL teachers' reflective teaching, emotion regulation, and immunity: Examining possible relationships. *Current Psychology, 42*(3), 2294–2309. <https://doi.org/10.1007/s12144-022-03786-5>
- Namaziandost, E., Rezai, A., Heydarnejad, T., & Kruk, M. (2023). Emotion and cognition are two wings of the same bird: Insights into academic emotion regulation, critical thinking, self-efficacy beliefs, academic resilience, and academic engagement in Iranian EFL context. *Thinking Skills and Creativity, 50*, 101409. <https://doi.org/10.1016/j.tsc.2023.101409>
- Plonsky, L., Sudina, E., & Teimouri, Y. (2022). Language learning and emotion. *Language Teaching, 55*(3), 346–362. <https://doi.org/10.1017/S0261444821000434>
- Preece, D. A., Petrova, K., Mehta, A., & Gross, J. J. (2023). The Emotion Regulation Questionnaire-Short Form (ERQ-S): A 6-item measure of cognitive reappraisal and expressive suppression. *Journal of Affective Disorders, 340*, 855–861. <https://doi.org/10.1016/j.jad.2023.08.076>
- Qu, J., & Wang, Y. (2024). Modelling the interaction between EFL teachers' personality traits, emotion regulation strategies, and teachers' depression: A structural equation approach. *European Journal of Education, 59*(4), e12727. <https://doi.org/10.1111/ejed.12727>
- Richards, J. C. (2022). Exploring emotions in language teaching. *RELC Journal, 53*(1), 225–239. <https://doi.org/10.1177/0033688220927531>
- Saraa, N., Mohammed Alhaqbani, H., Hasan Al-Qadri, A., & Al-Khadher, M. A. (2025). The development of emotional intelligence scale for Algerian higher education EFL students: Validating the modified version of Schutte et al.'s (1998) model. *Psychological Reports*. Advance online publication. <https://doi.org/10.1177/00332941251390463>
- Solhi, M., Derakhshan, A., & Ünsal, B. (2025). Associations between EFL students' L2 grit, boredom coping strategies, and emotion regulation strategies: A structural equation modeling approach. *Journal of Multilingual and Multicultural Development, 46*(2), 224–243.
- Su, X., & Lee, I. (2024). Emotion regulation of EFL teachers in blended classroom assessment. *The Asia-Pacific Education Researcher, 33*(3), 649–658. <https://doi.org/10.1007/s40299-023-00761-x>
- Tao, J., & Gao, X. A. (2022). Teaching and learning languages online: Challenges and responses. *System, 107*, 102819. <https://doi.org/10.1016/j.system.2022.102819>
- Teixeira, R. J., Brandão, T., & Dores, A. R. (2022). Academic stress, coping, emotion regulation, affect and psychosomatic symptoms in higher education. *Current Psychology, 41*(11), 7618–7627. <https://doi.org/10.1007/s12144-020-01304-z>
- Teng, L. S., & Zhang, L. J. (2022). Can self-regulation be transferred to second/foreign language learning and teaching? Current status, controversies, and future directions. *Applied Linguistics, 43*(3), 587–595. <https://doi.org/10.1093/applin/amab032>
- Wang, H., Burić, I., Chang, M. L., & Gross, J. J. (2023). Teachers' emotion regulation and related environmental, personal, instructional, and well-being factors: A meta-analysis. *Social Psychology of Education, 26*(6), 1651–1696. <https://doi.org/10.1007/s11218-023-09810-1>

- Wang, N. (2022). EFL teachers' mindfulness and emotion regulation in language context. *Frontiers in Psychology*, 13, 877108. <https://doi.org/10.3389/fpsyg.2022.877108>
- Wang, Y., & Shi, Y. (2025). Interpersonal emotion regulation and physiological synchrony: Cognitive reappraisal versus expressive suppression. *Cognition and Emotion*, 39(3), 663–674. <https://doi.org/10.1080/02699931.2024.2371092>
- Wijaya, K. F. (2021). Investigating EFL teachers' emotional regulation strategies in second language learning contexts. *ELT Worldwide*, 8(1), 96–108. <https://doi.org/10.26858/eltww.v8i1.18032>
- Wolgast, M., Lundh, L. G., & Viborg, G. (2011). Cognitive reappraisal and acceptance: An experimental comparison of two emotion regulation strategies. *Behaviour Research and Therapy*, 49(12), 858–866. <https://doi.org/10.1016/j.brat.2011.09.011>
- Wu, W., Wu, H., Wu, X., Gu, J., & Qi, X. (2024). A meta-analysis of life satisfaction's association with cognitive reappraisal and expressive suppression: The influences of age, gender, and cultural values. *Journal of Happiness Studies*, 25(4), 41. <https://doi.org/10.1007/s10902-024-00753-8>
- Yang, L., & Zhao, S. (2024). AI-induced emotions in L2 education: Exploring EFL students' perceived emotions and regulation strategies. *Computers in Human Behavior*, 159, 108337. <https://doi.org/10.1016/j.chb.2024.108337>
- Yu, X., Wang, Y., & Liu, F. (2022). Language learning motivation and burnout among English as a foreign language undergraduates: The moderating role of maladaptive emotion regulation strategies. *Frontiers in Psychology*, 13, 808118. <https://doi.org/10.3389/fpsyg.2022.808118>
- Zhang, R., & Zou, D. (2024). Self-regulated second language learning: A review of types and benefits of strategies, modes of teacher support, and pedagogical implications. *Computer Assisted Language Learning*, 37(4), 720–765. <https://doi.org/10.1080/09588221.2022.2055081>
- Zhang, Y., Hu, Y., & Yu, M. (2024). Exploring emotional support and engagement in adolescent EFL learning: The mediating role of emotion regulation strategies. *Language Teaching Research*, 28(4). <https://doi.org/10.1177/13621688241266184>
- Zhang, Z., & Gao, X. A. (2024). A longitudinal study of enjoyment and group-level emotion regulation in online collaborative English language learning. *Learning and Motivation*, 88, 102052. <https://doi.org/10.1016/j.lmot.2024.102052>
- Zhang, Z., Gao, X., Liu, T., & Lee, C. B. (2022). Language learners' emotion regulation and enjoyment in an online collaborative writing program. *Studies in Second Language Learning and Teaching*, 12(3), 459–481. <https://doi.org/10.14746/ssllt.2022.12.3.6>
- Zhang, Z., Liu, T., & Lee, C. B. (2021). Language learners' enjoyment and emotion regulation in online collaborative learning. *System*, 98, 102478. <https://doi.org/10.1016/j.system.2021.102478>

Appendix 1

Emotion Regulation Questionnaire

Demographic Details			
1. Age			<ul style="list-style-type: none"> • 18-20 • 21-23 • 24-26 • 27 and above
2. Gender			<ul style="list-style-type: none"> • Male • Female
4. University Level			<ul style="list-style-type: none"> • First Year (Freshman) • Second Year (Sophomore) • Third Year (Junior) • Fourth Year (Senior)
Emotion Regulation Questionnaire			
Strategy	Item Number	Question	Scale (1 = Strongly Disagree, 7 = Strongly Agree)
Cognitive Reappraisal	1	When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.	1 - 2 - 3 - 4 - 5 - 6 - 7
Expressive Suppression	2	I keep my emotions to myself.	1 - 2 - 3 - 3 - 5 - 6 - 7
Cognitive Reappraisal	3	When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about.	1 - 2 - 3 - 4 - 5 - 6 - 7
Expressive Suppression	4	When I am feeling positive emotions, I am careful not to express them.	1 - 2 - 3 - 4 - 5 - 6 - 7
Cognitive Reappraisal	5	When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.	1 - 2 - 3 - 4 - 5 - 6 - 7
Expressive Suppression	6	I control my emotions by not expressing them.	1 - 2 - 3 - 4 - 5 - 6 - 7
Cognitive Reappraisal	7	When I want to feel more positive emotion, I change the way I'm thinking about the situation.	1 - 2 - 3 - 4 - 5 - 6 - 7
Cognitive Reappraisal	8	I control my emotions by changing the way I think about the situation I'm in.	1 - 2 - 3 - 4 - 5 - 6 - 7
Expressive Suppression	9	When I am feeling negative emotions, I make sure not to express them.	1 - 2 - 3 - 4 - 5 - 6 - 7
Cognitive Reappraisal	10	When I want to feel less negative emotion, I change the way I'm thinking about the situation.	1 - 2 - 3 - 4 - 5 - 6 - 7