

# The effects of motivational dispositions on oral L2 task emotions and performance: A regulatory focus perspective

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## Abstract

Despite extensive research in task-based language learning, the role of learners' motivational dispositions in their task experience and performance has remained underexplored. To help bridge that gap, this study investigated the relationships between second language (L2) learners' chronic regulatory focus and their oral task emotions and performance. One hundred and thirty-three high school students studying English as a foreign language in China completed a regulatory focus questionnaire, an English proficiency self-rating questionnaire, an oral opinion task, and a post-task questionnaire measuring their task anxiety and enjoyment. Multiple regression results showed that the learners' chronic promotion focus positively predicted their task enjoyment, which, in turn, predicted their oral task performance. In addition, the participants' chronic prevention focus did not predict task anxiety but positively and directly predicted their oral task performance. The results of the study highlight the importance of learners' chronic regulatory focus in their task experience and performance. Theoretical and pedagogical implications are discussed.

## Keywords

anxiety, enjoyment, motivation, regulatory focus, task performance

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## I Introduction

Research on task-based language learning suggests that second language (L2) task engagement and performance may be influenced by learner-related factors such as motivation (e.g. Kormos & Dörnyei, 2004; Saito et al., 2018), topic familiarity (Qiu & Lo, 2017), task choice (Nakamura et al., 2021), willingness to communicate, attitudes towards the L2 course (Dörnyei & Kormos, 2000), learner interest (Poupore, 2014), group work dynamics (Poupore, 2016), and anxiety (Baralt & Gurzynski-Weiss, 2011; Trebis, 2016). Among these factors, the role of motivation in L2 task performance has received more scholarly attention (e.g. Van Batenburg et al., 2019). For instance, studies have shown that motivational interventions (Dembovskaya, 2009), course-specific motivational variables (Dörnyei & Kormos, 2000), personal investment (Lambert et al., 2023), and task motivation (Poupore, 2016) contribute to L2 learners' task engagement and performance. These early motivation studies have contributed to our understanding of the role of L2-specific motivational factors in L2 task engagement and performance. However, they do not explain how learners' motivational dispositions lead to qualitative differences in learners' task experience and performance. Papi (2018) has argued that most previous L2 motivation studies have ignored 'qualitative differences in what motivates learners to engage in and complete a task, and how the learners accomplish that' (p. 708). In other words, the early task motivation studies focused on the effects of the strength of learner motivation on task performance while overlooking how the qualitative differences in motivation affect L2 learners' engagement and performance in a task (e.g. Papi, 2016, 2018). The present study aims to bridge this gap and explore how such motivational dispositions may affect L2 learners' oral task emotions and performance.

One of the theories that best represents such motivational dispositions is regulatory focus theory (Higgins, 2000), which highlights how an individual's chronic concerns with growth, advancement, and accomplishments (a promotion regulatory focus) versus security, safety, and calmness (a prevention regulatory focus) can lead to differences in emotional, motivational and behavioral experiences in their goal pursuits. Researchers have provided evidence that these regulatory foci can lead to qualitative differences in learners' future selves (Teimouri, 2017), L2 emotions (Jiang & Papi, 2022), strategic inclinations for L2 use (Papi & Khajavy, 2021; Papi et al., 2019), and learning outcomes (e.g. Y. Zhang & Papi, 2021, 2024). Other studies have explored the effects of regulatory fit between these dispositions and task instructions on learning outcomes such as vocabulary learning and lexical stress (Cho, 2021; Papi, 2018). A recent study by Papi et al. (2023) explored the connection between these motivational dispositions and general and specific measures of oral L2 production. To the best of our knowledge, however, no published studies have examined how such regulatory orientations can directly lead to qualitative differences in both oral L2 task emotions and performance. Exploring this connection can help L2 teachers and researchers better understand the sources of variation in oral L2 learners' task experience and its connection with their task performance, which can lead to devising instructional techniques for enhancing learners' engagement and performance in such tasks (Papi, 2018).

Building on the previous studies, the present study aims to bridge this gap and explore how regulatory focus theory (Higgins, 1997) could account for qualitative differences in

oral L2 task anxiety, enjoyment, and performance. The promotion focus has been found to enhance elation-related emotions such as enjoyment, and the prevention focus has been associated with agitation-related emotions such as anxiety, which in turn affect task performance (Freitas & Higgins, 2002; Klenk et al., 2011; Papi & Khajavy, 2021). Therefore, this study will also explore whether task anxiety and enjoyment mediate the relationship between regulatory focus and oral L2 task performance. Such an exploration can help form a more comprehensive understanding of the factors that could contribute to oral L2 task engagement and performance, which in turn can inform the creation of optimal conditions for task-based instruction.

## II Literature review

### *I Motivation in L2 oral task performance*

Studies on oral L2 task motivation have shown that situation-specific motivational variables (e.g. attitudes towards the course and tasks), general motivational factors (e.g. educational/cultural orientations), and even interlocutors' motivation influence the learner's task motivation and performance. Julkunen (1992) investigated how different types of tasks (open and closed vocabulary tasks), task conditions (e.g. individual, collaborative), and L2 learners' English proficiency affected their task motivation in the classroom. The results showed that both high achievers' and low achievers' task motivation improved under collaborative task conditions, whereas high achievers showed higher task motivation under individualistic/competitive conditions for closed tasks. Dörnyei and Kormos (2000) demonstrated that situation-specific motivational variables such as attitudes towards the course and attitudes towards the tasks more strongly affected participants' task performance than did the more general motivational variables. In another study, Dörnyei (2002) found that participants with low task attitudes displayed better oral performance when working with more motivated interlocutors. In contrast, the performance of high task-attitude learners was not influenced by their interlocutors' task motivation.

Kormos and Dörnyei (2004) found a significant relationship between motivational variables (e.g. task attitudes, course attitudes) and their participants' quantity of L2 speech production (e.g. the number of words and speech turns) but not the quality of their speech performance (e.g. accuracy, complexity, and lexical richness). The only motivational variable that showed some correlation with a qualitative measure (accuracy) was course attitudes. The authors argued that the lack of connection between motivational variables and the qualitative measures was due to the underlying assumption of the motivation theories 'which see motivation as the force that determines the magnitude of behavior rather than the quality of behavioral outcome' (Kormos & Dörnyei, 2004, p. 10), an assumption that is challenged in the present study.

These L2 task motivation studies either focused on investigating how task-related factors (e.g. task condition and task type) affect the amount of motivation or how motivational factors influence oral task performance. In other words, they view task motivation as a force or 'pulling power' in affecting learners' task performance (Papi, 2018, p. 708). This 'motivation-as-energy' view, which has shaped our understanding of the relationships

between task motivation and task performance, ignores how the different types of motivation can lead to qualitative differences in how learners engage in or complete tasks (e.g. Dörnyei & Ryan, 2015; Papi & Khajavy, 2021).

To demonstrate such qualitative differences in task experience and performance, Papi (2016, 2018) proposed using regulatory focus theory (Higgins, 1997) from social psychology. The theory outlines two motivational principles that motivate individuals to set different goals (i.e. L2 self-guides) and adopt distinct strategies to achieve those goals. Adopting a regulatory focus perspective, this study aims to contribute to a theoretically meaningful understanding of how individual differences in learners' regulatory focus can lead to qualitative differences in learners' L2 task emotions and performance (Papi, 2018; Papi et al., 2023; Teimouri, Papi, & Tahmouresi, 2022).

## 2 Regulatory focus theory in SLA

Regulatory focus theory (Higgins, 1997) is a goal pursuit theory. It describes how people regulate their goal-oriented cognitions, emotions, and behaviors through two fundamental motivational principles: a promotion focus and a prevention focus (Higgins, 1997). Individuals with a predominantly promotion focus are concerned with the fundamental needs of growth and advancement, set goals that represent their hopes, wishes, and aspirations, and are sensitive to the presence and absence of positive outcomes ('gains'). Comparatively, individuals with a predominantly prevention focus are concerned with the fundamental needs of safety, protection, and security, strive to meet duties, obligations, and responsibilities, and are more sensitive to the presence and absence of negative consequences ('losses'). Regulatory focus can be chronic or situational (Higgins, 1997, 1998). Chronic regulatory focus can be viewed as a personality dimension that shapes the individual's cognitions, emotions, and actions, and is commonly measured using questionnaires (e.g. Higgins et al., 2001; Shah et al., 1998). Regulatory focus can also be situationally induced using activities such as essay writing, thinking about previous experience, or completing tasks that are naturally more promotion- or prevention-oriented (e.g. Motyka et al., 2014).

The promotion and prevention focus can both motivate individuals to progress and achieve their goals through different types of strategies. Promotion-focused individuals adopt eager strategies that aim to maximize their opportunities for advancement. Those with a prevention focus use vigilant strategies to minimize their chances of failure. Individuals with different regulatory foci have been found to experience different emotions during goal pursuit (Higgins, 1998). Those with a strong promotion focus have been found to experience cheerfulness-related positive emotions (e.g. happiness, enjoyment) when making progress toward the successful attainment of future goals, and dejection-related negative emotions (e.g. depression, sadness) when they fail to achieve their future goals (e.g. Förster et al., 1998; Higgins, 1997). On the other hand, those with a strong prevention focus have been found to experience quiescence-related emotions (e.g. relief, relaxation) when they achieve their future goals and agitation-related emotions (e.g. anxiety, fear) when their goals remain unfulfilled (e.g. Brockner & Higgins, 2001; Higgins, 1997).

In the field of SLA, some empirical studies have explored connections between learners' chronic regulatory focus and their L2 motivation, emotions, and learning outcomes. Papi and Khajavy (2021) found that promotion-focused individuals pursued ideal selves, which, in turn, positively predicted more L2 enjoyment, eager L2 use, and achievement. In contrast, prevention-focused individuals were motivated by their ought-to selves, which, in turn, predicted more L2 anxiety, vigilant L2 use, and lower achievement. In the English as a foreign language (EFL) context of China, Jiang and Papi (2022) found that the promotion focus strongly and negatively predicted L2 anxiety, whereas no relationship was detected between the prevention focus and L2 anxiety. The study, however, focused on general L2 learning emotions and did not measure task-related emotions or performance, which is the focus of the present study. In the area of L2 pragmatics, Y. Zhang and Papi (2021, 2024) explored the relationship between regulatory focus and L2 learners' pragmatic competence among 121 first-language-Mandarin learners of English as a second language (ESL) in the U.S. The participants completed a regulatory focus questionnaire, a discourse completion task and a judgment task reflecting their awareness of and sensitivity to grammatical and pragmatic errors. The results showed that learners with a stronger promotion focus showed stronger pragmatic competence and pragmatic error sensitivity, whereas those with a stronger prevention focus displayed lower levels of pragmatic competence and higher recognition of and sensitivity to grammatical errors. The authors argued that due to the eager nature of learning behavior among promotion-focused learners, they are more likely to engage in L2 interaction behavior and improve their pragmatic competence, awareness, and sensitivity whereas prevention-focused individuals improve their grammatical awareness and sensitivity due to their concern with linguistic accuracy (Papi & Hiver, 2024). Papi et al. (2023) examined how chronic regulatory focus predicted learners' complexity, accuracy, and fluency of oral L2 production and proficiency. Eighty-one international students learning ESL in the context of the US completed a regulatory focus questionnaire, an oral interview task, and a picture description task. Multiple regression results showed that, among other results, the promotion focus predicted learners' oral English proficiency, whereas the prevention focus negatively predicted their lexical sophistication.

A few other studies have explored situational regulatory focus, which is the focus of regulatory fit theory (Higgins, 2000). According to this theory, a match between the regulatory focus of an individual and the regulatory structure of a task could increase the individual's task engagement and performance. Papi (2018) applied this theory to the area of task-based incidental vocabulary learning. More specifically, he examined how a match or mismatch between ESL learners' chronic regulatory focus and the incentive structure (a gain-framed task vs. a loss-framed task) of an integrated reading/writing task would lead to differences in incidental vocabulary learning. The results show that, overall, learners with a chronic promotion focus learned more vocabulary items than prevention-focused learners, and the gain-framed condition led to better learning outcomes. In addition, chronically prevention-focused learners learned more vocabulary items in the loss-framed condition (e.g. participants started with 100 points and lost points if they made mistakes) than in the gain-framed condition (e.g. participants started at zero but gained points as they performed different sections of the task).

In a similar study, Cho (2021) examined the effect of the same regulatory fit technique on L2 learners' acquisition of lexical stress. Ninety EFL learners practiced mimicking a model speech in English in exchange for a chance to enter a raffle for a prize. The participants received either gain-framed or loss-framed instructions. The results showed a total advantage for the acquisition of lexical stress in the gain-framed condition, confirming a similar finding by Papi (2018).

Han and McDonough (2018, 2019) conducted two quasi-experimental studies among Vietnamese learners of Korean as a foreign language to explore how both L2-specific regulatory focus (instrumentality promotion vs. instrumentality prevention) and situationally induced regulatory focus (i.e. tasks requiring explaining the reasons for visiting vs. avoiding two locations in one's hometown) affected learners' oral L2 task performance (complexity, accuracy, and fluency). Han and McDonough (2018) found that learners' chronic promotion/prevention did not affect the learners' oral task production, but Han and McDonough (2019) reported that chronic prevention negatively predicted their oral L2 accuracy. The authors explained that the negative relationship might be due to the prevention-focused learners' anxiety during oral tasks; however, the results cannot be easily interpreted considering the use of a non-chronic measure of regulatory focus. In terms of situationally-induced regulatory focus, Han and McDonough (2018) found that task-induced prevention contributed to oral L2 fluency and accuracy, whereas Han and McDonough (2019) did not support these relationships. In addition, interviews with the participants showed that learners with a stronger instrumentality prevention focus were more anxious than those with a stronger instrumentality promotion when engaged in completing the oral tasks. Instrumentality prevention's connection with accuracy and anxiety makes theoretical sense. The researchers speculated that anxiety might have mediated the relationship between instrumentality prevention and oral L2 task performance, a hypothesis that will be tested in this study.

In sum, the studies reviewed above have explored how chronic regulatory focus (Papi et al., 2023), L2-specific regulatory focus (Han & McDonough, 2019), or situationally-induced regulatory focus (Cho, 2021; Papi, 2018) relate to general L2 motivational, affective or learning outcomes. However, it remains unclear how chronic regulatory focus influences oral L2 task emotions and performance. Uncovering these links can help with the design and implementation of oral tasks in ways that can potentially maximize students' task engagement and learning (Lambert, 2017; Phung, 2017; Poupore, 2014). The present study thus aims to bridge this gap and explore the links among regulatory focus, oral task emotions, and oral task performance. More specifically, given the promotion regulatory focus is associated with elation-related emotions such as enjoyment, and the prevention regulatory focus is associated with agitation-related emotions such as anxiety (Papi & Khajavy, 2021; Teimouri, 2017), we expect these motivational dispositions to lead to their corresponding emotions, which are, in turn, expected to influence learners' task performance (Baralt & Gurzynski-Weiss, 2011; Poupore, 2014; Trebis, 2016). That is why this study will explore the links between learners' regulatory foci and oral task performance and the mediating role of L2 task enjoyment and anxiety. We decided to explore the chronic regulatory focus instead of the situational one for multiple reasons. First, both chronic and situationally-induced regulatory focus have

been found to influence human motivation, behavior, learning, and performance (for a meta-analysis, see Motyka et al., 2014), making both legitimate topics of research in relation to task-based L2 learning. Second, previous studies have mostly focused on either the relationship between chronic regulatory focus and general L2 learning behaviors or emotions (e.g. Jiang & Papi, 2022; Papi et al., 2023) or the fit between chronic regulatory focus and task instructions (e.g. Cho, 2021; Papi, 2018), leaving the link between chronic regulatory focus and task emotions and performance unexplored. Third, the study by Papi (2018), which was based on a reading/writing task, showed that the gain-framed condition and the chronic promotion focus led to better vocabulary learning, whereas the prevention focus was a better predictor of vocabulary learning in the loss-framed condition than in the gain-framed condition. On the other hand, Cho (2021) found a similar effect for a gain-framed condition on the acquisition of lexical stress but none for chronic regulatory focus or the interaction between regulatory focus and framing conditions. These inconsistencies call for more research on the unique effects of chronic regulatory focus on oral task emotions and performance without the intervening effect of situationally-induced regulatory focus.

### **III Research objectives and questions**

Exploring the relationships between regulatory focus and task emotions and performance can paint a more comprehensive picture of learners' engagement and performance in task-based language learning and could have theoretical and instructional implications. Therefore, the present study aims to bridge this gap by answering the following research questions:

- Research question 1: What is the relationship between L2 learners' chronic regulatory focus and their task anxiety, enjoyment, and performance?
- Research question 2: What is the relationship between L2 learners' oral task emotions and performance?
- Research question 3: Is the relationship between L2 learners' chronic regulatory focus and oral task performance mediated by their oral task emotions?

The promotion focus and the prevention focus are expected to be associated with task enjoyment and task anxiety, respectively. Task emotions are, in turn, expected to mediate the relationships between L2 learners' regulatory focus and task performance.

### **IV Methods**

#### *I Participants*

A total of 133 second-year students (72 females) from a high school in northern China participated in this study. The participants were recruited based on a convenience sampling strategy. The age of participants ranged from 14 to 18 years ( $M=16.47$ ,  $SD=.67$ ). Of all participants, 46.9% had studied English for less than five years, and 53.3% had studied English for at least six years (Table 1). There was no institutional placement test

**Table 1.** Demographic information of participants.

Category	Sub-category	n	Percentage
Gender	Female	72	54.1
	Male	60	45.1
	Missing	1	0.8
Age (years)	14	1	0.8
	15	7	5.3
	16	56	42.1
	17	65	48.9
	18	3	2.3
	Missing	1	0.8
English learning experience (years)	Less than 5	62	46.9
	6–10	57	42.5
	11–14	13	9.8
	Missing	1	0.8

Note. Sample's statistics ( $n = 133$ ).

for the participants' English proficiency, but they all completed a self-rating measure of English proficiency (Winke, 2013).

## 2 Materials and instruments

This study used various materials and instruments, including a demographic questionnaire, an English proficiency self-rating scale, a chronic regulatory focus questionnaire, a post-task emotions questionnaire, and a speaking task prompt. To ensure that all the materials and instruments were understandable to the participants, they were translated from English to Chinese and then back-translated by two other translators proficient in Chinese and English. All the materials are available in supplementary materials.

*a Demographic questionnaire.* This questionnaire included two parts: one part collected data regarding participants' background information such as age, gender, and year in high school, and the second part included an English proficiency self-assessment scale (Winke, 2013) with 10 items which were based on the Test of English for International Communication (TOEIC) 'Can do' Guide. The items were responded to on a 5-point Likert scale with options ranging from 1 ('not at all') to 5 ('easily'). The scale has been shown to have high reliability ( $\alpha = .96$ ) and be a valid way to examine participants' oral proficiency levels (Winke, 2013).

*b Regulatory focus questionnaire.* This study used a questionnaire to measure the participants' chronic regulatory focus. The items were adapted from Higgins' regulatory focus questionnaire (Higgins et al., 2001) and composite regulatory focus scale (Haws et al., 2010). The questionnaire contained 17 items. Seven items were adapted from the regulatory focus questionnaire, which asked participants to indicate their answers on a 7-point

Likert scale ranging from 0 ('not at all true of me') to 7 ('very true of me'). Ten items were adapted from the composite regulatory focus scale, and the response options were based on a 5-point Likert scale (1 = 'seldom/never' or 'certainly false' to 5 = 'very often' or 'certainly true').

*c Task emotions questionnaire.* Participants completed the task anxiety and enjoyment measures immediately after they completed the speaking task. Each scale contained 10 items with a 10-point rating scale ranging from 0 ('not at all') to 9 ('extremely'). The task anxiety items were adapted from a post-task questionnaire from Papi (2016), a speaking anxiety questionnaire from Cheng (2017), and an emotion questionnaire from Peixoto et al. (2015). The task enjoyment scale included five items adapted from Papi's (2016) post-task questionnaire, Khajavy et al.'s (2018) L2 learning enjoyment scale, and Peixoto et al.'s (2015) emotion questionnaire. The items related to these emotions were selected based on their specific task-related nature or adaptability. In other words, we chose items that either reflected students' anxiety reactions and experiences of joy while performing a specific task or items that could be adapted easily by adding an adverb like 'when completing the oral task'. By so doing, we established that all the items constituted a content-valid construct reflecting the task-related emotions of anxiety and enjoyment.

*d Speaking task.* The independent speaking task from the Test of English as a Foreign Language (TOEFL) was used in this study to measure L2 learners' spontaneous speech performance (Educational Testing Service). The independent speaking task has been used as a valid measure of oral L2 task performance in many studies (e.g. Huang, 2018; Huang & Hung, 2013; Y. Zhang & Papi, 2021). According to the TOEFL test guidelines, when students take the independent speaking tasks, they will have 15 seconds to prepare and 45 seconds to respond to the questions. In the present study, to minimize learners' test-specific anxiety, the preparation time was increased to 90 seconds, and the responding time was increased to 3 minutes. The speaking prompt was: 'During holidays, do you prefer to spend more time studying or relaxing? Include reasons, examples, and details to support your explanation.' A pilot study was implemented to make sure that the preparation time and responding time, as well as other procedures, were appropriate. The authors also consulted with the participants' English instructors to ensure that the content and format of the oral tasks were easy for participants to understand and talk about (Nitta & Nakatsuhara, 2014).

### 3 Procedures

The procedures for data collection included five steps. First, the researchers visited the participating classes and explained the data collection procedures and the participants' rights. Second, each participant completed a demographic information survey, an English oral proficiency self-rating scale, and a chronic regulatory focus questionnaire. Third, all the participants individually met with the first author in a private room and completed an independent speaking task. The participants were informed that their oral task performance would be graded, and these scores would be added to their next English test scores. Participants had 90 seconds to prepare after receiving an oral task prompt and were

allowed to use dictionaries during this time. After the 90-second preparation, they spoke for 3 minutes without additional materials or help. Fourth, each participant completed the post-task anxiety and enjoyment questionnaire. On average, the participants spent about 20 minutes completing all the data collection steps. Finally, they were thanked and debriefed that their performance on the oral task was not related to their English test grades but it was essential to our study that they would take the task seriously.

*a Coding of oral data.* The current study adapted the rubrics used for evaluating the TOEFL independent speaking tasks (Educational Testing Service, 2022) as the criteria to assess participants' oral performance. Raters determined individuals' oral responses holistically and based on three main aspects: delivery, language use, and topic development. For delivery, the raters graded the responses based on speech fluency, pronunciation, pace, and intonation. For language use, the raters examined learners' use of grammar and vocabulary. For topic development, the raters assessed responses based on whether the participants answered the question with enough information and whether they provided their answers logically and clearly.

The original TOEFL independent speaking scale includes five score bands (i.e. performance levels; 0, 1, 2, 3, 4). For the purpose of representing each participant's speaking performance and capturing the variation more precisely, the width of score bands was increased to 13 points with 1-point increments: Unanswered: 0; Weak: 1–3; Limited: 4–6; Fair: 7–9; Good: 10–12. The final score of each participant's overall oral performance was the average of the three raters' scores.

*b Raters.* Participants' oral performance in the speaking task was audio-recorded and rated by three applied linguists who were native speakers of English and had taught English before. The raters used the adapted TOEFL rating guidelines for this purpose (see supplementary materials). To train the raters, two main stages – orientation and calibration (Kermad, 2018; Saito, 2011; Zhou, 2021) – were implemented. During the orientation stage, the authors reviewed the content of the present study, related rating materials, as well as the rating requirements and process; during the calibration stage, the researchers specifically described and discussed the benchmarks and rating scales with the raters and practiced the rating of a few samples both together and independently.

*c Rater reliability.* To ensure the consistency of the three raters' grading of the whole speaking task samples ( $n=133$ ), inter-class correlations (ICC) indices were run using SPSS version 26 (IBM) based on single ratings ( $k=3$ ), absolute agreement, and a 2-way random effect model, which showed high inter-rater reliability for the speaking task (ICC=.92, confidence interval: .89–.94;  $F=13.00$ ,  $p<.01$ ).

Intra-rater reliability was also evaluated through ICC indices. First, 10 speaking samples were randomly selected and duplicated, and inserted among speaking samples, which were rated over 10 different sessions. Then, the reliability between the original 10 samples and the 10 duplicates was calculated. ICC was measured based on average measures ( $k=2$ ), absolute agreement, and a 2-way random effect model. As shown in Table 2, for the speaking task, the ICC indices of the three raters were all higher than .90, suggesting good intra-rater reliability.

**Table 2.** Intra-rater reliability results for the oral task.

Raters	Intraclass correlation	95% confidence interval		F test with true value 0	
		Lower bound	Upper bound	Value	p
Rater 1	.96	.82	.99	25.00	<.01
Rater 2	.98	.92	.99	49.00	<.01
Rater 3	.94	.73	.98	14.00	<.01

## V Data analysis

### 1 Exploratory factor analysis

Because some questionnaire items for measuring task anxiety and task enjoyment were newly developed, and items from two different questionnaires were combined for measuring the promotion and prevention focus, four exploratory factor analyses (EFA) were conducted to test the factor structure of the four constructs.

After data screening and checking for the multivariate normality assumption, principal axis factoring (PAF) analyses with direct oblimin as the rotation method were conducted on the promotion, prevention, task anxiety, and task enjoyment scales. As summarized in Table 3, one factor emerged from each EFA. Each final solutions showed good fitness of the model and explained a good amount of variance, and the scales showed acceptable reliability values. For the details of the analyses, see supplementary materials.

### 2 Self-reported proficiency data

Confirmatory factor analysis (CFA) was run to validate the factor structure of the English proficiency self-assessment scale. The analysis was conducted using Mplus 8.4 with the solution generated based on maximum likelihood with a mean-adjusted statistic (MLM;  $df=133$ ; Muthén & Muthén, 2020). Since the chi-square test ( $\chi^2/df$ ) is sensitive to sample size, it was not chosen as a benchmark for measuring model fit in the present study, but the information was still reported (Alavi et al., 2020). Model fit was examined through several other indices, including root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker–Lewis Index (TLI), and standardized root mean square residual (SRMR). Model fit is acceptable when RMSEA is less than .08, SRMR is less than .08, and CFI and TLI are larger than .90 (e.g. Browne & Cudeck, 1989; McDonald & Ho, 2002). As shown in Table 4, RMSEA, SRMR, CFI, and TLI values suggested a good model fit. No questionnaire items were deleted. The standardized factor loadings of questionnaire items ranged from .45 to .64. All loadings were adequate and statistically significant ( $p < .01$ ). In conclusion, the model was suitable and indicated a good fit for the data (for the details of the analysis, see supplementary materials). Moreover, the reliability indices of self-reported English proficiency were calculated through Cronbach's alpha ( $\alpha$ ) and McDonald's omega ( $\omega$ ), which were both .81 ( $M/SD=3.48/.56$ ), supporting the internal consistency of the scales.

**Table 3.** The results of four separate EFAs for task anxiety, task enjoyment, promotion and prevention.

Variables	Factor loadings	$h^2$	M (SD)	$\alpha$
<i>Task anxiety:</i>			5.62 (2.16)	.82
When completing the oral task, I felt so nervous that I was trembling.	.78	.60		
When completing the oral task, I felt my heart was pounding.	.80	.65		
When completing the oral task, I worried that I made language mistakes.	.55	.31		
As soon as I started completing the oral task, I began to worry about not being able to express myself.	.58	.34		
When completing the oral task, I got so nervous that I couldn't wait for the task to be over.	.72	.51		
<i>Task enjoyment:</i>			6.32 (2.08)	.91
The task was interesting.	.77	.59		
The task was enjoyable.	.85	.72		
I enjoyed doing the task.	.91	.83		
The task was exciting.	.85	.72		
For me, the task was a challenge that is enjoyable.	.76	.57		
<i>Promotion focus:</i>			5.86 (1.07)	.71
When I see an opportunity for something I like, I get excited right away.	.74	.55		
I frequently imagine how I will achieve my hopes and aspirations.	.77	.60		
I see myself as someone who is primarily striving to reach my 'ideal self' – to fulfill my hopes, wishes, and aspirations.	.51	.26		
<i>Prevention focus:</i>			4.05 (.76)	.73
Growing up, would you ever 'cross the line' by doing things that your parents would not tolerate? (R)	.86	.74		
Did you get on your parents' nerves often when you were growing up? (R)	.55	.30		
Growing up, did you ever act in ways that your parents thought were objectionable? (R)	.67	.45		

Notes.  $h^2$  denotes the communality coefficient; M = mean; SD = standard deviation; (R) = reverse-coded;  $\alpha$  = Cronbach's alpha.

**Table 4.** CFA model fit result of self-reported English proficiency.

	$\chi^2/df$	RMSEA	90% CI	SRMR	CFI	TLI
Self-reported English Proficiency	52.025/35*	.06	.018–.093	.06	.94	.92

Notes.  $\chi^2$  = chi-square; df = degree of freedom; CI = confidence interval; \* $p < .05$ .

**Table 5.** Descriptive statistics of variables.

	Range	Scale	<i>M</i>	<i>SD</i>
Promotion	1.33–7	1–7	5.86	1.07
Prevention	1–5	1–5	4.05	.76
Task anxiety	.20–9	0–9	5.62	2.16
Task enjoyment	.80–9	0–9	6.32	2.08
Speaking performance	2–10	0–12	5.58	1.28
Self-reported proficiency	2.10–5	1–5	3.48	.56

Notes. *M* = mean; *SD* = standard deviation.

## VI Results

A series of correlational and multiple regression analyses were conducted to explore the relationships among the participants' chronic regulatory foci, task anxiety and enjoyment, and task performance. Before conducting the analyses, the assumptions of this statistical technique (i.e. multicollinearity, linearity, normality, homoscedasticity) were checked as satisfied, and multivariate outliers of each regression model were tested, which did not lead to the removal of any outliers.

### 1 Descriptive statistics

As shown in Table 5, the participants had a relatively high level of chronic promotion orientation ( $M=5.86$ ,  $SD=1.07$ ) on a 7-point scale and a high level of chronic prevention orientation ( $M=4.05$ ,  $SD=.76$ ) on a 5-point scale.<sup>1</sup> Concerning their task emotions which were measured on a 10-point scale, the results showed that L2 learners experienced high levels of task anxiety ( $M=5.62$ ,  $SD=2.16$ ) and enjoyment ( $M=6.32$ ,  $SD=2.08$ ). In addition, L2 learners' speaking performance ( $M=5.58$ ,  $SD=1.28$ ), and their perceived English proficiency ( $M=3.48$ ,  $SD=.56$ ) were both at moderate levels.

### 2 Oral performance as the outcome variable

To answer research question 1 (What is the relationship between L2 learners' chronic regulatory focus and their task anxiety, enjoyment, and performance?), three multiple regression analyses using the standard entry method were run with chronic prevention and promotion focus as predictors, self-reported English proficiency as a covariate, and task anxiety, enjoyment and performance as outcome variables, respectively (for inter-correlations, see Table 6).

In the regression model with task anxiety as the outcome variable (Table 7), the model was significant and explained 6% of the variance ( $F^{(3,129)}=2.65$ ,  $p=.05$ ,  $R^2=.06$ ). In addition, self-reported English proficiency ( $\beta=-.23$ ,  $p<.05$ ) significantly and negatively predicted participants' task anxiety, while the chronic promotion and prevention focus did not emerge as significant predictors.

With task enjoyment as the outcome variable (Table 7), the model was significant ( $F^{(3,129)}=6.31$ ,  $p<.001$ ,  $R^2=.13$ ) and accounted for 13% of the variance. In addition,

**Table 6.** Correlation results among variables.

	1	2	3	4	5
1. Promotion	—				
2. Prevention	.07	—			
3. Task anxiety	-.08	-.04	—		
4. Task enjoyment	.21*	.01	-.25**	—	
5. Performance	.13	.27**	.01	.25**	—
6. English proficiency	.05	.09	-.23**	.30**	.23**

Notes. \* $p < .05$ ; \*\* $p < .01$ .

**Table 7.** Three multiple regression analyses with task anxiety, enjoyment and performance as outcome variables.

	Task anxiety		Task enjoyment		Task performance	
	$\beta$	$p$	$\beta$	$p$	$\beta$	$p$
Promotion	-.07	.41	.20	<.05	.11	.20
Prevention	-.01	.88	-.03	.72	.24	<.01
English proficiency	-.23	<.05	.29	<.01	.20	<.05

chronic promotion focus ( $\beta = .20, p < .05$ ) and self-reported English proficiency ( $\beta = .29, p < .01$ ) emerged as statistically significant positive predictors of task enjoyment, while chronic prevention focus did not predict task enjoyment.

With task performance as the outcome variable, the model was significant and accounted for 12% of the variance ( $F^{(3,129)} = 5.99, p < .01, R^2 = .12$ ) (Table 7). In addition, the prevention focus ( $\beta = .24, p < .01$ ) and self-reported English proficiency ( $\beta = .20, p < .05$ ) emerged as statistically significant positive predictors, but the promotion focus did not predict participants' oral performance significantly.

To answer research question 2 (What is the relationship between L2 learners' oral task emotions and performance?), a multiple regression model was run with task anxiety and task enjoyment as predictors, self-reported English proficiency as a covariate, and oral task performance as the outcome variable (Table 8). The model was significant ( $F^{(3,129)} = 4.66, p < .01, R^2 = .10$ ) and explained 10% of the variance in participants' oral performance. In addition, task enjoyment ( $\beta = .22, p < .05$ ) and self-reported English proficiency ( $\beta = .19, p < .05$ ) positively predicted participants' oral performance, while task anxiety did not emerge as a statistically significant predictor.

### 3 Mediation analysis

To answer research question 3 (Is the relationship between L2 learners' chronic regulatory focus and oral task performance mediated by their oral task emotions?), mediation analyses were conducted through hierarchical linear regression models (Baron & Kenny, 1986) and the Sobel test.

**Table 8.** Multiple regression results with task anxiety and enjoyment as predictors and oral task performance as the outcome variable.

	B	Std. error	$\beta$	t	p	VIF
(Constant)	2.90	.83		3.48	<.01	
Anxiety	.07	.05	.11	1.27	.21	1.10
Enjoyment	.14	.06	.22	2.47	<.05	1.14
Proficiency	.42	.20	.19	2.08	<.05	1.13

Note.  $R^2 = .10$ .

**Table 9.** Stepwise regression results with oral task performance as the outcome variable.

	B	Std. Error	$\beta$	t	p	VIF
(Constant)	1.66	.97		1.70	.09	
Promotion	.13	.10	.11	1.28	.20	1.01
Prevention	.40	.14	.24	2.90	<.01	1.01
Proficiency	.45	.19	.20	2.39	<.05	1.01
(Constant)	1.20	1.09		1.10	.27	
Promotion	.13	.10	.11	1.34	.18	1.01
Prevention	.40	.14	.24	2.91	<.01	1.01
Proficiency	.49	.19	.22	2.54	<.05	1.06
Anxiety	.05	.05	.08	.95	.34	1.06
(Constant)	1.58	.96		1.64	.10	
Promotion	.08	.10	.07	.82	.41	1.05
Prevention	.41	.14	.25	3.00	<.01	1.01
Proficiency	.33	.20	.14	1.67	.10	1.11
Enjoyment	.12	.05	.19	2.16	<.05	1.15

In the base hierarchical regression model ( $F^{(3,129)}=5.99, p < .01, R^2=.12$ ), the dependent variable (DV) was oral performance and the independent variables (IVs) were chronic promotion focus, chronic prevention focus, and self-reported English proficiency. As presented in Table 9, chronic promotion focus ( $\beta=.11, p=.20$ ) was not a statistically significant predictor of participants' oral task performance; chronic prevention focus ( $\beta=.24, p < .01$ ) and self-reported English proficiency ( $\beta=.20, p < .05$ ) were statistically significant predictors of participants' oral task performance. When task anxiety was added to the base model in the second step ( $F^{(4,128)}=4.71, p < .01, R^2=.13$ ), it did not statistically predict the outcome variable ( $\beta=.08, p=.34$ ). The beta value of chronic promotion focus ( $\beta=.11, p=.18$ ) remained non-significant, and the beta values of chronic prevention focus ( $\beta=.24, p < .01$ ) and self-reported English proficiency ( $\beta=.22, p < .05$ ) remained statistically significant (Table 9). These results indicated that task anxiety was not a mediator in this model. The Sobel test results supported this finding (Table 10).

When task enjoyment was added to the base model ( $F^{(4,128)}=5.79, p < .001, R^2=.15$ ), it emerged as a significant predictor ( $\beta=.19, p < .05$ ). However, chronic promotion focus ( $\beta=.07, p=.41$ ) was still not a statistically significant predictor, and chronic prevention focus

**Table 10.** Sobel statistic results.

IV → Mediator → DV	Sobel statistic	p
Promotion → Anxiety → Performance	0.71	0.48
Prevention → Anxiety → Performance	-0.17	0.87
Promotion → Enjoyment → Performance	1.66	0.10
Prevention → Enjoyment → Performance	-0.34	0.73

Notes. IV = independent variable; DV = dependent variable.

( $\beta=.25, p<.01$ ) remained a statistically significant predictor (Table 9). Therefore, no mediations were found in this analysis either. The Sobel test confirmed these results (Table 10).

## VII Discussion

The results of this study showed that whereas learners' chronic promotion focus positively predicted their task enjoyment, the chronic prevention focus did not predict task anxiety, partly confirming Higgins's (1987) predictions that promotion-related motives are associated with elation-related emotions but failing to confirm that prevention-oriented motives are associated with agitation-related motives such as anxiety in this context. These results share both similarities and differences with the results of the previous studies. For example, in the present study, chronic prevention emerged as a positive predictor of task performance, whereas Papi (2016, 2018) found the promotion focus to be a positive predictor of L2 vocabulary learning. In addition, Papi (2016) found that promotion was associated with task enjoyment, and prevention was associated with task anxiety. In this study, only the link between promotion and enjoyment was confirmed. These similarities and differences are discussed below.

### *1 Regulatory focus and task emotions*

In response to research question 1, the multiple regression results showed that promotion and prevention regulatory focus did not emerge as statistically significant predictors of task anxiety. This result was unexpected given that Papi (2016) found that chronic prevention was a significant predictor of students' anxiety in an argumentative writing task for the whole sample but not for each task condition (gain-framed vs. loss-framed). Also based on interviews with their participants, Han and McDonough (2019) reported that students with a stronger instrumentality prevention experienced more task anxiety. The lack of a predictive relationship between chronic regulatory focus and task anxiety could be due to task-related factors such as task difficulty and complexity (Robinson, 2001). It might be the case that the task of choosing whether to study or relax during holidays was not challenging enough to induce enough anxiety ( $M=5.62, SD=2.16$ , on a 10-point scale) that would engage their regulatory focus. In this study, self-reported English proficiency was the only variable that emerged as a negative predictor of task anxiety ( $\beta=-.23, p<.05$ ), suggesting that task anxiety, in this case, may be more reflective of students L2 competence than their chronic regulatory focus. Another possible explanation could concern the type of task used. Papi (2016) used an argumentative writing task

that could last up to 40 minutes followed by vocabulary tests, whereas the present study employed a 3-minute opinion task with a 90-second preparation time and low stakes, which may not be as anxiety-provoking.

Alternatively, it can be speculated that the promotion and prevention focus can lead to the decrease of anxiety indirectly through the medium of L2-specific motives such as future L2 selves, which were not examined in this study. The promotion focus can decrease anxiety through the activation of ideal selves, which represent one's hopes and aspirations, and the prevention focus can do so through meeting the ought selves, which represent obligations (e.g. Jiang & Papi, 2022; Papi & Khajavy, 2021; Tahmouresi & Papi, 2021). Evidence for the existence of such a link between regulatory focus, future selves, and anxiety, however, is limited to the studies focusing on general L2 anxiety and has not been explored in the context of task anxiety even though Han and McDonough (2019) reported such a possibility in relation to L2 instrumentality prevention based on interview data.

As expected, the promotion focus positively predicted task enjoyment. According to the regulatory focus theory (Higgins, 1998), individuals with a promotion focus experience cheerfulness-related emotions such as enjoyment during their goal pursuit, which is confirmed in this study. Recent studies also provide empirical evidence for the connection between the promotion focus and enjoyment. For example, Papi (2016) found that the promotion focus positively predicted L2 learners' task enjoyment in their integrated reading and writing task. Papi and Khajavy (2021) found similar results; the promotion focus positively predicted L2 enjoyment through the medium of the ideal L2 self. In the present study, these results were replicated, and L2 learners' enjoyment was associated with their chronic promotion focus. It seems that the promotion-focused learners' preoccupation with positive outcomes and accomplishments makes them more prone to experiencing elation-related emotions such as joy (Higgins, 1987). In addition, the covariate of proficiency also emerged as a predictor of task enjoyment, suggesting that the more proficient learners enjoy completing a task that they are competent enough to complete. In other words, students' promotion focus and their sense of competence and control contribute to their task enjoyment.

## 2 Regulatory focus and oral task performance

Multiple regression results showed that the prevention focus predicted oral L2 task performance, whereas the promotion focus did not emerge as a significant predictor. These results were surprising, considering recent L2 studies have found more favorable results for the promotion focus. For instance, Papi (2018) found that the promotion focus positively predicted vocabulary learning in a reading and writing task, whereas the prevention focus did not. Eom and Papi (2022a) found that the promotion focus positively predicted L2 writing complexity, whereas the prevention focus negatively predicted L2 writing fluency and accuracy. Similarly, Papi et al. (2023) found that the promotion focus predicted learners' oral English proficiency, but the prevention focus was a negative predictor of lexical sophistication. Finally, Y. Zhang and Papi (2021, 2024) found that the promotion focus positively and the prevention focus negatively predicted L2 pragmatic competence and sensitivity, whereas the prevention focus positively predicted grammatical sensitivity and awareness among Chinese EFL learners. There could be two possible and related

explanations for these results. One could be related to the nature of the task completed and the other to the context of the study.

The positive relationship between the prevention focus and oral task performance could be due to the way the task was framed and task performance was assessed. Van Dijk and Kluger's (2004, 2011) studies have shown that different types of tasks possess different regulatory features. Tasks that require generating ideas, creativity, risk-taking, and open-mindedness are considered promotion-focused tasks, whereas tasks requiring attention to detail, risk avoidance, detecting errors, and adherence to structures and rules are considered prevention-focused tasks. Although the task used in this study was a personal opinion one, it asked the participants to 'include reasons, examples, and details to support your explanation', which are considered prevention-oriented features. In addition, the students might have felt the need to avoid making errors and looking incompetent while being recorded speaking English. Furthermore, the criteria that were used for rating task performance in this study have probably favored a prevention focus. Raters in this study evaluated task performance in terms of delivery, language use, and topic development. Delivery represented speech fluency, pronunciation, pace, and intonation; language use measured in terms of grammar and vocabulary; and topic development assessed whether students included enough information in a logical and clear manner. These criteria seem to be mostly concerned with the form, structure, and accuracy of students' responses, features that are associated with a prevention focus rather than characteristics such as creativity, persuasiveness, generating ideas, and risk-taking, which represent a promotion focus. Therefore, even though promotion-focused learners enjoyed the task more, their performance was not rated as highly; this was probably due to the prevention bias in the way the task was assessed.

In a study in South Korea, Eom and Papi (2022b) found that students' performance on different types of L2 writing tasks varied as a function of their regulatory focus. More specifically, promotion-focused EFL learners showed better complexity, accuracy, and fluency in an argumentative writing task than a narrative writing task, whereas the reverse was true for the prevention-focused learners, whose writing was more complex, accurate, and fluent in the narrative writing task. Eom and Papi (2022b) argued that their argumentative task, which asked students to argue for or against the invention of driverless cars, might have been a better match for promotion-focused learners because such a task requires imagination, creativity, and risk-taking, which are characteristics of promotion-focused individuals (Crowe & Higgins, 1997; Förster et al., 2001). The narrative writing task, on the other hand, which asked learners to write a story based on a set of six chronologically sequenced pictures, required attention to the accuracy and details of the story, which are characteristics of prevention-focused individuals (Crowe & Higgins, 1997; Förster et al., 2001). Similarly, Papi (2018), who asked students to write an argumentative essay for or against animal testing, argued that the task might have been biased in favor of promotion-focused learners because writing such an essay may require generating ideas and taking risks to express them. The emphasis on providing reasons, examples, and details in the task used in the present study, the pressure to avoid errors while being recorded speaking English, and the way students' performance was evaluated, thus, might have contributed to the prevention-focused learners' vigilance and enhanced their performance on this speaking task.

These results might also be related to the specific sociocultural context of the study. English learning in high schools in China is exam-oriented, and English is a required course that students are required to take (Apple et al., 2016; Hu & West, 2015). In this context, the primary purpose of English learning could be meeting the requirements of the schools and avoiding low grades due to pressure from parents, teachers, or peers (Apple et al., 2016). The Chinese high school students' concerns with meeting these expectations and avoiding negative consequences might have made their prevention focus their stronger regulatory orientation, especially because they were told that their performance in this task would count toward their course grade. The students' motivation to perform well within the prevention-focused context of the course might, therefore, have activated their chronic prevention focus, which in this study was the only predictor of oral L2 task performance.

### **3 Task emotions and performance**

As expected, task enjoyment emerged as a positive predictor of oral performance. The result makes theoretical and intuitive sense, given that individuals typically perform better when they enjoy completing tasks or activities (e.g. Boudreau et al., 2018), and conversely they tend to enjoy the task when they perform well on it. Similar results were found in previous studies. For example, Papi and Khajavy (2021) reported a positive link between L2 enjoyment and achievement through the mediation of eager strategies for L2 use. MacIntyre and Vincze (2017) found positive correlations between Italian EFL learners' enjoyment and their perceived L2 competence in speaking. Poupopre (2016) found positive associations between task motivation (conceptualized as a combination of task enjoyment, reported effort, and success expectation) and nonverbal language production (e.g. smiling and body language) during interactive oral tasks.

Unexpectedly, no association was detected between task anxiety and oral performance. It is difficult to explain what caused this result, but it might relate to participants' task enjoyment and anxiety levels. On a 10-point scale (0–9), participants in this study experienced relatively higher levels of enjoyment ( $M=6.32$ ,  $SD=2.08$ ) than anxiety ( $M=5.62$ ,  $SD=2.16$ ). Perhaps the task was not challenging or high stakes enough, which led to the participants experiencing higher levels of task enjoyment than anxiety. Similar results were reported by Dewaele and Alfawzan (2018), who found that the positive influence of enjoyment on performance was stronger than the negative influence of anxiety on performance. It might be the case that students' experience of enjoyment does not leave much room for anxiety to affect their performance. The age of the participants could be another explanation. In a meta-analysis of 27 studies, X. Zhang (2019) found that the negative correlation between anxiety and performance was weaker if L2 learners were younger. Considering that the mean age of participants in the current study was 16.47 years, such an explanation can be justified.

### **4 The mediating effect of task emotions**

In contrast to our predictions, no mediating relationships were found for task emotions, and only the mediation of enjoyment for the relationship between promotion and task performance approached statistical significance ( $p=.10$ ). Statistically speaking, a mediation model

assumes causal relationships among independent variables, mediator variables, and dependent variables (Warner, 2012). From this perspective, the unexpected result may be because of a lack of or weakness in the associations among dispositional variables (i.e. regulatory foci), task-related emotions (i.e. task anxiety and enjoyment), and oral task performance. Chronic regulatory foci are dispositional variables that may directly influence the strategic inclination of learners in task performance (Papi et al., 2023). In the case of this study, the prevention focus did not predict task anxiety but it directly predicted L2 task performance probably because prevention was a regulatory match for the detail-oriented nature of the task or the prevention-oriented way task performance was measured. The promotion focus predicted L2 enjoyment, which, in turn, was a direct predictor of L2 task performance, even though mediation was not statistically significant. This may suggest that the promotion focus was not the only source of enjoyment for these students while completing this task. Other factors, such as the proficiency level of the students, which also predicted task enjoyment in this study, could also have contributed to the learners' task enjoyment. Therefore, these results suggest that regulatory focus can influence task experience and performance by enhancing different task emotions (Freitas & Higgins, 2002) and specific strategic inclinations that favor detail and accuracy (prevention) vs. creativity and risk-taking (promotion) (Förster et al., 2003; Papi & Khajavy, 2021).

## **VIII Conclusions**

Employing Higgins' (1997) regulatory focus theory, this study explored how L2 learners' chronic regulatory focus could lead to qualitative differences in learners' oral L2 task emotions (i.e. anxiety and enjoyment) and performance. The findings also provide preliminary evidence for the direct role of the prevention focus in task performance as well as the influence of the promotion focus on task enjoyment, which, in turn, enhanced their performance on a personal opinion task.

Specifically, the results reveal three key findings. First, the findings suggest that the participants' L2 oral task performance was directly influenced by their prevention system of regulation. The findings can be due to either the prevention bias in the task that was employed in this study, the way performance was assessed, and/or the socio-educational context of the study, where a prevention focus could be more effective in the exam-oriented nature of English learning in the context of Chinese education (Hu & West, 2015). Second, the current study revealed that L2 learners' enjoyment during the oral task was associated with the promotion focus and influenced their oral task performance. However, the enjoyment in completing the task only approached statistical significance in mediating the relationship between the promotion focus and task performance, suggesting that other factors related to the learner (e.g. English proficiency) or the task (e.g. task difficulty) might have also contributed to the students' enjoyment. Finally, task anxiety was not predicted by regulatory focus and did not contribute to differences in oral performance, which could be due to factors such as the low stakes of the task, the difficulty level of the task, or the more substantial influence of task enjoyment on oral performance.

Overall, this study provides additional evidence suggesting that learners' motivational dispositions, such as their regulatory focus, can lead to qualitative differences in their task experience and performance (Higgins, 1987; Papi, 2018). Motivational factors are

thus not only responsible for the amount of effort that learners invest in a specific task; they can also influence the quality of the emotions that students experience as well as the quality of learners' task performance, depending on the type of task. These results also provide preliminary evidence that the influence of chronic regulatory focus – in this case, the prevention focus – on students' task performance is not necessarily mediated by anxiety. These regulatory dispositions can thus directly influence the strategic means that students employ to complete a task (Papi & Khajavy, 2021; Teimouri, 2017).

### *1 Limitations and future directions*

The findings highlight the role of the prevention focus and enjoyment in oral L2 task performance among high school students in China. Future studies are needed to replicate these findings before they can be generalized to the entire Chinese English learner population or other contexts. The present study used only one task, which might have been biased in favor of prevention-focused learners. Future studies can employ either neutral tasks or two tasks, one representing a promotion focus and the other representing a prevention focus. There were only 133 L2 learners recruited in the present study, which could have affected the statistical power of our data analyses. With more participants, more powerful statistical methods such as structural equation modeling (SEM) could be used to reveal other possible effects. The current study explored the relationships between chronic regulatory focus and oral task emotions and performance. It would be interesting to examine how L2-specific regulatory focus and situational priming of regulatory focus could influence their L2 task experiences and outcomes. In the present study, the participants were told that their performance in the task may affect their final grade in their class. This might have led to a more prevention-focused orientation in their task experience, influencing the results (see Papi, 2018). In addition, using tasks that tap into different skills (listening, reading, writing) could reveal interesting dynamics in relation to the regulatory focus of different types of tasks. Further research is needed to examine whether and how factors such as task difficulty and students' perceptions regarding the stakes of the task could influence L2 learners' anxiety and enjoyment levels.

### *2 Pedagogical implications*

The results of this study confirm the positive relationship between the promotion focus system and task enjoyment (Papi, 2016). Therefore, activating the promotion focus system through different induction techniques (Cho, 2021; Papi, 2018) could increase their enjoyment, which can, in turn, improve their oral performance. For instance, teachers can use promotion-oriented strategies such as encouraging students to speak more without paying too much attention to their mistakes to increase participants' enjoyment levels and improve their task experience and performance. Alternatively, they can use prevention-oriented strategies to induce attention to detail when desired (Cho, 2021; Eom & Papi, 2022a). The type of task students complete in a class can have a regulatory bias that would benefit prevention-focused or promotion-focused individuals. Teachers are thus recommended to strategically employ promotion or prevention-oriented tasks depending on the needs and preferences of their students (Eom & Papi, 2022b; Papi, 2018). Based on this theoretical

understanding, workshops or programs can help teachers better understand the mechanisms underlying different regulatory orientations and how those might influence task-related emotions, strategies, and performance (Cho, 2021; Papi, 2018; Papi et al., 2023).

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## Supplemental material

Supplemental material for this article is available online.

## Note

1. The analyses using standardized scores for these scales yielded the same results.

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