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## Teacher Enthusiasm and Students' Social-behavioral Learning Engagement: The Mediating Role of Student Enjoyment and Boredom in Chinese EFL Classes<sup>1</sup>

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## Abstract

Teacher enthusiasm is attracting growing attention in educational and learner psychology research. There is evidence that teacher enthusiasm is contagious in class and positively affects student emotions. Their fundamental role in shaping student engagement has also been well documented. However, the links—between teacher enthusiasm and student emotions, and between student emotions and engagement—remain underexplored in instructed second language acquisition. The present study adopted a mixed-method approach to examine the complex relationships between perceived teacher enthusiasm, emotions (enjoyment and boredom), and social-behavioral learning engagement among 2002 EFL learners from 11 universities in China. Quantitative analyses showed small to large correlations between perceived teacher enthusiasm and student between perceived teacher enthusiasm and student social-behavioral learning engagement. In addition, student enjoyment and boredom were found to co-mediate the relationship between perceptions of teacher enthusiasm and student social-behavioral engagement in English classes. Qualitative interviews with nine students provided insights into the potential causes of the statistical patterns. Theoretical and pedagogical implications are discussed, followed by directions for future research.

*Keywords*: emotion contagion, teacher enthusiasm, enjoyment, boredom, student engagement, L2 learning

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#### Introduction

Enthusiastic teaching not only motivates, inspires, and excites learners but also improves learning and learners' achievement (Keller et al., 2016). Teacher enthusiasm has been identified as one of the defining features of good teachers and also as a key indicator of instruction quality (Kunter et al., 2011). In addition, "enthusiastic teachers also appear to be happier and healthier" (Keller et al., 2016, p. 744), and are more effective in teaching (e.g., Frenzel et al., 2009; Lazarides et al., 2018, 2019). However, in the field of instructed second language acquisition (ISLA), scant attention has been paid to this fundamental teacher characteristic. The present contribution thus follows Sato and Csizér's (2021) call for the building of bridges between ISLA and language learning psychology (LP) research with the wider aim of informing and co-opting L2 teachers in the research (see also Sato & Loewen, 2019). Such bridge building implies a good understanding of both the educational, the psychological and the ISLA literature that has combined psychological and emotional variables. After a brief introduction to the precursor research on classroom emotion in the three fields, the present study delves into English as a Foreign Language (EFL) teachers' enthusiasm and investigates its associations with students' emotional experiences as well as learning engagement, within the Chinese EFL context.

## **Emotion Theories and ISLA**

#### **Broaden-and-Build Theory**

There has been growing attention to LP and emotions in ISLA contexts, more specifically in how they affect language learners' motivation, cognition, interest, engagement, behavior, achievement as well as well-being (for overviews see Dewaele et al., 2019; Dewaele & Li, 2020; MacIntyre, Gregersen, & Mercer 2019). The so-called "affective turn" (Pavlenko, 2013) was further fueled by the introduction of Positive Psychology into SLA (MacIntyre & Gregersen, 2012). The major underpinning theory is the Broaden-and-Build Theory (Fredrickson, 2003). The main tenet of the theory is that positive emotions broaden people's thought-action repertoires, which further helps to build their social resources, while negative emotions have the opposite narrowing effect. In SLA terms, it is argued that learners experiencing positive emotions will absorb more input and will build more resources for further language learning. In contrast, negative emotions will narrow learners' focus and restrict the range of potential language input (MacIntyre & Gregersen, 2012). These insights contributed to a new wave of emotion studies in ISLA. Interest moved beyond foreign language (classroom) anxiety to include a wider spectrum of emotions including enjoyment, love, pride, hope, shame, guilt, and boredom (e.g., MacIntyre et al., 2019; Pavelescu & Petrić, 2018; Teimouri, 2018). Questions were also raised about the relationship between positive and negative emotions such as foreign language enjoyment (FLE) and foreign language classroom anxiety (FLCA) (Dewaele & MacIntyre, 2014). Most recently, there has also been a growing interest in foreign language learning boredom (Kruk, 2019; Kruk & Zawodniak, 2018; Li, 2021; Li, Dewaele & Hu, 2021; Pawlak et al., 2020a, b). **Control-Value Theory** 

The Control-Value Theory (CVT) of achievement emotions (Pekrun, 2006), a major theory in educational psychology, has also provided a useful theoretical basis for ISLA emotion researchers (Li, 2018; Piniel & Albert, 2018). Various achievement emotions including enjoyment, anxiety and boredom were found to be pervasive in L2 contexts. The relevant key assumptions are as follows:

**Three-dimension taxonomy of achievement emotions.** According to the CVT, achievement emotions are those that are closely tied to learning activities or outcomes (Pekrun, 2006). Enjoyment, boredom, anxiety, hope and excitement are typical achievement emotions permeating in educational settings (Pekrun & Perry, 2014). Achievement emotions are conceptualized along three dimensions, namely, *object focus* (the activity itself vs. the

outcome), *valence* (positive vs. negative quality), and *activation* (deactivation vs. activation) (Pekrun & Stephens, 2010). Thus, enjoyment and boredom are both activity-related achievement emotions. That is, they both arise from ongoing activities or the learning materials used in the activities but stand at opposite poles of the continuum: enjoyment is a positive activating emotion, while boredom is a negative deactivating emotion. Other emotions, like hope and anxiety, are outcome-related achievement emotions evoked by past or future outcomes of these learning activities. Specifically, emotions like hope are positive, activating and evoked by future outcomes, while those like anxiety are negative, activating and evoked by either past or future outcomes (Pekrun & Perry, 2014).

Achievement emotions and their antecedents and outcomes. The CVT also posits a model whereby achievement emotions, its antecedents and outcomes in learning are linked by reciprocal relationships over time (Pekrun et al., 2007). More specifically, achievement emotions occur as a result of various types of appraisals (e.g., appraisals of subjective control and value, agency, goal congruence) of environment (e.g., teacher characteristics, task demands), and act on other resources (e.g., cognition, motivation and engagement), further influencing students' academic achievement (Pekrun & Stephens, 2010). In addition, students' achievement can further act as environmental factors and affect their appraisals.

Control-Value Theory in ISLA. The three-dimension taxonomy of CVT has been used in ISLA research to conceptualize and define various types of achievement emotions. For example, based on the qualitative analysis of the writings of 166 English majors in Hungary, Piniel and Albert (2018) described their emotional experiences along three dimensions (i.e., object focus, valence and activation) within the framework of the CVT. Its conceptual nomological network has also been used to investigate the links between achievement emotions and its antecedents or outcomes. For example, Piechurska-Kuciel (2017) examined the enjoyment experiences of English L2 and German L3 learners in Polish universities. The level of enjoyment could be attributed to language achievement, which is closely related to control and value appraisals, two proximal antecedents of achievement emotions. Extending this, Li (2018), Li et al. (2020) probed the relationship between Chinese EFL learners' foreign language classroom emotions (anxiety and enjoyment) and their outcomes. The results showed that enjoyment and anxiety were related to learners' confidence, interest, motivation, engagement, cognition (e.g., attention), and finally to their overall English achievement. Li (2021) found that appraisals of perceived control and value negatively predicted boredom, uniquely or interactively, among 2002 Chinese EFL learners. Students who felt more proficient in English and valued their learning more reported feeling less bored, and vice versa.

However, so far very few studies have included achievement emotions, their antecedents and effects in one research design. In addition, only a few studies have included teacher enthusiasm as an environment antecedent, or engagement as an outcome of achievement emotions. Thus, in the present study, the CVT is adopted to firstly conceptualize enjoyment and boredom as achievement emotions, and then investigate their antecedent (i.e., teacher enthusiasm) and outcome (i.e., student engagement).

## **Teacher Enthusiasm**

Definitions for the concept of "teacher enthusiasm" have evolved dramatically over time. During the 1970s, teacher enthusiasm was firmly equated with displayed enthusiasm and regarded as instructional behaviors including "vocal delivery, eyes, gesture, movements, facial expression, word selection, acceptance of ideas and feelings and overall energy level" (Collins, 1978, p. 3). This uni-behavioral approach to enthusiasm was challenged. For example, Kunter et al. (2008) conceptualized teacher enthusiasm as an affective-motivational teacher characteristic, with the behavioral component excluded. However, in Kunter et al.'s (2008) conceptualization, teacher enthusiasm referred solely to teachers' experienced enthusiasm, namely the subjective emotional experience of enjoyment in teaching that forms the integral part of teacher motivation. This two-dimensional conceptualization with an exclusion of behavioral expressions disconnected enthusiasm from the literature of displayed enthusiasm and made it difficult to disentangle it from teacher enjoyment (Kunter et al., 2011). In addition, the exclusion of the behavioral expression of teacher enthusiasm also limited the conceptualization of the perception, transmission, and communication of teachers' enthusiasm in the classroom.

Kunter et al. (2011) thus redefined enthusiasm as an affective-behavioral teacher characteristic. The bi-dimensional construct reflects both the emotional experiences of enjoyment, excitement, and pleasure, and certain related behaviors manifesting these experiences in the classroom. Moreover, they distinguished teacher enthusiasm for the subject from teacher enthusiasm for the activity of teaching. Following this avenue, Keller et al. (2016) defined teacher enthusiasm as an affective-behavioral teacher characteristic, that is, the co-occurrence of positive emotional experiences including enjoyment, and the behavioral (mostly nonverbal) display of these subjective experiences. In other words, enthusiasm includes both experienced enthusiasm and displayed enthusiasm. Frenzel et al. (2009) strenghtened this approach by positing that teacher enthusiasm refers to the affective experience of enjoyment during teaching and its behavioral expression or translation during teaching. Specifically, the associated expressive behaviors of enjoyment are "smiles, widened eyes, high and variable pitch, and higher speaking speed" (p. 707).

The inclusion of the displayed enthusiasm in the construct allows teacher enthusiasm to be a teacher characteristic that is visible, perceivable, and transmittable to students. Frenzel et al. (2009) showed that enjoyment was contagious in class and that teacher and student enjoyment could be reciprocally transmitted and affect each other. Other educational psychologists such as Lazarides et al. (2018, 2019) confirmed that teacher enthusiasm could be directly transmitted to students and improve their interest, engagement and motivation development. Keller et al. 's (2016) and Frenzel et al.'s (2009) bi-dimensional conceptualization of teacher enthusiasm provides the conceptual and empirical basis for the present study. We adopt the affective-behavioral approach to teacher enthusiasm and seek to investigate the links between teacher enthusiasm and student emotions and social-behavioral learning engagement in an EFL context.

## **Enjoyment in L2 Learning**

Enjoyment is a positive affective state that combines challenge, happiness, interest, fun, sense of pride, and sense of meaning. It occurs especially in activities where learners have a degree of autonomy and when something novel is encountered or something challenging is achieved (Seligman & Csikszentmihalyi, 2000; Dewaele & MacIntyre, 2014). According to the CVT, enjoyment in L2 context could be regarded as a positive learning-facilitative achievement emotion. It has been linked to heightened motivation and engagement, as well as better actual and self-perceived L2 performance and also a higher Willingness to Communicate (Botes et al., 2021; Li, 2018).

A number of studies identified multiple sources for FLE. They include teacher factors (e.g., predictability, friendliness, patience, behaviors, and use of L2), peer factors (e.g., student cooperation), self-factors (e.g., age, gender, multilingualism, level in the FL, relative standing in class, L2 attitude, attitude towards L2 teacher), content (e.g., novelty of content and difficulty of tasks), and classroom environment in L2 class (e.g., Dewaele & MacIntyre, 2014, 2016, 2019; Dewaele et al. 2018; Dewaele, Magdalena Franco et al., 2019; Li et al., 2018; Jiang, 2020; Khajavy et al., 2018; Sampson, 2020).

Germane to the current study, many of the studies showed that teachers play a crucial role in enjoyment. For example, using focused essay technique, Jiang (2020) focused on teacher-related sources for the enjoyment experienced by 646 Chinese EFL students. Five

sources emerged, among which teacher characteristics, which included teacher happiness and humor, friendliness, kindness, and patience.

Jiang and Dewaele (2019) reported similar findings. Multiple regression analyses of 564 Chinese first-year EFL undergraduate students' responses to open questions revealed that FLE was predicted more strongly by teacher-related variables and less by learner-internal variables. Three main teacher-related variables were attitudes towards the teacher, teacher's joking, and friendliness of teacher. Li et al. (2021b) also revealed that teacher played a key role in creating a positive classroom environment among two samples of 1,718 secondary EFL students and 2,268 EFL students in China. The students were more likely to experience enjoyment when their teachers provided more academic and emotional support, displayed interest and passion in teaching, and tried to establish a warm, congenial, and caring relationship with them. The strong effect of teachers on learners' FLE also emerged in Dewaele, Magdalena Franco et al.'s (2019) study of 210 Spanish EFL learners. Teacher's friendliness was the strongest predictor of FLE-explaining close to a fifth of variance. These patterns were further confirmed in Dewaele and MacIntyre (2019) who analyzed quantitative and qualitative feedback from 750 FL learners around the world and found that FLE was mainly predicted by teacher behaviour such as friendliness and joking. The analysis of participants' descriptions of enjoyable FL experiences revealed that the teacher was mentioned as the most frequent cause of the enjoyment.

Finally, enjoyment was found to be be transmitted by teachers to students. For example, Moskowitz and Dewaele (2021) found evidence of an emotional contagion effect of teacher happiness among 129 adult EFL students. Perceptions of their teacher's happiness in the FL class was positively linked to their overall L2 attitude and motivation as well as their attitude towards teacher. Talebzadeh et al. (2020) used an idiodynamic research design to explore how emotion contagion occurs between a teacher and a student in dyadic interactions. They found that enjoyment was automatically transmitted by teacher and student via facial expressions, posture, movement, and vocalization.

#### **Boredom in L2 Learning**

Boredom can be defined as an unpleasant affective or psychological state that is associated with low physical and cognitive arousal, specific time perceptions (e.g., dragging or standing still) and action tendencies to disengage from what is going on around (Li, 2021). This entails that boredom is "a combination of dissatisfaction, disappointment, annoyance, inattention, lack of motivation to pursue previously set goals and impaired vitality" (Kruk & Zawodniak, 2018, p. 177). It permeates academic settings, and has consistent repercussions in various aspects in learning, including individual engagement, cognition, motivation, selfregulation, learning strategies, and learning achievement (Daniels et al., 2015; Macklem, 2015).

Most ISLA research into boredom has been conducted in a Polish university context using qualitative methods (Pawlak et al., 2020a, b). For example, Kruk and Zawodniak (2018) used interviews to identify causes for boredom experienced by Polish EFL learners. They included: 1) repetitive and monotonous tasks; 2) lack of interest caused by tight teacher control; 3) low usefulness of assigned tasks; 4) teachers personalities and teaching tools; 5) under-challenging or over-challenging activities; 6) lack of teacher feedback. Notably, they pointed that undesirable teacher characteristics played a central role in the instigation of boredom, which led to disengagement and avoidance behaviors. In another study, Pawlak, Kruk and Zawodniak (2020) examined boredom experiences of three Polish English majors in three English Language classes. They described the changing patterns of boredom and the underlying factors for the changes. The intensity of boredom was linked to the teacher, topics, repetitive activities, task implementation, and a mismatch between challenge and proficiency level (Pawlak et al., 2020a, b). In their only quantitative study on boredom, Pawlak, et al. (2020a, b) investigated the boredom experiences of 107 Polish English majors and identified its two factors: 1) *Disengagement, monotony, and receptiveness*, and 2) *Lack of satisfaction and challenge*.

Li (2021) used the CVT framework to define boredom in L2 learning along three dimensions, and investigated its links with control and value apprasials as its antecedents, based on the data of 2002 non-English majors in China. Boredom was found to occur mostly during tasks or activities that were over-challenging, under-challenging or of no value or interest. In a further study of 2223 non-English majors in China, Li et al. (2021a) found that boredom experienced in L2 learning could be attributed to learner-internal factors (e.g., trait boredom) and learner-external factors (e.g., task difficulty, peer performance, and perceptions of teacher characteristics including personality, teaching motvation and teaching practices). Of high relevance to the present study, the findings showed that students were more likely to be bored with teachers who were not likable, uninteresting, and not motivated in teaching.

Research in this area is just starting. Methodologically, most of the existing studies on L2 boredom are qualitative in nature. Theoretically, very few of the studies have adopted the CVT approach to investigate the antecedents and outcomes of boredom collectively to provide a holistic understanding of the complete picture. In terms of the subject matter, few studies have focused on the effect of teacher enthusiasm on boredom and the outcomes (e.g., engagement) of boredom in L2 learning.

### **Student Engagement**

For more than three decades, researchers have investigated student engagement and its positive association with "desired academic, social, and emotional learning outcomes" (Reeve, 2012, p. v). It is a multidimensional construct encompassing cognitive, emotional, behavioral, agentic and social dimensions (Linnenbrink-Garcia et al., 2011; Reeve, 2012). It refers to students' heightened attention, involvement, and participation in learning activities towards a certain achievement goal, with efforts in both personal dimensions (e.g., cognitive, affective, behavioral factors) and interpersonal dimensions (e.g., social and affective factors) (Linnenbrink-Garcia et al., 2011).

The construct of student engagement has evolved in SLA research, starting with Storch's (2002) unidimensional model limited solely to cognitive engagement with language to Philp and Duchesne's (2016) multidimensional model encompassing behavioral, cognitive, emotional and social dimensions. This evolution is in line with the increasing acceptance that language learning is a culmination of cognitive, emotional, and social factors (Sato, 2017). Oga-Baldwin (2019) pointed out that affective factors (e.g., motivation, emotion, interest) and learning environment (e.g., teacher and peer relationships) could affect student engagement and that the effect was reciprocal. In other words, student engagement is not only shaping but also being shaped by both individual affective experiences and environmental characteristics. Mercer (2019) similarly addressed the effects of both individual and environmental (teacher) factors on student engagement. More specifically, she claimed that learners who felt competent, autonomous, in a growth mindset, in positive relationships with peers and teachers, and enjoyed learning more, became more motivated and involved in the process of language learning (see also Henry & Thorsen, 2020; Hiver, Al-Hoorie, & Mercer, 2021). She also argued that teacher behavior was at the basis of learner engagement: "knowing and using names, knowing and addressing learners' personal interests, responding to mistakes and discipline issues in respectful ways, and being enthusiastic and passionate about teaching, language, and learners' language learning" (p. 655).

While there is a consensus that engagement has an emotional component, few empirical studies to date have sought to investigate the link between emotions and engagement in ISLA. What is also surprising is the fact that empirical research on engagement has largely ignored learner-external factors in favor of learner-internal factors (see however Oga-Baldwin, 2019). Thus, the present study seeks to investigate its associations with both personal emotional factors and teacher characteristic of enthusiasm in an L2 context. The engagement we focus on in this study is mainly social-behavioral engagement, referring to "the social forms of engagement around academic tasks" (Linnenbrink-Garcia et al., 2011, p. 13), including participation (e.g., interactions with classmates in group work or with the English teacher) as well as "the quality of social interactions" in class (p. 13). Emotion is at the heart of engagement. Indeed, engagement implies the "presence of task-facilitating emotions" (e.g., interest and enjoyment) and "absence of task-withdrawing emotions" (e.g., anxiety, distress, and boredom) (Reeve, 2012). It makes thus perfect sense to empirically investigate the effects of emotions on student engagement.

## **Enjoyment, Boredom and Engagement**

According to the CVT, enjoyment and boredom are both focused on the learning activity itself, which involves learners' engagement and involvement directly. Links may thus exist between both emotions and learning engagement. In fact, during the past decade, a large number of studies in general educational psychology found that emotions shape engagement, especially in social interactions in class (Linnenbrink-Garcia & Pekrun, 2011; Pekrun & Linnenbrink-Garcia, 2012). Positive emotions are linked to heightened engagement, while negative emotions are linked to disengagement (Linnenbrink-Garcia et al., 2011). Enjoyment has been conceptualized as an integral part of student engagement, inattention, and reduced motivation (Tze et al., 2014). In other words, enjoyment fosters engagement (Ainley & Ainley, 2011), and an engaging classroom is more likely to be enjoyable than a boring one. It remains to be seen whether the links could be replicated in the specific domain of ISLA. **Rationale of the Present Study** 

The research so far has highlighted the links between: (a) teacher behavior (enthusiasm) and student engagement; (b) teacher enthusiasm and student emotion; and (b) student emotion and engagement. Correspondingly, we propose a mediation model whereby: 1) teacher enthusiasm predicts student emotions; 2) student emotions affect learning engagement; and 3) teacher enthusiasm affects student engagement directly and indirectly by affecting student emotions. In other words, in this mediation model, student emotions mediate the relationship between teacher enthusiasm and student engagement. This study aims to substantiate this mediation model. More specifically, we explored the following two research questions in a Chinese EFL context:

RQ1: What are the relationships between EFL students' perceived teacher enthusiasm, and their enjoyment, boredom and social-behavioral engagement in L2 classrooms? RQ2: In what way do EFL students' enjoyment and boredom co-mediate the relationship between their perceived EFL teacher enthusiasm and their social-behavioral engagement in L2 classrooms?

The examination of the components in the mediation model collectively is meaningful because it may shed new insights into the pathway or the mechanism underlying the effect of the teacher on student emotions and engagement.

#### Methodology

A mixed methods approach was adopted in the study. More specifically, it deployed an explanatory sequential design, starting with quantitative methods followed by complementary qualitative methods (Creswell, 2014).

## **Participants**

A total of 2268 students originally participated in the project. However, 267 (11.77%) less attentive respondents were eliminated from the dataset because their failure rate was over 80% in trap questions (Liu & Wronski, 2018). Thus, the final valid dataset consisted of 2002

participants. They were from 58 EFL classes in 11 different universities in mainland China. They were from more than 40 academic disciplines including humanities, social sciences, and natural sciences. Among them, 1345 (67.1%) were in Year 1, 644 (32.2%) in Year-2, 12 (0.6%) in Year 3 and 1 (0.05%) in Year 4. There were 487 (24.3%) male participants, 1422 (71.0%) female participants, and 93 (4.6%) preferring not to say. The mean age was 18.6 (SD = 1.9). Although the curriculum for English was different in each school, all the participants were enrolled in an English course at the time of the data collection. The College English classes are obligatory for all non-English majors. The credit for this course ranges from 2 to 4. The course aims to enhance students' communicative competence (listening, speaking, reading, writing and translating) and strengthen their academic literacy. Teachers are free in their choice of teaching method. Typical pedagogical activities include teacher presentations, individual and group presentations, group discussions, question sessions with teacher feedback, and quizzes.

Nine students (four males and five females) participated in the subsequent semistructured interview. Their information is displayed in Table 1.

#### Table 1

Information of Interviewees							
				Length of		English class	
Student	University	Gender	Age	English	Grade	sessions	Major
				learning		per	
				(Year)		week	
<b>S</b> 1	А	Male	21	10	Year 3	2	Nuclear Engineering
S2	В	Female	18	11	Year 1	2	Psychology
S3	С	Male	19	10	Year 1	2	Remote Sensing
S4	D	Female	21	9	Year 2	2	Gardening
S5	Е	Female	19	9	Year 2	5	Human Resource
S6	G	Female	18	8	Year 1	4	Accounting
<b>S</b> 7	F	Male	19	7	Year 1	4	Chinese
<b>S</b> 8	G	Male	18	13	Year 1	4	Accounting
S9	G	Female	19	13	Year 1	4	Accounting

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#### **Data Collection**

Convenience sampling was used in the present study. EFL teachers of non-English major students at different universities in China were contacted. With the teachers' agreement to support the current study, the students in their target classes were invited to fill out an online questionnaire voluntarily after they provided their online consent form. Participation rate was high: A total of 58 (93.5%) teachers out of 62 and 2268 (92.5%) students out of the 2452 invited agreed to participate. The composite questionnaire was uploaded to online survey tool www.wjx.cn and its QR code was generated and administered to students in classroom environment. At the end of the questionnaire survey, the participants were awarded digital red envelopes to thank them for their efforts and invited to take part in the subsequent interview. We set 1.5 Chinese Yuan for each participant, and the actual amount of money they received was randomly decided by the survey system of www.wjx.cn.

A total of 428 participants provided their email addresses. The researchers randomly contacted 11 of them (one for each of the 11 participating universities) and successfully got nine (four males and five females) participants for the online interview. They also received monetary awards (Twenty Chinese Yuan for each interviewee). The language used in the questionnaires as well as the interview was Chinese to ensure full understanding and expression.

#### Instruments

Quantitative data was collected on demographic background, and the in/dependent variables (i.e., students' perceived EFL teacher enthusiasm, FLE and boredom, and English classroom engagement). All the scales were responded to on a 7-point Likert scale, ranging from "1 (strongly disagree)" to "7 (strongly agree)". The scales were all translated into Chinese by the second author (see Appendix). Two professional applied linguists and five advanced English students were invited to rate the items on a 10-point scale in terms of their language quality. Items with scores lower than 6 were adjusted and differences were reconciled after further discussion.

**Perceived teacher enthusiasm.** To measure students' perception of EFL teacher enthusiasm, the existing four-item scale for student-perceived maths teacher enthusiasm (Frenzel et al., 2009) was used. The items were re-formulated in relation to the specific domain of English class the participants were having as a semester-course. An example item is "Our English teacher really seems to take pleasure in teaching". Internal consistency was satisfactory (Cronbach's Alpha = .763).

**Foreign Language Enjoyment.** Chinese version of Foreign Language Enjoyment Scale (Li et al., 2018) was used in the present study to assess students' enjoyment in English class. The scale was modified and validated in Chinese EFL context (N = 1718), based upon the original scale developed by Dewaele and MacIntyre (2014, 2016) in an international FL context. It consists of three subscales (i.e., *FLE-Private, FLE-Teacher* and *FLE-Atmosphere*) and 11 items. Internal consistency was high (Cronbach's Alpha = .873).

**Boredom.** We reformulated the Boredom Subscale of the Achievement Emotions Questionnaire (AEQ) (Pekrun et al., 2011) to fit an EFL context. The AEQ was originally developed in the general context of educational psychology. The Boredom Subscale concerns class-related boredom, learning-related boredom, and test-related boredom. An example items is "I get bored in English class". Internal consistency was satisfactory (Cronbach's Alpha =.783).

**Engagement.** Linnenbrink-Garcia et al.'s (2011) engagement scale was adopted for its strong emphasis on the social dimension of engagement. It consists of two subscales (*Social Loafing Scale* and *the Positive Group Interaction Scale*) and eight items. Following Philp and Duchesne's (2016) advice, the engagement scale was re-worded to fit the framework of FL learning. An example item for the *Social Loafing Scale* is "I tried to get the other students in my group to do the hard parts of the English classroom activities". An example items for *the Positive Group Interaction Scale* is "My group enjoyed working together in English class". Items 1-4 are reversely coded. Internal consistency was satisfactory (Cronbach's Alpha = .775).

**Interview guideline questions.** The RQs concern direct and indirect effects of teacher enthusiasm on student emotions and engagement. Based on previous empirical findings (e.g., Li et al., 2018; Dewaele, Magdalena Franco et al., 2019) and relevant literature (Frenzel et al., 2018), the following questions were developed and revised after initial piloting among two students: What do you think of your English teacher's teaching? What do you think of her/his enthusiasm? How do you know that? Do you think her/his enthusiasm has any effect on you? If so, could you describe it in more detail?

### **Data Analyses**

The quantitative data were first screened and processed in terms of missing values, outliers, reliability, descriptive statistics, and normality tests. To answer the first RQ, a series of Pearson correlation analyses were conducted using SPSS 19.0. Then, to answer RQ2, following the steps recommended in Hayes (2013), multiple regression analyses were conducted to test the proposed parallel mediating model. More specifically, four-step regressions were conducted: 1) Perceived teacher enthusiasm and student engagement were

entered as predictor and outcome variables respectively; 2-3) Perceived teacher enthusiasm was entered as a predictor, and enjoyment and boredom were entered as outcome variables respectively; 4) Perceived teacher enthusiasm, enjoyment and boredom were all entered as co-predictors with student engagement being the outcome variable. After the regressions, PROCESS v2.16.3 (Model 4) developed by Hayes (see <u>http://www.afhayes.com/</u>) was further used to examine the relationship among these variables collectively, calculating the total indirect/mediating effect size, comparing specific indirect effects of enjoyment and boredom, and offering corresponding bootstrap confidence intervals automatically.

The interviews were first transcribed and produced a total of 3299 Chinese characters (1554 English words). We adopted a combination of both a deductive approach and an inductive approach in the qualitative data analysis. In other words, we used both a top-down approach starting from the RQs and the relevant literature, and a bottom-up approach by considering emerging themes in the data. The inductive analysis involves "immersion in the details and specifics of the data to discover important patterns, themes, and interrelationships" (Patton, 2002, p. 41). The second author and her colleague in educational psychology identified, coded, classified and translated the themes and episodes indicative of: (a) students' perceived teacher enthusiasm, (b) its effects on student emotions and (c) on student engagement. Based upon the interview data and relevant literature on teacher enthusiasm, student achievement emotions and engagement, the coding scheme presented in table 2 was created.

#### Table 2

Coding Scheme of Perceived Teacher Enthusiasm and Its Effects on Student Emotions and Engagement

Engugemeni				
Codes	Examples			
Perceived teacher	e.g., highly enthusiastic, intrinsic and visceral interest,			
enthusiasm	full engagement and meticulousness, unenthusiastic, intimate			
	and close, 8 to 9 scores of enthusiasm			
Effects on student	e.g., <b>positive emotions:</b> interest, liking the teacher, reduced			
emotions	boredom, more enjoyment, contagious enthusiasm, no fear,			
	reduced anxiety			
	negative emotions: no interest in the subject, uncaring,			
	indifference (neither liking nor disliking towards teachers),			
	boredom, guilt, shame			
Effects on student	e.g., willingness to follow, active engagement, working			
engagement	harder, more effort in learning			

In order to avoid distortion or meaning loss in translation, the second author reviewed the relevant literature, considered the interview data and discussed issues with the research team. Interrater reliability was calculated through joint-probability of agreement. The second author and her colleague coded the data separately and found that they agreed 54 out of 57 times (94.7%). The disagreement was settled after further discussion.

#### **Quantitative Results**

## Relationships Between Students' Perceived Teacher Enthusiasm, FLE, FL Boredom, and Classroom Engagement

The inter-correlations and the descriptive statistics are displayed in Table 3. The means show that most participants perceived their English teachers as highly enthusiastic, they experienced medium to high level of enjoyment, high engagement and low levels of boredom. Skewness and Kurtosis indicated that the variables under discussion were normally distributed, allowing subsequent parametric analyses.

## Table 3

Variable 2 Range MSD Skewness Kurtosis 1 3 4 (SE)(SE)1. Teacher enthusiasm [7-28] 23.24 4.91 -1.171 (.05) 1.336 (.11) \_\_\_\_ .613\*\* 2. Enjoyment [7-77] 54.50 12.02 -.924 (.05) 2.655 (.11) -.247\*\* -.436\*\* 3. Boredom [3-21] 8.51 3.74 .516 (.05) .192 (.11) .548\*\* .668\*\* -.366\*\* 4. Engagement [8-56] 43.23 8.75 -.944 (.05) 2.343 (.11)

Inter-correlations and Descriptive Statistics for Students' Perceived Teacher Enthusiasm, FLE, Boredom, and Student Engagement

*Note: N* = 2002; \* *p* < .05; \*\* *p* < .01

According to the benchmarks proposed by Plonsky and Oswald (2014) in the field of ISLA research, Table 3 shows small to large effect sizes for the correlations between students' perceived teacher enthusiasm, enjoyment, boredom, and classroom engagement (Bonferroni corrected). Perceived teacher enthusiasm was positively linked to enjoyment and engagement, and negatively to boredom. Enjoyment and boredom were positively and negatively linked to engagement respectively. In other words, students who perceived higher enthusiasm in their English teachers tended to experience more enjoyment and less boredom, and engaged more in English learning.

## The Co-Mediating Effect of Enjoyment and Boredom on the Relationship Between Students' Perceived Teacher Enthusiasm and Student Engagement

The results of the multiple regressions are displayed in Table 4. Students' perceived teacher enthusiasm predicted their EFL class engagement positively and significantly ( $\beta = .548, p < .001$ ); students' perceived teacher enthusiasm predicted both their enjoyment and boredom significantly ( $\beta = .613, p < .001$ ;  $\beta = -.247, p < .001$ ); in the presence of students' perceived teacher enthusiasm, enjoyment and boredom in the same formula, students' enjoyment and anxiety predicted their engagement in a positive and negative way respectively ( $\beta = .489, p < .001$ ;  $\beta = -.097, p < .001$ ), and the predictive effect of perceived teacher enthusiasm on their engagement remained significant ( $\beta = .224, p < .001$ ).

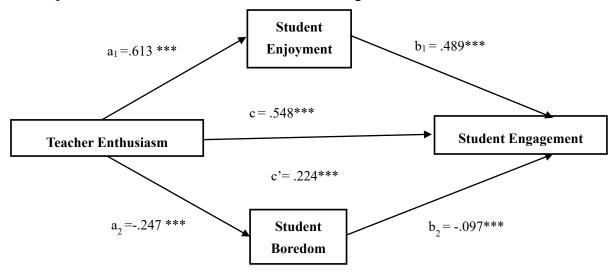
# Table 4Regression Results as Fundamentals for Mediation Analysis (N = 2002)

Regression		Fit Index			Coeffici	<b>Collinearity Statistics</b>			
Predictor	Outcome	R	$R^2$	F	β	В	Т	Tolerance	VIF
1. Teacher enthusiasm	engagement	.548	.300	857.3***	.548	.975	29.2***		
2. Teacher enthusiasm	enjoyment	.613	.376	1206.7***	.613	1.501	34.7***		
3. Teacher enthusiasm	boredom	.247	.061	130.1***	247	188	-11.4***		
4. Teacher enthusiasm		nent .696	.485	626.8***	.224	.399	11.0***	.623	1.605
enjoyment	engagement				.489	.356	22.3***	.538	1.860
boredom					097	227	-5.4***	.809	1.235

*Note. B* are Unstandardized Coefficients,  $\beta$  are standardized Coefficients. Teacher enthusiasm = students' perceived teacher enthusiasm. \* p < .05; \*\* p < .01; \*\*\* p < .001.

According to the conditions of mediation (Hayes, 2013) as well as the relevant literature, these results indicate that the parallel multiple mediator model we proposed is an excellent fit of the data ( $R^2 = .485$ , F(3, 1998) = 626.9, p < .001). Enjoyment and boredom collectively mediated the effect of students' perceived teacher enthusiasm on their engagement. In other words, perceived teacher enthusiasm influences student engagement either directly or indirectly by influencing achievement emotions first.

The parallel mediator model was summarized as Figure 1.



\*\*\* p < .0001

Figure 1. The statistical diagram of Parallel Multiple Mediation.

Total mediating effect size and comparison between the mediating effects of enjoyment and boredom are presented in Table 5.

## Table 5

Analysis of the Mediation Model

Pathway	Indirect	SE	BCa 95% CI	Indirect/total
	Effect Size			effect
Total Indirect Effect	.324	.019	[.2880, .3619]	59.12%
Teacher enthusiasm→enjoyment→engagement	.300	.022	[.2580, .3439]	54.73%
Teacher enthusiasm $\rightarrow$ boredom $\rightarrow$ engagement	.024	.006	[.0128, .0374]	4.39%
C1(enjoyment - boredom)	.491	.049	[.3960, .5902]	

Note: All coefficients except C1 are completely standardized coefficients.

The total mediating effect as well as the corresponding bootstrap confidence intervals was provided via further analysis using PROCESS v2.16.3 (Model 4). As shown in Table 5, the 95% confidence interval does not straddle zero (from .2880 to .3619), so we can conclude with 95% confidence that enjoyment and boredom collectively mediated the effect of perceived teacher enthusiasm on EFL classroom engagement, and the total mediating/indirect effect size was .324 ( $a_1b_1 + a_2b_2$ ), taking up 59.1% of the total effect of perceived teacher enthusiasm on classroom engagement. The indirect effect size of perceived teacher enthusiasm on classroom engagement through two mediators, namely enjoyment and boredom, were .300 (i.e.,  $a_1b_1$ ) and .024 (i.e.,  $a_2b_2$ ) respectively, and the 95% confidence interval (from .2580 to .3439; from .0128 to .0374) indicated that both of them reached a significant level. Besides, C1, provided in the PROCESS output, meaning the difference between the specific indirect effect of

perceived teacher enthusiasm on classroom engagement through enjoyment and through boredom (i.e.,  $a_1b_1 - a_2b_2 = .491$  in unstandardized coefficients condition), together with the 95% confidence interval [.3960 to .5902], indicated that the indirect effect through enjoyment was significantly stronger than that through boredom, taking up 54.7% and 4.4% of the total mediating effect respectively.

## **Qualitative Findings**

#### Direct Links Between Teacher Enthusiasm, Student Emotions and Engagement

Eight of the nine interviewees mentioned the strong links between perceived teacher enthusiasm and their own emotions. Teacher enthusiasm was contagious and transmitted to students, affecting their emotions, bolstering positive emotions including interest (9 times), warmth (once), likings (once), enthusiasm (once) and reducing negative emotions such as boredom (3 times) and fear (3 times). The excerpts of Student 8 and Student 6 reflect this:

**# Student 8:** He is very enthusiastic. He is always happy while lecturing. He lectures in such an enjoyable way that makes himself happy. (...). Generally, humans' feelings are shared and contagious, and thus if he conceives something as interesting, I am likely to have same feeling.

**# Student 6:** She is **rather enthusiastic...**She is always in a state of **happiness** while lecturing...In secondary school, I was always sleepy, while now, I won't fall asleep even though I **feel sleepy** because the teacher is enthusiastic.

Six of the nine interviewees addressed the effect of perceived teacher enthusiasm on student engagement. For example:

**# Student 2:** I think every teacher is **enthusiastic** and **nice...**She always **smiles** when asking us questions and **shares her personal experiences.** This makes us more **willing** to follow her, **listening to what she is saying.** 

In this excerpt, frequent broad smiles of the teacher and her sharing of personal experiences were perceived as indicators of her high enthusiasm, fueling students' emotional engagement. Notably, one interviewee also pointed to the link between the lack of teacher enthusiasm and student disengagement.

## Indirect Links Between Teacher Enthusiasm and Engagement

Five out of the nine interviewees reported the positive effects of perceived teacher enthusiasm. This is illustrated by the following excerpts:

**# Student 1:** Honestly, **highly enthusiastic.** He always teaches with **broad smiles**, and encourages us a lot. This makes us feel **warmth**, and then kindles our **interest** in learning English. (...) I **won't feel any fear** for English class, and then will **engage myself actively** in the class.

In Student 1's excerpt, teacher's high enthusiasm was perceived via nonverbal cues of broad smiles and verbal encouragement, making students feel happy, interested, relaxed, and engaged.

**# Student 3:** He is enthusiastic in teaching, humorous and interesting, and gets along well with my classmates. Anyway, I think he teaches well, and is very nice, close and intimate to my classmates. Thus, my classmates won't fear him. I think most of my class like him very much and are willing to be engaged while he is lecturing.

It is clear that the teacher's enthusiasm, behavior and close relationship with students boosted his standing in the group and increased his students' engagement.

**# Student 4: Rather enthusiastic. Much more** than that of the English teacher at secondary school...... Mr. Xu is the **most intimate and closest** teacher I've ever had; he always **sends his teaching materials** to us in evenings. Also, after class, he will **chat with us** in QQ group, **communicating with us in English** and **sharing some learning materials** with us (...) Firstly, I would feel **guilty** when I don't work hard, because I think I live up to his high enthusiasm, and I would blame myself for that. Then, I would feel I should be **more hardworking**, and **invest more efforts** in learning, because the teacher is so kind-hearted and enthusiastic.

Similarly, Student 4 also felt that the teacher's enthusiasm and dedication strengthened the social bond, and boosted his own engagement.

# Student 5: He shows his intrinsic and visceral interest in English and draw upon this to engage us. Besides, his pace is very desirable and makes us feel comfortable and willing to be with him in his lecture. Thus, I think his enthusiasm is the interest and attention he shows in lecturing, in text, in what the students are saying. And this enthusiasm boosts our interest to have in-depth engagement in his lecture or discussion. Thus, in terms of enthusiasm, I could say it is reflected in the form of his full engagement and meticulousness in teaching.

For Student 5, the teacher's skill, motivation, and enthusiasm boosted the participant's interest and engagement in learning. Asked about indicators of enthusiasm, Student 1 responds as follows:

Student 1: Maybe from his speaking style, very relaxed and not restrained but in a free style.... Maybe from his high speed in speaking. And if a person speaks very slowly, this would make others feel that he is not enthusiastic... At least, I won't feel sleepy. Enthusiastic teachers like him with variations in class help to make students not that sleepy. Besides, this enthusiasm is contagious and can be transmitted to students, making them more emotionally engaged in learning English.

In the above excerpt, the teacher's engaging behavior averted boredom and raised students' enthusiasm and learning engagement.

# Student 7: Five (scores of teacher enthusiasm) ... Yes, unenthusiastic in fact...it has multiple effects and main in learning aspects. I feel not agentically engaged in learning, and not interested in this subject...No special feelings, neither liking nor disliking.

This is a representative example for the negative face. A low level of teaching enthusiasm is interpreted as lack of care and interest towards both students and subject, leading to the student's disengagement.

#### Discussion

The first research question addressed the associations between students' perceptions of teacher enthusiasm, emotions, and engagement. The results in Table 3 suggested a triangular relationship between perceived teacher enthusiasm, student emotion, and student engagement. Large positive correlations and a smaller negative correlations were found between perceptions of teacher enthusiasm and student enjoyment, and between perceptions of teacher enthusiasm and student boredom respectively. In addition, a strong positive correlation and a medium size negative correlation were found between enjoyment and engagement, and between boredom and engagement respectively. It thus seems that when learners perceived their English teachers as being more enthusiastic in teaching, they were more likely to experience positive emotions (e.g.,

interest and enjoyment) and fewer negative emotions (e.g., fear/anxiety and boredom), and be more engaged in class, which confirms earlier findings (Frenzel et al., 2009; Lazarides et al., 2019; Mercer, 2019). Causes for these patterns emerged in the qualitative analysis. They confirmed Moskowitz and Dewaele's (2021) observation that as enthusiastic teachers "might enjoy teaching more, that enjoyment might rub off on students" (p. 126). These findings in fact illustrate the process of positive emotion transmission or contagion between teacher and students in the EFL class. Not surprisingly, the shared positive emotional experiences are also conducive to the reduction of negative emotions such as fear and boredom, the creation of a positive, psychologically safe and engaging classroom atmosphere (Dewaele & MacIntyre, 2014), and increased participation and involvement in class activities or tasks. The findings follow the pattern reported in educational psychology, namely, positive emotions are linked to heightened engagement, while negative emotions are linked to disengagement (Linnenbrink-Garcia et al., 2011; Oga-Baldwin, 2019; Philp & Duchesne, 2016).

The medium size negative correlation between enjoyment and boredom might be closely linked to differences and similarities in their conceptual structures. More specifically, according to the three-dimension taxonomy of the CVT (Pekrun, 2006), boredom and enjoyment share the two dimensions of the object focus as well as control, that is, they both arise from controllable ongoing activities. The dimension differentiates the value; that is, enjoyment is perceived as an emotion of positive quality while boredom has a negative quality (Li, 2021). Thus, the significant and negative relationships between them might be indicative of their conceptual characteristics and empirically support the CVT in an L2 context.

The second research question focused on the multiple relationships between these variables. The quantitative study revealed a mediating model whereby the student enjoyment and boredom mediated the relationship between their perceptions of teacher enthusiasm and their engagement. This mediating model was further supported in the qualitative data. Taken together, it seems that teachers' verbal and/or nonverbal behaviors in or/and out of class shape students' perceptions of their teaching enthusiasm, and become an important aspect of the social dynamics between them. These perceptions shape appraisals which has emotional repercussions, including positive emotions (interest, liking, happiness) or negative emotions (fear, boredom, guilt, ethical unease) to this perceived dynamics (Linnenbrink-Garcia et al., 2011), and these emotions further prompt students to be more or less engaged in the ongoing activities or interactions in class (Mercer, 2019). This collective relationship model empirically supports the CVT framework. More specifically, teacher characteristics (teacher enthusiasm) are linked to the instigation of achievement emotions (enjoyment and boredom) as environmental antecedents, and achievement emotions are further linked to various learning aspects (engagement). Future studies could examine whether the typical CVT model is open to other types of achievement emotions (e.g., shame), as well as their antecedents (e.g., teacher support, friendliness) and outcomes (e.g., motivation, learning strategy).

This mediation model shows the process of positive emotion transmission or contagion between teacher and students and the resulting boost of positivity in class, reducing negative emotions and thus creating a more engaging classroom atmosphere where more motivated behaviors occur. The study also identifies the pathways from teacher emotion to student emotions and finally to student engagement. Adopting an ecological perspective allowed us to show that student engagement is a joint product or culmination of perceptions of environmental factors (e.g., teacher characteristics) and personal factors (e.g., emotions) (Mercer, 2019; Oga-Baldwin, 2019; Philp & Duchesne, 2016; Svalberg, 2018). Besides the primary findings, there are also some other interesting secondary findings. The observations from Student 3 and Student 8 show that students' perceptions of teacher enthusiasm are closely related to their attitude towards the teacher, or even the subject. Undoubtedly, "students prefer happier teachers" (Moskowitz & Dewaele, 2021, p. 126). Moreover, students' perceptions of teacher enthusiasm also influence their evaluation of teacher effectiveness and instructional quality. Thus, the findings confirmed the crucial role of teacher enthusiasm in teaching and learning, and ultimately in student well-being and achievement (Moskowitz & Dewaele, 2021).

The present study is not without limitations. Firstly, social desirability bias may occur in self-report measures, skewing the results towards the more positive end of the scales. Secondly, the various instruments assessing the multidimensional construct of engagement have both strengths and weaknesses (Philp & Duchesne, 2016). The Linnenbrink-Garcia et al.'s (2011) engagement scale was selected for its emphasis on the social and behavioral dimensions, which were the focus of the present study. We acknowledge that a different scale could have highlighted different dimensions. Thirdly, our findings cannot be generalized to the whole FL population considering the role of unique social contexts in the multidimensional constructs of emotion as well as engagement. Fourthly, most of the scales in the present study were simply borrowed from educational psychology and then reformulated to make them L2-specific without considering the nature of L2 classrooms. For example, the Boredom Subscale does not include a social dimension. However, emotions are not only subjective experiences, but they are also socially constructed (Dewaele et al., 2018). This is especially true in contemporary English classes, which are communicative by nature (Gkonou & Mercer, 2017). Future studies could explore these concepts and develop corresponding measurements for L2 contexts, because achievement emotions are subject to domain-specificity (Goetz et al., 2006). Finally, we are aware that students' perceptions of their teachers' enthusiasm may not always be completely accurate.

## **Pedagogical Recommendations**

The study has some pedagogical implications. It provides teachers with a clearer understanding of the multidimensional construct of teacher enthusiasm, its transmission and its effects on student engagement. It may help them design activities that they enjoy themselves and that allow authentic and full participation of students. Teacher trainers may want to underline the importance of teacher enthusiasm to trainee teachers and the ways to communicate it clearly, verbally and nonverbally (cf. Talebzadeh et al., 2020). Combined with skillful use of humor, care and sympathy towards students, these strategies can lead to positive emotional contagion resulting in heightened student engagement, progress and well-being of both students and teachers.

### Conclusion

Mediation analysis revealed that teacher enthusiasm, as perceived by learners, affected social-behavioral learning engagement directly and indirectly in Chinese EFL classrooms. The indirect link went through enjoyment and boredom. Both emotions were linked to teacher enthusiasm, positively for enjoyment, and negatively for boredom, and these emotions mediated the effect of students' perceived teacher enthusiasm on their own engagement. Interviews with participants confirmed that teacher enthusiasm was a frequent direct cause of their engagement, and sometimes also the cause of a positive classroom atmosphere, leading to increased enjoyment and effort, and reducing boredom. The lack of teacher enthusiasm was also cited as the reason for disengagement, lack of enjoyment, absence of solidarity with their peers, and of frequent yawning because of boredom.

The findings offer support for the multidimensional theoretical constructs. First, it is clear that teacher behaviors, emotions and motivation have both personal and social consequences and that there is an interaction between both levels. Secondly, the mediating model was supported by qualitative data and allowed us to propose a more schematic model about the dynamic relationship between teacher enthusiasm, students' personal emotions and engagement. We fully agree with Sato and Loewen's (2019) call to push ISLA research agendas forward and to make space for evidence-based pedagogy that teachers can explore and try out in their classrooms. Intervention studies by teachers using intact classes could look whether other emotions might enter the mediating model and co-mediate the relationship between teacher enthusiasm and student engagement. Reciprocity could also be investigated (Oga-Baldwin, 2019), namely the effect of student engagement on teacher enthusiasm. Finally, the mediating model might vary depending on the age groups of students. Variation could also be linked to geographical and educational contexts, or even vary depending on the types of tasks, instruction and interactions in class.

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#### References

- Ainley, M., & Ainley, J. (2011). Student engagement with science in early adolescence: The contribution of enjoyment to students' continuing interest in learning about science. *Contemporary Educational Psychology*, 36(1), 4–12.
- Baralt, M., Gurzynski-Weiss, L., & Kim, Y. J. (2016). Engagement with the language: How examining learners' affective and social engagement explains successful learner-generated attention to form. In M. Sato & S. Ballinger (Eds.), *Peer interaction and second language learning: Pedagogical potential and research agenda* (pp. 209–240). Amsterdam: John Benjamins.
- Botes, E., Dewaele, J.-M., & Greiff, S. (2021). Taking stock: An overview of the literature and a preliminary meta-analysis of Foreign Language Enjoyment and other individual differences variables. Unpublished paper.
- Collins, M. L. (1978). Effects of enthusiasm training on preservice elementary teachers. *Journal* of *Teacher Education*, 29(1), 53–57.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. Thousand Oaks, CA: SAGE Publications.
- Daniels, L. M., Tze, V. M. C., & Goetz, T. (2015). Examining boredom: Different causes for different coping profiles. *Learning and Individual Differences*, 37, 255–261.
- Dewaele, J.-M., & Li, C. (2020). Emotions in second language acquisition: A critical review and

research agenda. Foreign Language World, 1, 34-49.

- 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.
- Dewaele, J.-M. & MacIntyre, P.D. (2016). Foreign Language Enjoyment and Foreign Language Classroom Anxiety. The right and left feet of FL learning? In P. MacIntyre, T. Gregersen & S. Mercer (Eds.), *Positive Psychology in SLA* (pp. 215-236). Bristol: Multilingual Matters.
- Dewaele, J.-M., & MacIntyre, P.D. (2019). The predictive power of multicultural personality traits, learner and teacher variables on foreign language enjoyment and anxiety. In M. Sato & S. Loewen (Eds.), Evidence-based second language pedagogy: A collection of Instructed Second Language Acquisition studies (pp. 263-286). London: Routledge.
- Dewaele, J.-M., Chen, X., Padilla, A.M., & Lake, J. (2019). The flowering of positive psychology in foreign language teaching and acquisition research. *Frontiers in Psychology. Language Sciences*, 10, 2128. https://doi.org/10.3389/fpsyg.2019.02128.
- Dewaele, J.-M., Franco Magdalena, A., & Saito, K. (2019). The effect of perception of teacher characteristics on Spanish EFL Learners' Anxiety and Enjoyment. *The Modern Language Journal*, 103(2), 412-427.
- Dewaele, J.-M., Witney, J., Saito, K., & Dewaele, L. (2018). Foreign language enjoyment and anxiety in the FL classroom: The effect of teacher and learner variables. *Language Teaching Research*, 22(6), 676–697.
- Fredrickson, B. L. (2003). The value of positive emotions. American Scientist, 91(4), 330-335.
- Frenzel, A. C., Goetz, T., Lüdtke, O., Pekrun, R., & Sutton, R. E. (2009). Emotional transmission in the classroom: Exploring the relationship between teacher and student enjoyment. *Journal* of Educational Psychology, 101(3), 705–716.
- Frenzel, A. C., Becker-Kurz, B., Pekrun, R., Goetz, T., & Lüdtke, O. (2018). Emotion transmission in the classroom revisited: A reciprocal effects model of teacher and student enjoyment. *Journal* of Educational Psychology, 110(5), 628-639.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis*. New York: Guilford Publications.
- Henry, A., & Thorsen, C. (2020). Disaffection and agentic engagement: 'redesigning' activities to enable authentic self-expression. *Language Teaching Research*, *24*(4), 456-475.
- Hiver, P., Al-Hoorie, A. H., & Mercer, S. (Eds.). (2021). *Student engagement in the language classroom*. Bristol, UK: Multilingual Matters.
- Jiang, Y. (2020). An investigation of the effect of teacher on Chinese university students' foreign language enjoyment. *Foreign Language World*, *196*(1), 60–68.
- Jiang, Y., & Dewaele, J.-M. (2019). How unique is the Foreign Language Classroom Enjoyment and Anxiety of Chinese EFL Learners? *System*, 82, 13-25.
- Keller, M. M., Hoy, A. W., Goetz, T., & Frenzel, A. C. (2016). Teacher enthusiasm: Reviewing and redefining a complex construct. *Educational Psychology Review*, *28*(4), 743–769.

- Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2018). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition*, 40(3), 605–624.
- Kruk, M. (2019). Dynamicity of perceived willingness to communicate, motivation, boredom and anxiety in Second Life: The case of two advanced learners of English. *Computer Assisted Language Learning*. https://doi.org/10.1080/09588221.2019.1677722.
- Kruk, M., & Zawodniak, J. (2018). Boredom in practical English language classes: Insights from interview data. In L. Szymański, J. Zawodniak, A. Łobodziec, & M. Smoluk (Eds.), *Interdisciplinary views on the English language, literature and culture* (pp. 177–191). Zielona Góra: Uniwersytet Zielonogórski.
- Kunter, M., Frenzel, A., Nagy, G., Baumert, J., & Pekrun, R. (2011). Teacher enthusiasm: Dimensionality and context specificity. *Contemporary Educational Psychology*, 36(4), 289– 301.
- Kunter, M., Tsai, Y.M., Klusmann, U., Brunner, M., Krauss, S., & Baumert, J. (2008). Students' and mathematics teachers' perceptions of teacher enthusiasm and instruction. *Learning and Instruction*, 18 (5), 468-482.
- Lazarides, R., Buchholz, J., & Rubach, C. (2018). Teacher enthusiasm and self-efficacy, studentperceived mastery goal orientation, and student motivation in mathematics classrooms. *Teaching and Teacher Education*, 69, 1–10.
- Lazarides, R., Gaspard, H., & Dicke, A.-L. (2019). Dynamics of classroom motivation: Teacher enthusiasm and the development of math interest and teacher support. *Learning and Instruction*, 60, 126–137.
- Li, C. (2018). A Positive Psychology Perspective on Chinese Students' Emotional Intelligence, Classroom Emotions, and EFL Learning Achievement. Unpublished PhD dissertation, Xiamen University, China.
- Li, C. (2020). A Positive Psychology perspective on Chinese EFL students' trait emotional intelligence, foreign language enjoyment and EFL learning achievement. *Journal of Multilingual and Multicultural Development*, 41(3), 246–263.
- Li, C. (2021). A Control–Value Theory Approach to Boredom in English Classes Among University Students in China. *The Modern Language Journal*, 105(1). https://doi.org/10.1111/modl.12693
- Li, C., Dewaele, J.-M., & Hu, Y. (2021a). Foreign language learning boredom: Conceptualization and measurement. *Applied Linguistics Review*. <u>https://doi.org/https://doi.org/10.1515/applirev-</u> 2020-0124
- Li, C., Dewaele, J.-M. & Jiang, G. (2020). The complex relationship between classroom emotions and EFL achievement in China. *Applied Linguistics Review*, 11(3), 485-510.
- Li, C., Huang, J., & Li, B. (2021b). The predictive effects of classroom environment and trait emotional intelligence on Foreign Language Enjoyment and Anxiety. *System*, *96*, 1–11.
- 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.

- Linnenbrink-Garcia, L., & Pekrun, R. (2011). Students' emotions and academic engagement: Introduction to the special issue. *Contemporary Educational Psychology*, *36*(1), 1–3.
- Linnenbrink-Garcia, L., Rogat, T. K., & Koskey, K. L. K. (2011). Affect and engagement during small group instruction. *Contemporary Educational Psychology*, 36(1), 13–24.
- Liu, M., & Wronski, L. (2018). Trap questions in online surveys: Results from three web survey experiments. *International Journal of Market Research*, 60(1), 32–49.
- MacIntyre, P. D., & Gregersen, T. (2012). Emotions that facilitate language learning: the positivebroadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2, 193–213.
- MacIntyre, P. D., Gregersen T., & Mercer S. (2019). Setting an Agenda for Positive Psychology in SLA: Theory, Practice, and Research. *The Modern Language Journal*, 103(1), 262-274.
- Macklem, G. L. (2015). Boredom in the Classroom: Addressing Student Motivation, Self-Regulation, and Engagement in Learning. Cham: Springer.
- Mercer, S. (2019). Language learner engagement: Setting the scene. In: X. Gao (Ed.), Second Handbook of English Language Teaching (pp. 643–660). Cham: Springer.
- Moskowitz, S., & Dewaele, J.-M. (2021). Is teacher happiness contagious? A study of the link between perceptions of language teacher happiness and student self-reported attitudes and motivation. *Innovation in Language Learning and Teaching*, *15*(2), 117-130.
- Oga-Baldwin, W. L. Q. (2019). Acting, thinking, feeling, making, collaborating: The engagement process in foreign language learning. *System*, *86*, https://doi.org/10.1016/j.system.2019.102128.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Pavelescu, L. M., & Petrić, B. (2018). Love and enjoyment in context: Four case studies of adolescent EFL learners. *Studies in Second Language Learning and Teaching*, 8(1), 73–102.
- Pavlenko, A. (2013). The affective turn in SLA: From 'affective factors' to 'language desire' and 'commodification of affect'. In: D. Gabrys-Barker & J. Bielska (eds.), *The affective dimension in second language acquisition* (pp. 3-28). Bristol, UK: Multilingual Matters.
- Pawlak, M., Kruk, M., & Zawodniak, J. (2020a). Investigating individual trajectories in experiencing boredom in the language classroom: The case of 11 Polish students of English. *Language Teaching Research*, https://doi.org/10.1177/1362168820914004.
- Pawlak, M., Kruk, M., Zawodniak, J., & Pasikowski, S. (2020b). Investigating factors responsible for boredom in English classes: The case of advanced learners, *System*, 91, https://doi.org/10.1016/j.system.2020.102259
- 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.
- Pekrun, R., & Linnenbrink-Garcia, L. (2012). Academic emotions and student engagement. In: S.

L. Christenson, A. L. Reschly & C. Wylie. (Eds.), *Handbook of research on student engagement* (pp. 259–282). New York: Springer.

- Pekrun, R., & Perry, R. P. (2014). Control-value theory of achievement emotions. In *International handbook of emotions in education* (pp. 130–151). London: Routledge.
- Pekrun, R., & Stephens, E. J. (2010). Achievement emotions: A control-value approach. *Social and Personality Psychology Compass*, 4(4), 238–255.
- Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). The control-value theory of achievement emotions: An integrative approach to emotions in education. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in Education* (pp. 13–36). San Diego, CA: Academic Press.
- Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement Emotions Questionnaire (AEQ). *Contemporary Educational Psychology*, 36(1), 36–48.
- Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics*, *36*, 50–72.
- Piechurska-Kuciel, E. (2017). L2 or L3? Foreign Language Enjoyment and Proficiency. In G. D. Gabryś-Barker, D. Gałajda, A. Wojtaszek, & P. Zakrajewski (Eds.), *Multiculturalism, Multilingualism and the Self* (pp. 97–111). Switzerland: Springer International Publishing.
- Piniel, K., & Albert, A. (2018). Advanced learners' foreign language-related emotions across the four skills. *Studies in Second Language Learning and Teaching*, 8(1), 127-147.
- Plonsky, L., & Oswald, F. L. (2014). How big is "big"? Interpreting effect sizes in L2 research. Language Learning, 64(4), 878–912.
- Putwain, D. W., Pekrun, R., Nicholson, L. J., Symes, W., Becker, S., & Marsh, H. W. (2018). Control-Value Appraisals, Enjoyment, and Boredom in Mathematics: A Longitudinal Latent Interaction Analysis. *American Educational Research Journal*, 55(6), 1339-1368.
- Reeve, J. (2012). A self-determination theory perspective on student engagement. In: S. L. Christenson, A. L. Reschly & C. Wylie. (Eds.), *Handbook of research on student engagement* (pp. 149–172). New York: Springer.
- Sampson, R. J. (2020). The feeling classroom: Diversity of feelings in instructed L2 learning. *Innovation in Language Learning and Teaching*, 14(3), 203-217.
- Sato, M. (2017). Interaction mindsets, interactional behaviors, and L2 development: An affectivesocial-cognitive model. *Language Learning*, 67(2), 249–283.
- Sato, M., & Csizér, K. (2021). Introduction to combining learner psychology and ISLA research: Intersections in the classroom. *Language Teaching Research*.
- Sato, M., & Loewen, S. (2019). Towards evidence-based second language pedagogy: Research proposals and pedagogical recommendations. In M. Sato & S. Loewen (Eds.), *Evidence-based* second language pedagogy: A collection of Instructed Second Language Acquisition studies (pp. 1–24). New York, NY: Routledge.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.

Shernoff, D. J., Csikszentmihalyi, M., Schneider, B., & Shernoff, E. S. (2014). Student engagement in high school classrooms from the perspective of flow theory. In M. Csikszentmihalyi (Ed.), *Applications of flow in human development and education* (pp. 475–494). Dordrecht: Springer.

Storch, N. (2002). Patterns of interaction in ESL pair work. Language Learning, 52(1), 119–158.

- Svalberg, A. M.-L. (2018). Researching language engagement; current trends and future directions. *Language Awareness*, 27(1–2), 21–39.
- Talebzadeh, N., Elahi Shirvan, M., & Khajavy, G. H. (2020). Dynamics and mechanisms of foreign language enjoyment contagion. *Innovation in Language Learning and Teaching*, 14(5), 399-420,
- Teimouri, Y. (2018). Differential roles of shame and guilt in L2 learning: How bad is bad? *Modern Language Journal*, *102*(4), 632–652.
- Tze, V. M. C., Klassen, R. M., & Daniels, L. M. (2014). Patterns of boredom and its relationship with perceived autonomy support and engagement. *Contemporary Educational Psychology*, 39(3), 175–187.

	Appendix. Searce							
Chinese version of scales used in the present study	English version of scales used in the present study							
<ul> <li>【英语】教师教学热情感知量表</li> <li>1. 英语老师上课很有热情。</li> <li>2. 英语老师上课时很幽默。</li> <li>3. 英语老师努力让学生对英语这门课充满激情。</li> <li>4. 英语老师似乎真的很喜欢教学。</li> </ul>	<ul> <li>Perceived [English] Teacher Enthusiasm Scale</li> <li>1. Our [English] teacher teaches with enthusiasm.</li> <li>2. Our [English] teacher is humorous during teaching.</li> <li>3. Our [English] teacher tries to get students excited about the subject of [English].</li> <li>4. Our [English] teacher really seems to take pleasure in teaching.</li> </ul>							
[英语]无聊量表 1. 英语课让我觉得无聊。 2. 我觉得英语学习材料极其无聊。 3. 英语课太无聊了,所以我无法专心 听课。	<ul> <li>[English] Boredom scale</li> <li>1. I get bored in [English] classes.</li> <li>2. The [English] learning material bores me to death.</li> <li>3. I can't concentrate in [English] class because I am so bored.</li> </ul>							
[英语课堂小组活动]投入量表	[English Classroom] Group Activity Engagement Scale							
<ul> <li>社会惰化分量表</li> <li>英语课上</li> <li>1. 小组活动中,我总是让其他成员做 困难的部分。</li> <li>2. 小组活动中,我让其他成员做大部 分工作。</li> <li>3. 我总是耐心倾听其他人员。</li> <li>4. 我不投入到小组活动中。</li> </ul>	<ul> <li>Social Loafing Subscale In English class</li> <li>My group enjoyed working together.</li> <li>We all worked well together.</li> <li>My group cared about what each person thought.</li> <li>The students in my group listened to each other.</li> <li>Positive Group Interaction Subscale</li> </ul>							
<ul> <li>积极小组互动分量表</li> <li>5. 小组活动中,大家相互帮助。</li> <li>6. 小组活动中,大家很享受合作。</li> <li>7. 小组活动中,我们大家配合地很好。</li> <li>8. 小组活动中,我们大家彼此认真听</li> </ul>	<ol> <li>My group enjoyed working together.</li> <li>We all worked well together.</li> <li>My group cared about what each person thought.</li> </ol>							
取对方的话。	4. The students in my group listened to each other.							

Appendix: Scales

Note: Please see Li, Jiang, and Dewaele for the *Chinese Version of the Foreign Language Enjoyment Scale (CFLES) and* Li (2021) for *the* [English] Boredom scale.