



Synthesis of current research on the affective dimensions of online English language education: Theories and praxis

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Abstract

The affective domain can impact the way teachers teach and students' motivation and engagement in learning in online contexts. This study focuses on the affective dimensions of online English language education by offering a comprehensive overview of the diverse types of emotions experienced by both students and teachers in online English language environments in terms of (1) the types of emotions and participants studied in specific virtual environments, (2) the theoretical approaches and pedagogical practices for studying emotions in online English language education, and (3) the methodological design features of the studies. Thematic analysis of the 40 selected studies highlighted these feelings as the focus, namely boredom, emotion regulation, emotional labour, emotional intelligence, stress, emotions towards L2 learning, foreign language enjoyment (FLE), FLE and foreign language anxiety/foreign language classroom anxiety, foreign language speaking anxiety, and positive and achievement emotions. The findings revealed the use of established theoretical frameworks such as control-value theory, the emotion regulation scale, the FLE and foreign language anxiety scales and other instruments, as well as questionnaires, interviews and multiple instruments to study emotions in online English language education. Educators can consider the emotionally resilient pedagogical practices identified in this study such as emotional scaffolding strategies and technology-assisted language learning or mobile-based language learning for emotion regulation in teaching and learning English online.

Keywords: affective dimension of language learning, online English language education, theories, praxis

Introduction

According to Ahmed (2024, p. 2), there is a need to look at the affective dimension in digital spaces because the affordances of digital tools are dependent “on a complex environment in which pedagogical possibilities are always emergent and attuned to (often unpredictable) affective relationship”. According to Richards (2022, p. 225), emotions are important as they “can shape the way teachers teach and can influence learners’ willingness to make use of what they have learned”. In his article, Richards (2022) explored the different kinds of positive and negative emotions (such as confidence, anxiety, stress and boredom), the causes, and possible impact on teaching and learning. In terms of emotions in English language teaching, Lasagabaster et al. (2024) looked at the impact of affective factors on learning in English-medium instruction in terms of identity and well-being, academic results, classroom practices and perceptions covering learner motivation, anxiety, emotions, willingness to communicate, teacher motivation and teachers’ beliefs. The two studies highlighted the types of second language (L2) emotions studied in the traditional classroom which are applicable to the online learning environment. For instance, Waterman et al. (2023) looked at the role of emotions in L2 use/learning for these modes (online, hybrid, and in person) to find that online students experienced the highest levels of language anxiety. Despite the importance of emotions in language teaching and learning and the prevalence of online English language teaching, there is yet to be a comprehensive overview of the diverse types of emotions experienced by both students and teachers in online English language environments in terms of the affective dimension. This study will contribute to the existing knowledge in the field of online English language education by synthesising research in terms of (1) the types of emotions studied in specific virtual environments and participants, (2) the theoretical approaches and pedagogical practices used for studying emotions in online English language education, and (3) the methodological design features of the studies. This study first reviewed the literature by defining types of emotions, theoretical approaches, and research instruments by researchers besides looking at research on online language education and emotions. Secondly, the steps in the analytical approach for the three research questions are described in the methodology section before the presentation of the findings in terms of the research questions. Implications for research and teaching regarding the affective dimensions of online English language education are discussed in the concluding section.

Literature Review

In the educational domain, emotions are ubiquitous and experienced by teachers and students as a fundamental aspect of learning and teaching because “educational settings abound with emotions... such as enjoyment of learning, curiosity, interest, hope, pride, anger, anxiety, shame, confusion, frustration, or boredom” (Pekrun & Linnenbrink-Garcia, 2014, p. 1). Reviews on emotions in language learning have examined positive and negative emotions such as anxiety, enjoyment, boredom, flow, shame and guilt. For instance, Meng (2024) reviewed the development of research on emotions in foreign language learning, finding that the first stage focused on negative emotion of foreign language anxiety, the second stage on the interrelationship between foreign language enjoyment and foreign language anxiety, and the third stage studying emotions like boredom, flow, shame and guilt. Plonsky et al. (2022) also talk about the shift in research into language learning and emotions from interest in anxiety to positive emotions and then increasing the range of emotions to include joy, love, pride, shame, guilt and boredom. In the present study, given the diverse emotions studied, we define the term “emotion” and the following types of emotions and theoretical approaches for

our study: boredom, emotion regulation, emotional labour, emotional intelligence, stress, emotions towards L2 learning, foreign language enjoyment (FLE), FLE and foreign language anxiety/foreign language classroom anxiety (FLA/FLCA), foreign language speaking anxiety (FLSA), and positive and achievement emotions. Next, we describe the research instruments adopted to study the emotions, and we also define online language education and look at research on emotions in online education.

Defining Types of Emotions and Theoretical Approaches

Pekrun and Linnenbrink-Garcia (2014, p. 2) defined emotions as “multifaceted phenomena involving sets of coordinated psychological processes, including affective, cognitive, physiological, motivational, and expressive components” on the basis of Kleinginna and Kleinginna (1981). Research on emotions or the affective domain in language learning and teaching began with studies on psychological processes in terms of students’ attitudes and motivation in the 1970s and on foreign language learning anxiety (Horwitz, 1986). Motivation can include autonomous motivation (Ryan & Deci, 2017), which can be subdivided into intrinsic motivation and integrated or controlled motivation. Emotions related to learning processes and achievement outcomes are considered to be achievement emotions (Pekrun & Stephens, 2010). Researchers have studied the L2 motivational self system in terms of the ideal L2 self and the ought-to L2 self (Taguchi et al., 2009). Researchers have also looked at trait emotional intelligence (TEI) which refers to “established personality traits” (Petrides & Mavroveli, 2018, p. 32).

Emotions in the language learning context have been conceptualised as FLE and FLCA (Resnik & Dewaele, 2020) or foreign language anxiety (FLA). FLE can be defined as a “broad, overarching positive emotion variable that is designed to encapsulate a positive disposition towards the foreign language learning process, towards peers, and towards teachers” (Botes et al., 2020, p. 282). FLA is the experience of negative emotions in language activities within a second or foreign language context (Horwitz, 2017). FLA can be defined as “the worry and negative emotional reaction aroused when learning or using a second language” (MacIntyre, 1999, p. 27). The theory proposed by Horwitz et al. (1986) divided L2 anxiety into three components of communication apprehension, fear of negative social evaluation, and test anxiety. FLSA, “an individual’s fear or nervousness associated with either real or anticipated oral communication in a foreign language with another person or persons” (He, 2018, p. 4), can inhibit language learning and use.

Besides FLE, FLA and FLSA, researchers have looked specifically at boredom in studying students’ engagement. Boredom consists of

specific affective components (unpleasant, aversive feelings), cognitive components (altered perceptions of time), physiological components (reduced arousal), expressive components (facial, vocal, and postural expression), and motivational components (motivation to change the activity or to leave the situation) (Pekrun et al., 2010, p. 532).

Various factors have been proposed for boredom. Environmental factors suggest that boredom is the result of the absence of new stimuli and learning environments according to the under-stimulation model (Larson & Richards, 1991). Motivational factors include learners not having control over the learning task or not finding value in the task according to the control-value theory of achievement emotions (Pekrun, 2006), or learners’ inattention due to uninteresting, unengaging learning tasks according to the attentional theory of proneness to boredom

(Harris, 2000). Cognitive factors suggest that learners with either insufficient or surplus mental energy units (known as mentons) due to over-challenging or under-challenging tasks will experience boredom, according to the Menton Theory of Engagement and Boredom (Davies & Fortney, 2012).

The affective dimension can be examined from the perspective of emotional regulation, which is “concerned with how emotions themselves are regulated” (Gross, 2014, p. 6) with “three core features of emotion regulation—the activation of a regulatory goal, the engagement of regulatory processes, and the modulation of the emotion trajectory” (p. 7). Gross (1998) categorises emotion regulation strategies into antecedent-focused (preventive) and response-focused (responsive).

Studies on language teachers’ emotions have gained traction since the early 2010s, such as studies on the emotions of experienced English as a foreign language (EFL) teachers (Cowie, 2011). Studies have also looked at emotional labour, defined as “the mental activity required to regulate emotions within specific contexts” (Sonnenberg & Rutledge, 2024, p. 1) or “the management of feeling to create a publicly observable facial and bodily display” (Hochschild, 1983, p. 7). It involves deep acting and surface acting (Grandey, 2000), which involve aligning internal feelings with displayed emotions (Sonnenberg & Rutledge, 2024) and “emotional suppression and the display of inauthentic feelings” (Sonnenberg & Rutledge, 2024, p. 2), respectively. Studies have also looked at emotional vulnerability, defined as a “multidimensional, multifaceted emotional experience [and] a state of being that can be influenced by the way people perceive their present situation as it interacts with their identity, beliefs, values, and sense of competence” (Lasky, 2005, p. 901) or a discrepancy between what teachers like to feel and what they really feel due to sociocultural situations or teachers themselves (Nazari et al., 2024b; Song, 2016, 2022; Zembylas, 2002).

In teaching, emotional labour involves the teachers’ efforts to inhibit, generate and manage their feelings and expressions according to general beliefs and expectations about the teaching profession or emotional rules (Gaskaree et al., 2025; Yin & Lee, 2012). Emotion regulation theory provides a useful framework for interpreting emotional labour (Grandey, 2000, p. 61) as teachers’ emotions can be “regulated by explicit and/or implicit feeling rules”. Teachers can upregulate and/or downregulate emotions about themselves and their students to create positive environments for their students’ learning (Sutton & Harper, 2009). In another study on teachers’ emotions and emotion regulation strategies by Jiang et al. (2016, p. 22), students’ surveys and teachers’ interviews showed that reappraisal was “more effective than suppression in increasing positive-emotion expression and reducing negative-emotion expression”.

Research Instruments

Achievement emotions can be studied through the Achievement Emotions Questionnaire (AEQ-S) (Bieleke et al., 2021) or the Academic Emotions Questionnaire (Dong & Yu, 2007). The TEI Questionnaire-Short Form (TEIQue-SF) (Petrides, 2009) measures 15 facets: emotion perception, trait empathy, emotion expression, relationships, emotion regulation, stress management, impulsiveness, adaptability, self-motivation, assertiveness, emotion management, social awareness, self-esteem, and trait happiness.

To study FLE, FLA, and FLSA, several scales have been widely used, though not universally adopted: the FLSA scale from Horwitz et al. (1986) and modified by Öztürk and Gurbuz (2014), and the FLE scale and FLA scale (Jiang & Dewaele, 2019). To examine anxiety among non-native teachers, Horwitz (1996) developed the Teacher Foreign Language Anxiety scale.

Emotion regulation can be measured using the Emotion Regulation Scale (Gross & John, 2003) to assess two emotion regulation strategies: cognitive reappraisal, defined as changing

the perception of a situation to reduce the emotional impact, and expressive suppression, inhibiting the outward expression of inner feelings. Researchers have adapted various teacher-focused emotional labour strategy scales for specific contexts (see Ma et al., 2023; Yin, 2012).

Given the diverse conceptualisations of emotions in the affective domain in language learning, the present study looked at emotions in terms of motivation, TEI, FLE, FLA, FLSA, boredom, emotional regulation and emotional labour.

Online Language Education and Research on Emotions

Online language learning refers to synchronous and asynchronous courses facilitated by the internet, which can be blended (hybrid) or fully virtual (online) (Blake, 2011). According to Tzirides (2020, p. 145), “online language learning (OLL) concerns the learning of a second or foreign language through the use of digital learning platforms, tools and applications which provide learning material, as well as the potential of interaction with peers and/ or the instructor, and they function online”. To Artino (2012, p. 137), emotions have “important affects [sic] on learning, engagement, and achievement in online settings” with “growing empirical literature on emotions in online learning environments (OLEs)” in terms of motivation, control-value theory, achievement emotions, self-regulatory behaviours, anxiety, boredom or engagement/ flow.

Artino (2012) surveyed 302 undergraduates participating in an online course regarding achievement-related emotions (boredom, frustration, and enjoyment) to find that enjoyment predicted self-regulated learning behaviors (elaboration and metacognition). Russell (2020) reviewed studies on foreign language classroom anxiety in the online learning environment. Valverde-Berrocoso et al. (2020) reviewed 248 articles for trends in educational research on e-learning to find massive open online courses to be the most researched e-learning modality, with achievement emotions as a strong predictor of the motivation of online students and the teacher/faculty member playing the essential role of stimulating motivation in e-learning by supporting the students. Martin et al. (2020) examined 619 research articles on online learning to look at the motivation of online learners (23 studies), the affective characteristics of learners (17 studies), and online teaching instructors’ characteristics (21 studies).

The studies have highlighted the increasing need to investigate the factors influencing emotions in the context of online language education, but these studies and reviews on online language learning are not specific to English language learning. Our present study addresses this research gap by reviewing studies on the affective dimensions specific to online English language education in terms of motivation, TEI, FLE, FLA, FLSA, boredom, emotional regulation and emotional labour through these three research questions:

- (1) What types of emotions and participants have been studied in specific online environments?
- (2) What theoretical approaches and pedagogical practices have been employed to study emotions in online English language education and teaching?
- (3) What methodological design features have been utilised?

Methodology

The methodology was a qualitative meta-synthesis of 40 empirical studies specifically focusing on the affective dimensions of online English language education in refereed journals, book chapters and conference proceedings published from 2020 to 2024. A qualitative meta-synthesis “enables researchers to identify a specific research question and then search for, select, appraise, summarize, and combine qualitative evidence to address the research question ...

[to uncover] ... patterns and common threads within a specific topic” (Erwin et al. 2011, p. 186) or “evidence-based practices” (p. 187). Our study followed the five-step qualitative meta-synthesis process advocated by Erwin et al (2011): (1) formulating clear research problem(s) and question(s) as the first step of the meta-synthesis; (2) conducting a comprehensive search of the literature; (3) appraising research studies for possible inclusion in terms of the credibility of the studies; (4) relating the selected studies by identifying and coding key phrases, concepts, themes, or metaphors from the findings through repeated reading of each article by the researchers to ensure that all concepts and relationships were explored for trustworthiness and dependability; and (5) presenting a synthesis of the findings across studies.

As this research synthesis is diachronic, dealing with studies on emotions changing over the past five years, to identify research published between 2020 and 2024, we conducted systematic searches of computer databases (such as Taylor and Francis, Elsevier, ProQuest and Wiley) in the National Institute of Education (Singapore) library and Google Scholar to retrieve journal articles, book chapters and conference proceedings. The following keywords were used for the searches: (1) “emotions”, (2) “language teaching”, (3) “digital spaces”, (4) “virtual language classrooms”, (5) “online language education”, and (6) “language apps”. This resulted in an initial list of 1135 articles. The titles of these were scrutinised to identify 500 articles in the first round of screening. The abstracts of the articles from the first round were carefully scrutinised to identify those that were relevant to the focus of our study to retain 157 articles. In the last round of close reading for relevance to the research focus, these inclusion criteria were applied: (1) only research items published in English-medium peer-reviewed papers were included; (2) articles about English as a first language, English as second language) or EFL; and (3) articles that were pertinent to answering the research questions. We collectively decided on the inclusion of 40 articles after discussion to apply these exclusion criteria: (1) papers not published between 2020 and 2024; (2) papers with no relevance to the research questions; (3) papers on emotions but not related to English online education; (4) articles on affective dimensions that were theoretical and not empirical; (5) Master’s or doctoral dissertations as the focus was on published peer-reviewed papers; and (6) unpublished literature or “grey literature”, given the focus on peer-reviewed papers (see Figure 1).

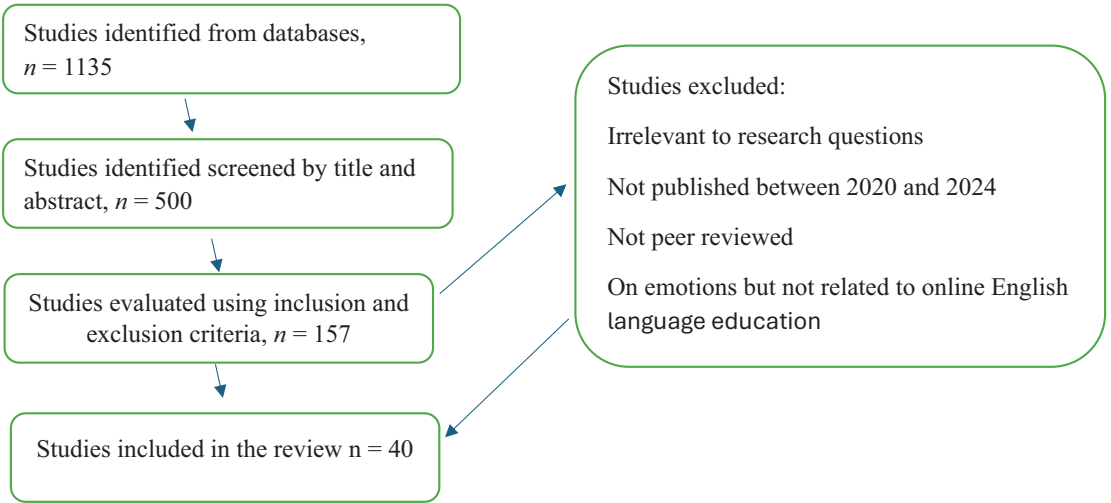


Figure 1. *The screening procedure*

In terms of data analysis, the 40 articles were read in detail for content analysis and coded according to the three research questions in terms of key phrases, concepts, and themes. For example for Research Question 3, the coding looked at studies in specific emotions and methods (questionnaires, questionnaires and interviews, interviews and others) (see Table 3). The first author extracted and coded the data. The second author checked the coding and a consensus was reached through discussion in cases of disagreements in the coding.

Findings

The findings are presented in terms of the three research questions.

Types of Emotions and Participants Studied in Specific Virtual Environments

For Research Question 1, the types of emotions studied are summarised in Table 1.

Table 1. Types of emotions and participants (n = 40)

Feeling(s)	Types of participants				
	Secondary/ high school students	University students	Teachers	Teacher educators	Mixed
Boredom	Kruk et al. (2022)	Derakhshan et al. (2022)			Pawlak et al. (2022)
Boredom and TEI		Li & Dewaele (2020)			
Foreign language boredom (FLB) and foreign language enjoyment (FLE)		Fattahi et al. (2023)			
Emotion regulation		Alazemi et al. (2023)	Cheng & Liu (2024)	Ngo (2021)	
Emotion regulation and FLE		Zhang et al. (2021, 2022)			
Emotion regulation strategies and emotional vulnerabilities			Meihami & Esmaili (2024)		
Group-level enjoyment and emotion regulation		Zhang et al. (2024)			
Teachers' emotions and coping strategies			Nguyen & Pham (2023)		
Emotional labour			Nazari et al. (2024) Liu et al. (2024) Peng et al. (2023)	Liu et al. (2021)	

(Continued)

Feeling(s)	Types of participants				
	Secondary/ high school students	University students	Teachers	Teacher educators	Mixed
FLE		Feng (2024) Zheng & Zhou (2023)			
L2 motivational self system and FLE					Lee & Lee (2021)
FLE and foreign language anxiety (FLA)		Bai (2024)			
Foreign language classroom anxiety (FLCA) and FLE		Yuan (2023)			
FLCA, FLE and trait emotional intelligence (TEI)		Resnik & Dewaele (2021)			
Foreign language speaking anxiety (FLSA)	Bashori et al. (2020)	Ding (2024)			
Stress, wellbeing, negative emotions/ stressors, and coping responses			MacIntyre et al. (2020)		
Perceived stress, world languages anxiety, FLA, speaking anxiety			Ayar (2023)		
Technostress		Feng & Liu (2024)			
Emotional intelligence		Abdolrezapour & Ghanbari (2022)			
Autonomous motivation and positive academic emotions		Wang et al. (2022)			
Teachers' vulnerability and emotional reflexivity				Song (2022)	
Perceptions, emotions, and performance		Alqasham (2022)			
Emotions towards l2 learning		Shao et al. (2023)			
L2 learners' feelings		Sampson & Yoshida (2020, 2021)			
Emotional involvement and cognitive learning		Ghanizadeh et al. (2024)			

(Continued)

Feeling(s)	Types of participants				
	Secondary/ high school students	University students	Teachers	Teacher educators	Mixed
Positive emotions			Kohnke & Foung (2023)		
Positive emotional experiences, emotional scaffolding outcomes		Rafidi & Wagner (2024)			
Achievement emotions		Ebn-Abbasi et al. (2024)			
Identity tensions on the pedagogical and socio- affective dimensions				Xu & Tao (2023)	
	2	23	9	4	2

The types of emotions studied in specific virtual environments and the types of participants are summarised in Table 2. In terms of the number of studies for the different types of participants, 2 were on secondary/high school students, 23 on university students, 9 on teachers, 4 on teacher educators and 2 on mixed groups.

Table 2. *Methodological design features (n = 40)*

Emotions	Methods			
	Questionnaires	Questionnaires and interviews	Interviews	Others
Boredom		Derakhshan et al. (2022) Kruk et al. (2022) Pawlak et al. (2022)		
Boredom and TEI	Li & Dewaele (2020)			
FLB and FLE		Fattahi et al. (2023)		
Emotion regulation	Cheng & Liu (2024)		Ngo (2021)	
Emotion regulation and FLE	Zhang et al. (2022)			Zhang et al. (2021)
Emotion regulation strategies and emotional vulnerabilities				Meihami & Esmaili (2024)
Group-level enjoyment and emotion regulation				Zhang et al. (2024)

(Continued)

Emotions	Methods			
	Questionnaires	Questionnaires and interviews	Interviews	Others
Teachers' emotions and coping strategies for emotion regulation			Nguyen & Pham (2023)	
Emotional labour	Peng et al. (2023)			Nazari et al. (2024) Liu et al. (2024)
Emotional labour, emotional regulation strategies, emotional rules, teacher emotion				Liu et al. (2021)
FLE	Feng (2024)			Zheng & Zhou (2023)
L2 motivational self system and FLE	Lee & Lee (2021)			
FLE and FLA		Bai (2024)		
FLE and FLCA	Yuan (2023)			
FLCA, FLE, and TEI	Resnik & Dewaele (2021)			
FLSA		Bashori et al. (2020)		Ding (2024)
Technostress				Feng & Liu (2024)
Stress, wellbeing, negative emotions/ stressors, and coping responses	MacIntyre et al. (2020)			
Perceived stress, FLA, speaking anxiety		Ayar (2023)		
TEI				Abdolrezapour & Ghanbari (2022)
FLCA, FLE, and TEI	Resnik & Dewaele (2021)			
Autonomous motivation and positive academic emotions	Wang et al. (2022)			
Teacher vulnerability and emotional reflexivity				Song (2022)
Emotions towards 12 learning	Shao et al. (2023)			

(Continued)

Emotions	Methods			
	Questionnaires	Questionnaires and interviews	Interviews	Others
achievement emotions	Ebn-Abbasi et al. (2024)			
Perceptions, emotions, and performance		Alqasham (2022)		
L2 learners' feelings				Sampson & Yoshida (2020, 2021)
Emotional involvement and cognitive learning				Ghanizadeh et al. (2024)
Positive emotions			Kohnke & Founq (2023)	
Positive emotional experiences, emotional scaffolding outcomes				Rafidi & Wagner (2024)
Identity tensions on the pedagogical, and socio-affective dimensions			Xu & Tao (2023)	
	13	8	4	15

For studies on boredom, Derakhshan et al. (2022) surveyed 240 English major Iranian students regarding boredom-inducing activity types in online classes. Kruk et al. (2022) looked at four Iranian EFL intermediate learners' (15 years of age) boredom in online language classes from an ecological perspective. The majority of 34 teachers and 256 Iranian English major university students deemed online classes to be more boring, with teachers having a greater variety of useful coping strategies compared with students (Pawlak et al. 2022). Li and Dewaele (2020) surveyed 348 Chinese tertiary students in an online English course to find a low to medium level of boredom, while TEI and achievement perceptions negatively co-predicted boredom. Fattahi et al. (2023) investigated the effect of foreign language boredom (FLB) and FLE on willingness to communicate (WTC) in online classrooms in 469 Iranian EFL tertiary learners, concluding that FLB had a considerably strong effect on L2 WTC.

For studies on emotion regulation, Ngo (2021) identified five types of emotion regulation in six Vietnamese EFL instructors' online teaching: feeling restricted, stressed, devalued, validated, and rejuvenated. Alazemi et al. (2023, p. 1) looked at 58 Iranian intermediate EFL learners using the Telegram app and the learning management systems and found that the experimental group demonstrated "superior outcomes in academic engagement, emotion regulation, WTC, and academic well-being". Cheng and Liu (2024) found that 364 Chinese EFL teachers' physical activity positively influenced emotion regulation and enhanced their competence in online instruction. Zhang et al. (2022, p. 460) looked at online collaborative writing program facilitated by a social media app (WeChat) of 336 Chinese students majoring in English language to reveal "medium and positive relationships between peer regulation, group regulation, and enjoyment of online collaboration". Zhang et al. (2021, p. 1) also found six Chinese undergraduate EFL learners' enjoyment and emotion regulation in online collaborative learning was facilitated by

WeChat, as the students used “different but mutually supported types of regulation such as self-, co-, and socially shared regulation to achieve group-level enjoyment”. Zhang et al. (2024) examined group-level enjoyment and emotion regulation in three Chinese undergraduate EFL learners involved in online collaborative learning via WeChat. The learners enacted three different types of regulation (self-regulation, co-regulation, and socially shared regulation), with socially shared regulation being the most prevalent. Meihami and Esmaili (2024) investigated 10 novice Arabic as a foreign language and six novice EFL teachers for emotional vulnerability and emotion regulation strategies in online classes and found that they used different strategies to deal with negative emotions. Nine EFL tertiary teachers in the study by Nguyen and Pham (2023, p. 18) adopted several coping strategies for emotional regulation: “(1) developing an understanding of the situation, (2) changing or lowering expectations, (3) hiding or inhibiting real emotions, (4) seeking external help, and (5) improving overall emotional well-being”.

Only four studies dealt with emotional labour. Ten Iranian EL teachers engaged in surface and deep acting in response to institutional expectations while engaging in online teaching (Nazari et al., 2024a). Peng et al. (2023) discovered that in 338 Chinese EFL teachers working at 19 middle schools and 24 high schools, their acceptance of online teaching positively influenced deep acting while negatively affecting surface acting. Liu et al. (2024, p. 462) found 12 secondary (EFL) Chinese teachers regulating “their emotions and practices according to a set of rules, including (a) being dedicated to teaching with responsibility, (b) caring for students, (c) having a passion for teaching and (d) responding flexibly”. Liu et al. (2021) looked at an EFL instructor’s online teaching in Wuhan, with a focus on the emotional regulation strategies employed while undertaking emotional labour and observing/renegotiating emotional rules.

In the two studies on FLE, Feng (2024) concluded that for 987 Chinese EFL university students, digital literacy could predict about 95% of the changes in the participants’ FLE. In the study by Zheng and Zhou (2023) of 98 Chinese EFL university students, students with pleasant experiences of cooperation had high FLE in an online cooperative learning context. In the study on the L2 motivational self system and FLE, Lee and Lee (2021) looked at 661 South Korean middle, high school and university students to reveal how informal digital learning of English and the ideal L2 self were significantly predictive of all groups’ FLE, while the ought-to L2 self predicted only middle school students’ FLE.

Of the two studies on FLE and FLA/ FLCA, Bai’s (2024) 69 intermediate Chinese EFL students from a language institute using Rosetta Stone, a mobile-based language learning application, showed significant improvements in their listening, speaking, FLE, and reduced FLA compared with the control group. Yuan’s (2023) 492 Chinese undergraduate students reported higher levels of FLE than FLCA in online learning, and FLE was negatively correlated with FLCA.

Two studies looked at FLSA. Bashori et al. (2020) demonstrated how 573 vocational Indonesian high school students could alleviate their speaking anxiety by using automatic speech recognition-based learning websites. In Ding’s (2024) study, most of the 140 Chinese English major students perceived high-immersion virtual reality (HiVR) to be useful for alleviating FLSA, though they had difficulty applying the experience in HiVR to real-life situations.

Four studies examined stress. MacIntyre et al. (2020) examined the stress and coping responses of an international sample of 634 language teachers to reveal that approach coping was consistently used across stress groups, while avoidant coping increased as stress increased. Ayar (2023) found that 83 Turkish English teachers from different education levels and 96 instructors affiliated with schools of foreign languages adopted mostly functional, approach-oriented, and cognitive strategies in the face of perceived stress, with a preference for cognitive strategies over behavioural ones. Feng and Liu (2024, p. 16) found that in their 20 Chinese

EFL tertiary participants, technostress was present even among participants with high levels of digital literacy, perhaps due to “constant updates and changes in digital platforms and tools”. Xu and Tao (2023) revealed that four university English teachers experienced varying degrees of identity tensions in the pedagogical and socio-affective dimensions when teaching online.

In the studies on emotional intelligence, the emotional-based pedagogy implemented by Abdolrezapour and Ghanbari (2022) had a positive effect on the emotional intelligence of 67 Iranian EFL learners’ (from a private language institute) and on their perceived flow or positive emotions associated with the task. In studying 546 EFL university students in China, Wang et al. (2022) concluded that teacher engagement affected students’ English achievement through the mediation of autonomous motivation and positive academic emotions. Song (2022) explored vulnerability and emotional reflexivity through an autoethnographic study of herself as a non-native TEFL teacher-educator. Regarding perceptions, emotions, and performance, Alqasham’s (2022) 58 Saudi Arabian university students had positive perceptions of online collaborative writing through Blackboard and Blackboard Chatbox, which encouraged frequent usage of the Blackboard platform for the enhancement of writing skills. Resnik and Dewaele (2021) looked at 510 European tertiary-level EFL learners to conclude that students with high levels of TEI experienced more enjoyment and less anxiety. However, feelings of enjoyment were significantly lower in online contexts.

In terms of emotions towards L2 learning, Shao et al. (2023) looked at 1503 Chinese EFL undergraduates’ emotions in an online EFL learning context to conclude that teachers’ perceived internet and communication technology competence had positive effects on enjoyment, mediated by perceived control and/or value. For L2 learners’ feelings, Sampson and Yoshida (2020) analysed a chat dyad of one Japanese EFL undergraduate and one Australian Japanese as a foreign language undergraduate to find the Japanese student indicated more unpleasant feelings, but the Australian student reported more pleasant feelings. Sampson and Yoshida (2021) studied the L2 online chat between 21 Japanese EFL undergraduates and 19 Australian Japanese as a foreign language undergraduates to uncover seven positively and four negatively valenced feelings: surprise, achievement, motivation, interest, gratitude, excitement, enjoyment, difficulty/frustration, disappointment, boredom/fatigue and anxiety. Regarding emotional involvement and cognitive learning, Ghanizadeh et al. (2024) examined the effect of a university instructor’s narrative on 38 Iranian EFL university students’ sustained attention, emotional involvement and cognitive learning within two different virtual classes.

Three studies looked at positive and achievement emotions. To Kohnke and Fount (2023), the constructionist approach played an important role in facilitating positive student emotions in 18 university English for academic purposes teachers in Hong Kong. In the study by Rafidi and Wagner (2024), 95 Palestinian university students had positive attitudes towards the use of emotional scaffolding strategies to support their online learning. Regarding achievement emotions, according to Ebn-Abbasi et al. (2024), a growth language mindset positively predicted all components of academic engagement, mediated by achievement emotions, in 428 EFL learners from eight Iranian private English language institutes.

Theoretical Approaches and Pedagogical Practices for Studying Emotions in Online English Language Education

Theoretical Approaches

For Research Question 2, the types of theoretical approaches were analysed and presented in terms of the types of emotions summarised in Table 1.

The five studies on boredom used the control-value theory (Pekrun, 2006) thrice, the under-stimulation model alongside boredom (Larson & Richards, 1991) twice (Pawlak et al., 2020),

the attentional theory of proneness to boredom (Harris, 2000), and FLB and FLE (Dewaele & MacIntyre, 2014).

In the six studies on emotion regulation, the researchers adopted emotion regulation strategies (Gross 1998), the emotion regulation scale (Gross & John, 2003) twice, emotion regulation (Gross and Thompson, 2006), emotion regulation and FLE, FLE Adaptive Tool for Emotional Regulation (Järvenoja et al., 2013), emotion regulation and FLE rating or the idiodynamic approach (MacIntyre, 2012), emotion regulation processes (Winne & Hadwin, 1998), emotion regulation types (Hadwin et al., 2018), and the association of emotion regulation with group-level enjoyment (Marshall & Rossman, 2016).

Six studies on emotional labour looked at emotional regulation strategies and emotional rules (Liu et al., 2024), emotional regulation strategies, emotional rules and teacher emotion (Liu et al., 2021). Theoretical approaches to emotion labour were explored by Benesch (2017), Yin (2012), and Ma et al. (2023).

There were five studies on FLE in relation to FLB, emotion regulation, the L2 motivational self system, FLA, and self-efficacy. Researchers have used FLB and FLE (Dewaele & MacIntyre, 2014) thrice, FLE (Dewaele & MacIntyre, 2016) twice, the FLE scale (Jiang & Dewaele, 2019; Li et al., 2018), FLE (Botes et al. 2020), FLE Adaptive Tool for Emotional Regulation (Järvenoja et al., 2013), and the idiodynamic approach (MacIntyre, 2012).

Six studies dealt with anxiety, FLA, FLSA, and stress. For examining FLSA, researchers used FLCA and FLSA (Horwitz et al., 1986). For FLA, researchers used the FLE scale and FLA scale (Jiang & Dewaele, 2019) and FLCA (Horwitz et al., 1986) twice. Stress has been studied in terms of online engagement autonomy-related technostress (Salem, 2018; Tarafdar et al., 2007), state anxiety (Marteau & Bekker, 1992), perceived stress, the online world languages anxiety scale (OWLAS) (Chametzky, 2019), and teachers' feelings of FLA (Horwitz, 1996). One study dealt with identity tensions (Pillen et al., 2013; Schaap et al., 2021) on the pedagogical and socio-affective dimensions of identity.

Five studies on emotional intelligence/TEI used the Trait Emotional Intelligence Questionnaire – Adolescent Short Form approach (Petrides et al., 2006) twice, TEI (Petrides, 2009) and FLCA (Horwitz et al., 1986). Two studies on motivation in relation to positive academic emotions employed the Language Learning Orientation Scale (Noels et al., 2000) and the L2 Motivational Self System (Taguchi et al., 2009). Two studies on emotional vulnerabilities used emotional vulnerability (Song, 2016; Zembylas, 2002), vulnerability (Lasky, 2005; Zembylas, 2003), and emotional reflexivity (Zembylas, 2014).

There were seven studies grouped under the generic term of emotions. Four studied emotions towards L2 learning using the control-value theory of achievement emotions (Pekrun, 2006), achievement emotions using the academic engagement scale (Reeve & Tseng, 2011), the AEQ-S (Bieleke et al., 2021), the language learning orientation scale (Noels et al., 2000), the academic emotions questionnaire (Dong & Yu, 2007), the engaged teachers scale (Klassen et al., 2013), and L2 learners' feelings (Damasio, 2003).

Three studies on feelings looked at promoting positive emotions through the constructivist learning approach and emotional scaffolding outcomes (Meyer & Turner, 2007). One study examined sustained attention, emotional involvement and cognitive learning through emotional involvement (Golestani, 2017), and another used the cognitive learning scale (Richmond et al., 1987).

Pedagogical Practices

Researchers have suggested pedagogical practices for various types of emotions, which have been summarised in Table 3.

Table 3. *Types of emotions and suggested pedagogical practices.*

Types of emotions	Suggested pedagogical practices
Boredom	Avoiding boredom-inducing activity types; optimizing lesson design and organisation
Emotion regulation for students	Telegram app with LMS; online collaborative writing programme
Emotion regulation for teachers	Coping strategies; community of practice to manage emotions; regulating negative emotions; pre- and in-service teachers' professional development
Emotional labour	Having positive attitudes towards online teaching; professional development; adopting emotional regulation strategies
FLE	Technology-assisted language learning; mobile-based language learning; promoting ideal L2 self-images using IDLE activities
FLCA	Mobile-based and web-based language learning
Stress	Instructional strategies to support students; using functional, approach-oriented, and cognitive strategies
Emotional intelligence	Emotional scaffolding strategies; emotional-based pedagogy
Emotions towards L2 learning	Increasing awareness of interactions impacting feelings
Ppositive and achievement emotions	Growth mindset

IDLE, informal digital learning of English.

Pedagogical practices for managing boredom have been addressed in terms of 10 different boredom-inducing activity types that are nonengaging or cognitively (un)demanding (Dera-khshan et al., 2022), Bronfenbrenner’s (1993) microsystem, mesosystemic and exosystemic levels (Kruk et al., 2022) and how teachers could reduce boredom by optimising lessons’ design and organisation (Li & Dewaele, 2020), or raising awareness of boredom and avoiding IT-re-lated disruptions (Fattahi et al., 2023) since online courses were more boredom-inducing due to their lecture-type nature (Pawlak et al., 2022).

To address emotion regulation for students, the Telegram app with LMS can significantly enhance EFL learners’ WTC, academic engagement, well-being, and emotion regulation (Alazemi et al., 2023), while there can be group and peer regulation (Zhang et al., 2022), or self-regulation, co-regulation, and socially shared regulation to achieve group-level enjoyment (Zhang et al., 2024) in online collaborative writing programmes. According to Zhang et al. (2021), teachers can enhance students’ enjoyment through regulation strategies such as using positive backchannels, adopting different emojis, and guiding planning, monitoring, and evaluating intentionally. Learning analytics data about students’ enjoyment and emotion regulation in collaborative language learning could be used to raise teachers’ and students’ awareness of the importance of emotion regulation during the learning process.

In terms of emotion regulation for teachers, teachers' physical activity influences emotion regulation and competence in online instruction (Cheng & Liu, 2024) while Nguyen and Pham (2023) identified five major coping strategies utilised by the teachers to enhance their emotional well-being. Ngo (2021) advocated for teachers to use online environments as a community of practice to share experiences, exchange strategies and gain help from others to proactively manage emotions. Meihami and Esmaili (2024) suggested that teachers should have negotiation sessions to discuss their emotional vulnerability during online classes and use suggestions from critical friends to implement effective emotion regulation strategies. To address teachers' vulnerability, they need to understand their agency to change their emotions caused by the challenges in online classes by regulating their negative emotions (Meihami & Esmaili, 2024). As emotional reflexivity can be a resource to develop relevant pedagogy, Song (2022) talked about the need for pre- and in-service teachers' professional development to include self-reflective work on emotions.

Researchers have suggested the following practices for emotional labour: teachers having positive attitudes towards online teaching to enhance deep acting and reduce surface acting (Peng et al., 2023), teachers channelling positive emotions into online teaching deliberately and strategically (Liu et al., 2021), professional development through modules like "peer negotiation of emotions, collective engagement with negative emotions, and reflection over positive and negative emotions to render emotion labour as a site of further emotionality than vulnerability" (Nazari et al., 2024a, p. 465) and adopting 16 emotional regulation strategies for pre-service and in-service teacher training to enhance their skills in emotional management (Liu et al., 2024).

FLE can be boosted in the context of technology-assisted language learning through interaction and group work (Zheng & Zhou, 2023) or by using mobile-based language learning tools (Bai, 2024) as more autonomous, emotionally intelligent students tend to enjoy the EFL class more (Resnik & Dewaele, 2021). As FLE was more strongly predicted by "teacher-related variables (i.e., teachers' friendliness, their familiarity with teaching platforms, their joking, English accent, and frequency of speaking English in class)" (Yuan, 2023, p. 1), teachers can be enthusiastic about the content, respect students' needs and employ exciting online games and activities to promote WTC (Fattahi et al., 2023) besides mobilising students' agency for regulating enjoyment (Zhang et al., 2021). Teachers can also employ appropriate strategies for guiding or supporting learners' emotional states (Zhang et al., 2022) and promote ideal L2 self-images using informal digital learning of English activities such as viewing YouTube videos, Twitter (X), and Facebook (Lee & Lee, 2021). There could be teacher training courses to deal with the emotional aspects of teaching in online contexts, such as techniques and practices for balancing emotions and the integration of technology (Feng, 2024).

Pedagogical practices for FLCA have to address "learner-internal variables (i.e., relative standing among peers and online interaction with the teacher)" (Yuan, 2023, p. 1), as emotionally intelligent students tend to experience lower levels of anxiety (Resnik & Dewaele, 2021). Mobile-based language learning tools could reduce anxiety (Bai, 2024) and web-based language learning could reduce FLSA, as students were less anxious speaking to automatic speech recognition-based websites compared with peers or other people (Bashori et al., 2020), while most students perceived HiVR as a useful tool for reducing FLSA.

In terms of stress, teachers can adopt instructional strategies to support students grappling with technostress (Feng & Liu, 2024) while materials developers and syllabus designers can create tailored resources to mitigate technostress (MacIntyre et al., 2020). English teachers and

instructors can use functional, approach-oriented and cognitive strategies to cope with their perceived stress while speaking in online classes (Ayar, 2023).

For pedagogical practices of motivation, language teacher training programmes could teach teacher engagement and emotional connection with students to foster students' autonomous motivation and positive academic emotions (Wang et al., 2022), while teachers can promote students' ideal L2 self-images or their motivational self system by supporting their language learning in out-of-class digital settings (Lee & Lee, 2021). Students' autonomous motivation and positive academic emotions could be fostered by teachers' engagement in online EFL learning (Wang et al., 2022).

In terms of pedagogical practices related to emotions, for L2 feelings, Shao et al. (2023) suggested decreasing language anxiety by expressing clear lesson expectations, monitoring the students' learning progress and answering questions in a timely manner. In online settings, teachers could increase learners' awareness of how their interactions could impact the feelings of their partners (Sampson & Yoshida, 2020) or talk about dealing with feelings in connection with topics about culture, life experiences, hobbies, linguistic aspects of the L2, L2 identity, chat partners and the chat process itself (Sampson & Yoshida, 2021). Teachers could provide timely emotional and professional support to satisfy their students' special needs in the online learning environment (Li & Dewaele, 2020) or enhance the learners' emotional involvement in collaborative writing through interesting activities or topics and less structure in online educational settings (Alqasham, 2022). Kohnke and Fount (2023) suggested promoting positive emotions through cognitively demanding tasks and teacher-student and student-student interactions. Rafidi and Wagner (2024) suggested eliciting emotional responses in formative and meaningful feedback and developing intentional emotional scaffolding strategies in discussions. Achievement emotions and learner engagement can be promoted through a growth mindset and through simulations, online roleplays and real-life problems (Ebn-Abbasi et al., 2024), while Ghanizadeh et al. (2024) suggested that university instructors should incorporate narratives into their teaching techniques. To enhance emotional intelligence, Abdolrezapour and Ghanbari (2022) have advocated for emotional-based pedagogy to make language learners more engaged in online classroom tasks.

Methodological Design Features

For Research Question 3, in terms of methodological design features, the methods adopted by the 40 studies have been summarised in Table 4. Thirteen studies were quantitative, using questionnaires to study emotions, eight mixed studies used questionnaires and interviews, and four used qualitative interviews. Fifteen used some other methods: questionnaires, semi-structured interviews and video recordings (Zhang et al., 2021); narrative inquiry (Meihami & Esmaili, 2024); questionnaires, video recordings and stimulated recall interviews (Zhang et al., 2024); the interpretative phenomenological approach (Nazari et al., 2024a); semi-structured interviews and reflective journals (Liu et al., 2024); autoethnographic self-study (Liu et al., 2021); questionnaires and experiment groups (Zheng & Zhou, 2023); questionnaires and experiment groups (Ding, 2024); interviews and document analysis (Feng & Liu, 2024); questionnaires, an emotional intelligence intervention and interviews (Abdolrezapour & Ghanbari, 2022); autoethnography (Song, 2022); a narrative approach (Sampson & Yoshida, 2020); reflective session reports (Sampson & Yoshida, 2021); control and experimental grouping and open-ended questionnaires (Ghanizadeh et al., 2024); and questionnaires, case studies, and field note observations (Rafidi & Wagner, 2024).

Table 4. *Methodological design features*

Emotions	Methods			
	Questionnaires	Questionnaires and interviews	Interviews	Others
Boredom		Derakhshan et al. (2022) Kruk et al. (2022) Pawlak et al. (2022)		
Boredom and TEI	Li & Dewaele (2020)			
FLB and FLE		Fattahi et al. (2023)		
Emotion regulation	Cheng & Liu (2024)		Ngo (2021)	
Emotion regulation and FLE	Zhang et al. (2022)			Zhang et al. (2021)
Emotion regulation strategies and emotional vulnerabilities				Meihami & Esmaili (2024)
Group-level enjoyment and emotion regulation				Zhang et al. (2024)
Teachers’ emotions and coping strategies emotion regulation			Nguyen & Pham (2023)	
Emotion labour	Peng et al. (2023)			Nazari et al. (2024a) Liu et al. (2024)
Emotional labour, emotional regulation strategies, emotional rules, teacher emotion				Liu et al. (2021)
FLE	Feng (2024)			Zheng & Zhou (2023)
L2 motivational self system and FLE	Lee & Lee (2021)			
FLE and FLA		Bai (2024)		
FLE and FLCA	Yuan (2023)			
FLCA, FLE, and TEI	Resnik & Dewaele (2021)			
FLSA		Bashori et al. (2020)		Ding (2024)
Technostress				Feng & Liu (2024)

(Continued)

Emotions	Methods			
	Questionnaires	Questionnaires and interviews	Interviews	Others
Stress, wellbeing and negative emotions/stressors and coping responses	MacIntyre et al. (2020)			
Perceived stress, FLA, speaking anxiety		Ayar (2023)		
TEI				Abdolrezapour & Ghanbari (2022)
FLCA, FLE, and TEI	Resnik & Dewaele (2021)			
Autonomous motivation and positive academic emotions	Wang et al. (2022)			
Teacher vulnerability and emotional reflexivity				Song (2022)
Emotions towards L2 learning	Shao et al. (2023)			
Achievement emotions	Ebn-Abbasi et al. (2024)			
Perceptions, emotions, and performance		Alqasham (2022)		
L2 learners' feelings				Sampson & Yoshida (2020, (2021)
Emotional involvement and cognitive learning				Ghanizadeh et al. (2024)
Positive emotions			Kohnke & Fount (2023)	
Positive emotional experiences, emotional scaffolding outcomes				Rafidi & Wagner (2024)
Identity tensions on the pedagogical and socio-affective dimensions			Xu & Tao (2023)	
	13	8	4	15

Discussion

The present study synthesises the findings on the affective domain of online English language education in terms of (1) the types of emotions in relation to specific virtual environments and participants, (2) the theoretical approaches for studying emotions and pedagogical practices, and (3) the methodological design features of the studies.

In terms of Research Question 1, the present study shows that researchers have either focused on one specific emotion (23 studies) for an in-depth understanding of an emotion in the online

learning context, or on multiple emotions (17 studies) to reflect what Meng's (2024) review observed about research moving from interest in one emotion of FLA to the interrelationship between FLE and FLA. Studies involving interrelationships are indicative of the increasing interest of researchers and educators in exploring complex multiple emotions for online language learning.

In terms of the types of emotions studied, Plonsky et al. (2022) talked about research shifting from anxiety to positive emotions and other emotions. The 40 studies reviewed reflect this shift, as there were only two studies on FLSA and two on FLE and FLA. Seven studies talked about increasing the positive emotions of FLE and twenty-nine were on other emotions. The findings are also in line with what Artino (2012) stated about empirical literature on emotions in online learning environments looking at motivation, control-value theory, achievement emotions, self-regulatory behaviours, anxiety, boredom or engagement/flow, given that five studies studied the factors of boredom in online classes and four studies were on emotions towards L2 learning. The present study has highlighted the increasing focus on emotion regulation and emotional labour in online teaching, with six studies on emotion regulation and six studies on emotional labour. That the emotions of online instructors are seen as important is evident in how more studies have looked at instructors' coping strategies or the employment of emotional regulation strategies while undertaking emotional labour. However, the present study has revealed studies on emotions not mentioned in the reviews such as the emotion of stress, technostress and the coping responses of teachers to stress, as well as five studies on emotional intelligence using strategies such as emotional-based pedagogy. This is indicative of the possibility of a wider range of emotions to be studied in future, such as shame and guilt (Meng, 2024) or joy, love, pride, shame and guilt (Plonsky et al., 2022).

For Research Question 2, in terms of theoretical approaches for studying emotions in online education, the present study reveals how researchers have used established theoretical frameworks. Boredom control-value theory (Pekrun, 2006) was used thrice, and the under-stimulation model (Larson & Richards, 1991) was used twice, the emotion regulation scale (Gross & John, 2003) twice, FLB and FLE (Dewaele & MacIntyre, 2014) thrice, FLE (Dewaele & MacIntyre, 2016) twice, the FLE scale and FLA scale (Jiang & Dewaele, 2019) and FLCA (Horwitz et al., 1986) twice and emotional intelligence (Trait Emotional Intelligence Questionnaire – Adolescent Short Form) (Petrides et al., 2006) twice. However, researchers have also used other instruments such the academic engagement scale (Reeve & Tseng, 2011) or the AEQ-S (Bieleke et al., 2021) for achievement emotions.

In terms of pedagogical practices, the study has revealed pedagogical practices targeting specific emotions: activity types for avoiding boredom; technology-assisted language learning or mobile-based language learning for emotion regulation, FLE, and FLCA; strategies for regulating emotions by teachers; and instructional strategies to manage stress and emotions towards L2 learning.

For Research Question 3 regarding methodological design features, researchers have mainly used quantitative questionnaires (13), a mix of questionnaires and interviews (8) or qualitative interviews (4) as well as multiple instruments (15). Researchers used questionnaires/scales to study emotions such as the foreign language classroom boredom subscale (Li and Dewaele, 2020) or the emotion regulation scale (Gross & John, 2003).

Limitations

The present study has reviewed only 40 studies from 2020 to 2024, which could limit the scope in the rapidly evolving field of online education and the affective dimension of language teaching.

The comprehensiveness of the present review could be limited by the exclusion of nonempirical theoretical papers, unpublished doctoral dissertations, and papers not written in English.

Conclusion

The present study has reviewed 40 studies to highlight the study of several emotions for the affective dimension of online English education, namely boredom (5), emotion regulation (6), emotional labour (6), emotional intelligence (5), stress (4), emotions towards L2 learning (4), FLE (3), FLE and FLA/ FLCA (2), FLCA (2), and positive and achievement emotions (3). In terms of future research, as emotions are complex and multidimensional, researchers can look at one specific emotion (23 studies) or multiple emotions (17 studies) or examine other emotions such as “curiosity, interest, hope, pride, anger, anxiety, shame, confusion, frustration” (Pekrun & Linnenbrink-Garcia, 2014, p. 1). Researchers can use questionnaires (13 studies), mixed methods (15 studies), a mix of questionnaires and interviews (8) or qualitative interviews to measure emotions. Researchers can draw from existing theories or instruments such as control-value theory (Pekrun, 2006), the under-stimulation model (Larson & Richards, 1991) for boredom, emotion regulation (Gross, 1998; Gross & John, 2003), emotional labour (Benesch, 2017), FLE (Dewaele & MacIntyre, 2014), FLCA and FLCA (Horwitz et al., 1986), FLE and FLA (Jiang & Dewaele, 2019) and TEI (Petrides, 2009; Petrides et al., 2006;). However, researchers can also look into the development of context-specific measurement tools. Besides the need for longitudinal studies, there is a need for more studies on secondary/high school students or comparative analyses of different levels as most of the studies were on university students (23), with only two on secondary/high school students and two on mixed groups. Given the nine studies on teachers and four on teacher educators, this represents a rich area for research, given their impact on students’ learning of EFL online.

The findings have several implications for educators and policymakers involved in online English language education. Educators can consider adopting pedagogical practices meant for specific emotions in terms of types of online activities, technological tools or emotional-based pedagogy. For instance, in terms of boredom, educators can avoid using the 10 different boredom-inducing activity types identified by Derakhshan et al. (2022) such as lectures (Pawlak et al., 2022). Educators can consider developing tailored technological tools to address specific emotions such as alleviating FLCA through automatic speech recognition learning websites (Bashori et al., 2020), which are part of a series of online experiments being developed, or HiVR technology though it is still developing its functions and affordances for language learning (Ding, 2024). To enhance emotion regulation for students, educators can consider using the Telegram app (Alazemi et al., 2023) and collaborative writing programmes (Zhang et al., 2022, 2024) with the use of learning analytics about students’ enjoyment and emotion regulation (Zhang et al., 2021). However, such technological tools, apps and programmes are subjected to obsolescence in the ever changing technological landscape, considering the replacement of Facebook by Telegram in recent years and the increasing importance of Artificial Intelligence tools. Educators can consider implementing emotional-based pedagogy (Abdolrezapour & Ghanbari, 2022, p. 6) through activities so language learners can work on emotional intelligence involving “storytelling, reflective activities, group discussions, and experience-sharing”. These activities can be adapted for diverse educational contexts. Educators can adopt emotional scaffolding strategies to support students’ online learning. This involves creating positive emotional experiences during the process of learning through strategies like connecting content to the learner’s prior knowledge and eliciting emotional responses (Rafidi & Wagner, 2024). These are generic strategies applicable to various contexts.

Policymakers can look at emotions at systemic levels (microsystem, mesosystem, exosystem) to chart research directions and professional development. In terms of research, as a microsystem refers to “a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting” (Bronfenbrenner, 1993, p. 39), it involves looking at the types of emotions experienced by the language learner in the online classroom. At the mesosystem level, which is “a system of microsystems” (Bronfenbrenner, 1993, p. 40) or the linking between settings in which the developing person is in, this means looking at factors affecting emotions within and outside the classroom for online language learning. The exosystem entails looking at the design of the curriculum, pedagogy and assessments, which is a system the developing person is not directly involved in. At the mesosystem and exosystem levels, policymakers have to look at teacher training, such as professional development sessions on the use of emotional scaffolding strategies as a teaching tool (Rafidi & Wagner, 2024).

References

- Abdolrezapour, P., & Ghanbari, N. (2022). Emotional-based pedagogy and facilitating EFL learners' perceived flow in online education. *Frontiers in Psychology, 13*, 960287 <https://doi.org/10.3389/fpsyg.2022.960287>
- Ahmed, A. (2024). Affective affordances in technology-mediated language teaching and learning. *Technology in Language Teaching & Learning, 6*(4), 1720. <https://doi.org/10.29140/tltl.v6n4.1720>
- Alazemi, A. F. T., Gheisari, A., & Patra, I. (2023). The consequences of task-supported language teaching via social media on academic engagement, emotion regulation, willingness to communicate, and academic well-being from the lens of positive psychology. *Asian-Pacific Journal of Second and Foreign Language Education, 8*(47), 1–26. <https://doi.org/10.1186/s40862-023-00220-6>
- Alqasham, F. H. (2022). Investigating English as a foreign language learners' perceptions, emotions, and performance during online collaborative writing. *Frontiers in Psychology, 13*, 954011. <https://doi.org/10.3389/fpsyg.2022.954011>
- Artino, A. R. (2012). Emotions in online learning environments: Introduction to the special issue. *The Internet and Higher Education, 15*(3), 137–140. <https://doi.org/10.1016/j.iheduc.2012.04.001>
- Ayar, Z. (2023). The coping strategies of English instructors and teachers with perceived stress while giving synchronous E-lectures in the COVID-19 era: A non-native EFL context. *rEFlections, 30*(3), 596–619. <https://doi.org/10.61508/refl.v30i3.267665>
- Bai, Y. (2024). A mixed methods investigation of mobile- based language learning on EFL students' listening, speaking, foreign language enjoyment, and anxiety. *Sage Open, 14*(2). <https://doi.org/10.1177/21582440241255554>
- Bashori, M., van Hout, R., Strik, H., & Cucchiarini, C. (2020). Web-based language learning and speaking anxiety. *Computer Assisted Language Learning, 35*(5–6), 1058–1089. <https://doi.org/10.1080/09588221.2020.1770293>
- Benesch, S. (2017). *Emotions and English language teaching: Exploring teachers' emotion labor*. Routledge.
- Bieleke, M., Gogol, K., Goetz, T., Daniels, L., & Pekrun, R. (2021). The AEQ-S: A short version of the achievement emotions questionnaire. *Contemporary Educational Psychology, 65*, 101940. <https://doi.org/10.1016/j.cedpsych>
- Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The power to improve: Effects of multilingualism and perceived proficiency on enjoyment and anxiety in foreign language learning. *European Journal of Applied Linguistics, 8*(2), 279–306. <https://doi.org/10.1515/eujal-2020-0003>
- Blake, R. J. (2011). Current trends in online language learning. *Annual Review of Applied Linguistics, 31*, 19–35. <https://doi.org/10.1017/S026719051100002X>
- Bronfenbrenner, U. (1993). Ecological models of human development. In Gauvain, M., & Cole, M. (Eds.), *Readings on the development of children* (pp. 37–43). Freeman.
- Chametzky, B. (2019). The online world languages anxiety scale (OWLAS). *Creative Education, 10*(1), 59–77. <https://doi.org/10.4236/ce.2019.101005>
- Cheng, P. Y. Z., & Liu, H. (2024). A structural model of EFL teachers' physical activity, emotion regulation, and competence for online teaching. *BMC Psychology, 12*(252), 1–13. <https://doi.org/10.1186/s40359-024-01753-2>

- Cowie, N. (2011). Emotions that experienced English as a foreign language (EFL) teachers feel about their students, their colleagues and their work. *Teaching and Teacher Education*, 27(1), 235–242. <https://doi.org/10.1016/j.tate.2010.08.006>.
- Damasio, A. (2003). *Looking for Spinoza: Joy, sorrow and the feeling brain*. Vintage.
- Davies, J., & Fortney, M. (2012). The menton theory of engagement and boredom. Poster presented at the *First Annual Conference on Advances in Cognitive Systems* (Palo Alto, 2012, December 6–8).
- Derakhshan, A., Kruk, M., Mehdizadeh, M., & Pawlak, M. (2022). Activity-induced boredom in online EFL classes. *ELT Journal*, 76(1), 58–68. <https://doi.org/10.1093/elt/ccab072>
- Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237–274. <https://doi.org/10.14746/ssl.2014.4.2.5>.
- Dewaele, J.-M., & MacIntyre, P. D. (2016). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of the language learner? In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 215–236). Multilingual Matters.
- Ding, M. (2024). The impact of high-immersion virtual reality on EFL learners' foreign language speaking anxiety: A mixed-method approach. *ReCALL*, 36(3), 1–19. <https://doi.org/10.1017/S0958344024000156>
- Dong, Y., & Yu, G. L. (2007). The development and application of an academic emotions' questionnaire. *Acta Psychologica Sinica*, 39(5), 507–511. <https://doi.org/10.1631/jzus.2007.B0507>
- Ebn-Abbasi, F., Fattahi, N., Sayyahi, M. J., & Nushi, M. (2024). Language learners' mindset and their academic engagement in online classrooms: The mediating role of achievement emotions. *Asia Pacific Education Review*, 25, 73–85. <https://doi.org/10.1007/s12564-023-09901-w>
- Erwin, E. J., Brotherson, M. J., & Summers, J. A. (2011). Understanding qualitative metasynthesis: Issues and opportunities in early childhood intervention research. *Journal of Early Intervention*, 33(3), 186–200. <https://doi.org/10.1177/1053815111425493>
- Fattahi, N., Ebn-Abbasi, F., Botes, E., & Nushi, M. (2023). Nothing ventured, nothing gained: The impact of enjoyment and boredom on willingness to communicate in online foreign language classrooms. *Language Teaching Research* Available online ahead of print. <https://doi.org/10.31234/osf.io/nz7m2>
- Feng, L. (2024). Modeling the contribution of EFL students' digital literacy to their foreign language enjoyment and self-efficacy in online education. *The Asia-Pacific Education Researcher*, 33, 977–985. <https://doi.org/10.1007/s40299-023-00787-1>
- Feng, X., & Liu, H. (2024). I feel blue – teacher, can you help me? A study on the effect of digital literacies on language learners' technostress, on-line engagement, autonomy, and academic success. *BMC Psychology*, 12(143), 1–18. <http://doi.org/10.1186/s40359-024-01637-5>
- Gaskaree, B. L., Xodabande, I., Zohrabi, M., & Behshad, N. (2025). Exploring the relationship between meaningful work and subjective well-being among language teachers: A mixed method study. *Australian Journal of Applied Linguistics*, 8(1), 2289. <https://doi.org/10.29140/ajal.v8n1.2289>
- Ghanizadeh, A., Tabeie, M., & Pourtousi, Z. (2024). The role of university instructor's narrative in students' sustained attention, emotional involvement and cognitive learning. *Journal of Applied Research in Higher Education*, 16 (1), 195–207. <https://doi.org/10.1108/JARHE-09-2022-027>
- Golestani, N. (2017). Designing and validating EFL teachers' smart classroom management scale and exploring its role in students' engagement and language achievement. [Unpublished Master's thesis]. Imam Reza International University, Mashhad.
- Grandey, A. A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5(1), 95–110. <https://doi.org/10.1037/1076-8998.5.1.95>
- Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression and physiology. *Journal of Personality and Social Psychology*, 74, 224–237. <https://doi.org/10.1037/0022-3514.74.1.224>
- Gross, J. J. (2014). (Ed.). *Handbook of emotion regulation* (2nd ed.). The Guilford Press.
- 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>
- Gross, J. J., & Thompson, R.A. (2006). Emotion regulation: Conceptual foundations. In J.J. Gross (Ed.), *Handbook of emotion regulation* (pp. 408–426). Guilford Press.

- Hadwin, A. F., Järvelä, S., & Miller, M. (2018). Self-regulation, co-regulation, and shared regulation in collaborative learning environments. In B. J. Zimmerman, & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (2nd ed., pp. 83–106). Routledge.
- Harris, M. B. (2000). Correlates and characteristics of boredom proneness and boredom. *Journal of Applied Social Psychology*, 30(3), 576–598. <https://doi.org/10.1111/j.1559-1816.2000.tb02497.x>
- He, D. (2018). *Foreign language learning anxiety in China: Theories and applications in English language teaching*. Springer.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feelings*. University of California Press.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly* 20(3), 559–562. <https://doi.org/10.2307/3586302>
- Horwitz, E. K. (1996). Even teachers get the blues: Recognizing and alleviating language teachers' feelings of foreign language anxiety. *Foreign Language Annals*, 29(3), 365–372. <https://doi.org/10.1111/j.1944-9720.1996.tb01248.x>
- Horwitz, E. K. (2017). On the misreading of Horwitz, Horwitz, and Cope (1986) and the need to balance anxiety research and the experiences of anxious language learners. In C. Gkonou, M. Daubney, & J.-M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 31–47). Multilingual Matters.
- Horwitz, E. K., Horwitz, B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>
- Järvenoja, H., Volet, S., & Järvelä, S. (2013). Regulation of emotions in socially challenging learning situations: An instrument to measure the adaptive and social nature of the regulation process. *Educational Psychology*, 33(1), 31–58. <https://doi.org/10.1080/01443410.2012.742334>
- Jiang, J., Vauras, M., Volet, S., & Wang, Y. (2016). Teachers' emotions and emotion regulation strategies: Self- and students' perceptions. *Teaching and Teacher Education*, 54, 22–31. <https://doi.org/10.1016/j.tate.2015.11.008>
- Jiang, Y., & Dewaele, J.M. (2019). How unique is the foreign language classroom enjoyment and anxiety of Chinese EFL learners? *System*, 82, 13–25. <https://doi.org/10.1016/j.system.2019.02.017>
- Kleinginna, P. R., & Kleinginna, A. M. (1981). A categorized list of emotion definitions, with suggestions for a consensual definition. *Motivation and Emotion*, 5, 345–379.
- Klassen, R. M., Yerdelen, S., and Durksen, T. L. (2013). Measuring teacher engagement: Development of the engaged teachers scale (ETS). *Frontline Learning Research*, 1, 33–52. <https://doi.org/10.14786/flr.v1i2.44>
- Kohnke, L., & Fount, D. (2023). Promoting positive emotions during the emergency remote teaching of English for academic purposes: The unexpected role of the constructionist approach. *Education Sciences*, 13(765), 1–12. <https://doi.org/10.3390/educsci13080765>
- Kruk, M., Pawlak, M., Shirvan, M. E., & Shahnama, M. (2022). The emergence of boredom in an online language class: An ecological perspective. *System*, 107, 102803. <https://doi.org/10.1016/j.system.2022.102803>
- Larson, R. W., & Richards, M. H. (1991). Boredom in the middle school years: Blaming schools versus blaming students. *American Journal of Education*, 99(4), 418–443. <https://doi.org/10.1086/4439>
- Lasagabaster, D., Fernández-Costales, A., & de Lis González-Mujico, F. (2024). *The affective dimension in English-medium instruction in higher education*. Multilingual Matters.
- Lasky, S. (2005). A sociocultural approach to understanding teacher identity, agency and professional vulnerability in a context of secondary school reform. *Teaching and Teacher Education*, 21, 899–916. <https://doi.org/10.1016/j.tate.2005.06.003>
- Lee, J. S., & Lee, K. (2021). The role of informal digital learning of English and L2 motivational self system in foreign language enjoyment. *British Journal of Educational Technology*, 52(1), 358–373. <https://doi.org/10.1111/bjet.12955>
- Li, C., & Dewaele, J.-M. (2020). The predictive effects of trait emotional intelligence and online learning achievement perceptions on foreign language class boredom among Chinese university students. *Foreign Languages and Their Teaching*, 5, 33–44. <https://doi.org/10.13458/j.cnki.flatt.004711>
- Li, C., Jiang, G., & Dewaele, J.M. (2018). Understanding Chinese high school students' foreign language enjoyment: Validation of the Chinese version of the foreign language enjoyment scale. *System*, 76, 183–196. <https://doi.org/10.1016/j.system.2018.06.004>

- Liu, H., Li, H., & Fang, F. (2024). "Behind the screen, I still care about my students!": Exploring the emotional labour of English language teachers in online teaching during the COVID-19 Pandemic. *International Journal of Applied Linguistics*, 34(2), 450–465. <https://doi.org/10.1111/ijal.12501>
- Liu, S., Yuan, R., & Wang, C. (2021). 'Let emotion ring': An autoethnographic self-study of an EFL instructor in Wuhan during COVID-19. *Language Teaching Research*. Available online ahead of print. <https://doi.org/10.1177/13621688211053498>
- Ma, P., Yu, J., Qiao, Y., & Zhang, L.C. (2023). Developing and validating a scale to measure teachers' emotional labor strategy in classrooms. *Social Psychology of Education*, 26, 557–577. <https://doi.org/10.1007/s11218-022-09752-0>
- MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language teaching: A practical guide to creating a low-anxiety classroom atmosphere* (pp. 24–45). McGraw-Hill.
- MacIntyre, P. D. (2012). The idiodynamic method: A closer look at the dynamics of communication traits. *Communication Research Reports*, 29(4), 361–367. <https://doi.org/10.1080/08824096.2012.723274>
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*, 94, 102352. <https://doi.org/10.1016/j.system.2020.102352>
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research*. Sage.
- Marteau, T. M., & Bekker, H. (1992). The development of a six-item short-form of the state scale of the Spielberger State-Trait Anxiety Inventory (STAI). *British Journal of Clinical Psychology*, 31(3), 301–306. <https://doi.org/10.1111/j.2044-8260.1992.tb00997.x>
- Martin, F., Sun, T., & Westine, C.D. (2020). A systematic review of research on online teaching and learning from 2009 to 2018. *Computers & Education*, 159, 104009. <https://doi.org/10.1016/j.compedu.2020.104009>
- Meyer, D. K., & J. C. Turner. (2007). Scaffolding emotions in classrooms. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in education* (pp. 243–258). Elsevier Academic Press.
- Meihami, H., & Esmaili, S. (2024). TAFL and TEFL teachers' emotional vulnerability and emotion regulation strategies in online classes. *The Asia-Pacific Education Researcher*, 33, 913–929. <https://doi.org/10.1007/s40299-023-00804-3>
- Meng, J. (2024). A review of research on emotions in foreign language learning. *Applied and Educational Psychology*, 5(4), 156–165. <https://doi.org/10.23977/appep.2024.050423>
- Nazari, M., Karimpour, S., & Xodabande, I. (2024a). English language teachers' emotion labor in response to online teaching: An interpretative phenomenological approach. *Journal of Education*, 204(2), 455–467. <https://doi.org/10.1177/00220574221150000>
- Nazari, M., Nejadghanbar, H., & Hu, G. (2024b). An activity theory inquiry into emotional vulnerability and professional identity construction of language teacher educators. *Journal of Multilingual and Multicultural Development*. Available online ahead of print. <https://doi.org/10.1080/01434632.2024.2354350>
- Ngo, T. C. T. (2021). EFL teachers' emotion regulation in response to online-teaching at Van Lang University. *Proceedings of the AsiaCALL International Conference*, 533, 80–87. <https://doi.org/10.2991/assehr.k.210226.010>
- Nguyen, H. H., & Pham, T. T. (2023). EFL teachers' emotions at online teaching throughout the COVID-19 pandemic: Changes and coping strategies. *TESL-EJ*, 26(4), 1–21. <https://doi.org/10.55593/ej.26104a13>
- Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50, 57–85. <https://doi.org/10.1111/1467-9922.53223>
- Öztürk, G., & Gurbuz, N. (2014). Speaking anxiety among Turkish EFL learners: The case at a state university. *Journal of Language and Linguistic Studies*, 10(1), 1–17.
- Pawlak, M., Kruk, M., & Zawodniak, J. (2020). Investigating individual trajectories in experiencing boredom in the language classroom: The case of 11 Polish students of English. *Language Teaching Research*, 26(4), 598–616. <https://doi.org/10.1177/1362168820914004>

- Pawlak, M., Derakhshan A., Mehdizadeh, M., & Kruk, M. (2022). Boredom in online English language classes: Mediating variables and coping strategies. *Language Teaching Research*. Available online ahead of print. <https://doi.org/10.1177/13621688211064944>
- Peng, R., Hu, Q., & Kouider, B. (2023). Teachers' acceptance of online teaching and emotional labor in the EFL context. *Sustainability*, 15(18), 13893. <https://doi.org/10.3390/su151813893>
- Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, 18(4), 315–341. <https://doi.org/10.1007/s10648-006-9029-9>
- Pekrun, R., & Linnenbrink-Garcia, L. (2014). Introduction to emotions in education. In Pekrun, R., & Linnenbrink-Garcia, L. (Eds.) *International handbook of emotions in education* (pp. 1–10). Routledge.
- Pekrun, R., & Stephens, E. J. (2010). Achievement emotions: A control-value approach. *Social and Personality Psychology Compass*, 4(4), 238–255. <https://doi.org/10.1111/j.1751-9004.2010.00259.x>
- Pekrun, R., Goetz, T., Daniels, L., Stupnisky, R.H., & Perry, R.P. (2010). Boredom in academic settings: Exploring control-value antecedents and performance outcomes of a neglected emotion. *Journal of Educational Psychology*, 102(3), 531–549. <http://dx.doi.org/10.1037/a0019243>.
- Petrides, K. (2009). Psychometric properties of the Trait Emotional Intelligence Questionnaire (TEIQue). In C. Stough, D. Saklofske & J. Parker (Eds.). *Assessing emotional intelligence* (pp. 85–101). Springer Science.
- Petrides, K. V., & Mavroveli, S. (2018). Theory and applications of trait emotional intelligence. *Psychology*, 23(1), 24–36. https://doi.org/10.12681/psy_hps.23016
- Petrides, K. V., Sangareau, Y., Furnham, A., & Frederickson, N. (2006). Trait emotional intelligence and children's peer relations at school. *Social Development*, 15(3), 537–547. <https://doi.org/10.1111/j.1467-9507.2006.00355.x>
- Pillen, M., Beijaard, D., & den Brok, P. (2013). Professional identity tensions of beginning teachers. *Teachers and Teaching*, 19(6), 660–678. <https://doi.org/10.1080/13540602.2013.827455>
- Plonsky, L., Sudina, E., & Teimouri, Y. (2022). Language learning and emotion. *Language Teaching*, 55(3), 346–362. <https://doi.org/10.1017/S0261444821000434>.
- Rafidi, T. J., & Wagner, B. (2024). The impact of emotional scaffolding on online teaching and learning in Palestinian English language classrooms during COVID-19. *Innovation in Language Learning and Teaching*, 18(2), 155–168. <https://doi.org/10.1080/17501229.2023.2245810>
- Reeve, J., & Tseng, C. M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, 36(4), 257–267. <https://doi.org/10.1016/j.cedpsych.2011.05.002>
- Resnik, P., & Dewaele, J.-M. (2020). Trait emotional intelligence, positive and negative emotions in first and foreign language classes: A mixed-methods approach. *System*, 94, 102324. <https://doi.org/10.1016/j.system.2020.102324>
- Resnik, P., & Dewaele, J.-M. (2021). Learner emotions, autonomy and trait emotional intelligence in “in-person” versus emergency remote English foreign language teaching in Europe. *Applied Linguistics Review*, 14 (3), 473–501. <https://doi.org/10.1515/applirev-2020-0096>.
- Richards, J. C. (2022). Exploring emotions in language teaching. *RELC Journal*, 53(1), 225–239.
- Richmond, V. P., McCroskey, J. C., Kearney, P. & Plax, T. G. (1987). Power in the classroom VII: Linking behavior alteration techniques to cognitive learning. *Communication Education*, 36(1), 1–12. <https://doi.org/10.1080/03634528709378636>
- Russell, V. (2020). Language anxiety and the online learner. *Foreign Language Annals*, 53(2), 338–352. <https://doi.org/10.1111/flan.12461>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press. <https://doi.org/10.1521/978.14625/28806>
- Salem H. S. (2018). *The perceptions and implications of techno-stress in an E-learning environment: An exploratory case study*. [Doctoral dissertation, Cape Peninsula University of Technology]. Cape Peninsula University of Technology.
- Sampson, R. J., & Yoshida, R. (2020). Emergence of divergent L2 feelings through the co-adapted social context of online chat. *Linguistics and Education*, 60, 100861. <https://doi.org/10.1016/j.linged.2020.100861>

- Sampson, R. J., & Yoshida, R. (2021). L2 feelings through interaction in a Japanese–English online chat exchange. *Innovation in Language Learning and Teaching*, 15(2), 131–142. <https://doi.org/10.1080/17501229.2019.1710514>
- Schaap, H., van der Want, A. C., Oolbekkink-Marchand, H. W., & Meijer, P. C. (2021). Changes over time in the professional identity tensions of Dutch early-career teachers. *Teaching and Teacher Education*, 100, 1–13. <https://doi.org/10.1016/j.tate.2021.103283>
- Shao, K., Kutuk, G., Fryer, L. K., Nicholson, L. J., & Guo, J. (2023). Factors influencing Chinese undergraduate students' emotions in an online EFL learning context during the COVID pandemic. *Journal of Computer Assisted Learning*, 39(5), 1465–1478. <https://doi.org/10.1111/jcal.12791>
- Song, J. (2016). Emotions and language teacher identity: Conflicts, vulnerability, and transformation. *TESOL Quarterly*, 50(3), 631–654. <https://doi.org/10.1002/tesq.312>
- Song, J. (2022). The emotional landscape of online teaching: An autoethnographic exploration of vulnerability and emotional reflexivity. *System*, 106, 102774. <https://doi.org/10.1016/j.system.2022.102774>
- Sonnenberg, D., & Rutledge, P. (2024). Online education benefits instructors' emotional labor management. *Computers and Education Open*, 7, 100225. <https://doi.org/10.1016/j.caeo.2024.100225>
- Sutton, R. E., & Harper, E. (2009). Teachers' emotion regulation. In Saha, L. J., & A. G. Dworkin (Eds.), *International handbook of research on teachers and teaching* (pp. 389–401). Springer.
- Taguchi, T., Magid, M., & Papi, M. (2009). The L2 motivational self system among Japanese, Chinese and Iranian learners of English: A comparative study. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 66–97). Multilingual Matters.
- Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301–328. <https://doi.org/10.2753/MIS0742-1222240109>
- Tzirides, A. O. (2020). Online language learning: Understanding and supporting the contemporary digital multilingual learner. In M. Montebello (Ed.), *Handbook of research on digital learning* (pp. 140–159). IGI Global.
- Valverde-Berrocoso, J., Garrido-Arroyo, M. d. C., Burgos-Videla, C., & Morales-Cevallos, M. B. (2020). Trends in educational research about e-Learning: A systematic literature review (2009–2018). *Sustainability*, 12(12), 5153. <https://doi.org/10.3390/su12125153>
- Wang, J., Zhang, X., & Zhang, L. J. (2022). Effects of teacher engagement on students' achievement in an online English as a foreign language classroom: The mediating role of autonomous motivation and positive emotions. *Frontiers in Psychology*, 13, 950652. <https://doi.org/10.3389/fpsyg.2022.950652>
- Waterman, J., de Figueiredo, E. H. D., & Kyria Finardi, R. (2023). Emotions of L2 learners in different contexts and modes. *Studies in English Language Teaching*, 11(2), 91–113. <https://doi.org/10.22158/selt.v11n2p91>
- Winne, P. H., & Hadwin, A. F. (1998). Studying as self-regulated learning. In D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), *Metacognition in educational theory and practice* (pp. 277–304). Lawrence Erlbaum Associates Publishers.
- Xu, Y., & Tao, J. (2023). The pedagogical and socioaffective dimensions of identity tensions and teacher agency: Case studies of university English teachers teaching online. *Language Teaching Research*. Available online ahead of print. <https://doi.org/10.1177/13621688221151047>
- Yin, H. B. (2012). Adaptation and validation of the teacher emotional labor strategy scale in China. *Educational Psychology*, 32(4), 1–15. <https://doi.org/10.1080/01443410.2012.674488>
- Yin, H., & Lee, J. C. (2012). Be passionate, but be rational as well: Emotional rules for Chinese teachers' work. *Teaching and Teacher Education*, 28(1), 56–65. <https://doi.org/10.1016/j.tate.2011.08.005>
- Yuan, R. (2023). Chinese university EFL learners' foreign language classroom anxiety and enjoyment in an online learning environment during the COVID-19 pandemic. *Asia Pacific Journal of Education*, 0(0), 1–17. <https://doi.org/10.1080/02188791.2023.2165036>
- Zembylas, M. (2002). "Structures of feeling" in curriculum and teaching: Theorizing the emotional rules. *Educational Theory*, 52(2), 187–208. <https://doi.org/10.1111/j.1741-5446.2002.00187.x>

- Zembylas, M. (2003). Interrogating “teacher identity”: Emotion, resistance, and self-formation. *Educational Theory*, 53(1), 107–127. <https://doi.org/10.1111/j.1741-5446.2003.00107.x>
- Zembylas, M. (2014). The place of emotion in teacher reflection: Elias, Foucault and critical emotional reflexivity. *Power and Education*, 6(2), 210–222. <https://doi.org/10.2304/power.2014.6.2.210>
- Zhang, Z., Gao, X. (A.), 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. <http://dx.doi.org/10.14746/ssllt.2022.12.3.6>
- Zhang, Z., Liu, T., Gao, X. (A.), & Lee, C. B. (2024). A longitudinal examination of language learners’ group-level enjoyment and emotion regulation in online collaborative learning. *Language Teaching Research*. Available online ahead of print. <https://doi.org/10.1177/13621688241227584>
- 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>
- Zheng, S., & Zhou, X. (2023). Enhancing foreign language enjoyment through online cooperative learning: A longitudinal study of EFL learners. *International Journal of Environmental Research and Public Health*, 20, 611. <https://doi.org/10.3390/ijerph20010611>