

Effects of motivational interventions on EFL learners' willingness to communicate, self-confidence, and anxiety: An experimental study

Xuejun Ye

Chengdu University of Technology, China; The Hong Kong Polytechnic University, Hong Kong

Guangwei Hu*

The Hong Kong Polytechnic University, Hong Kong

Abstract

Adopting a quasi-experimental design, this study investigated the effects of motivational interventions on L2 willingness to communicate (WTC), self-confidence, and anxiety over a period of 27 weeks. A total of 391 Chinese junior secondary students were assigned to four instructional conditions: Instruction incorporating no motivational strategies (control condition), instruction supported by experience-related motivational strategies (Intervention 1), instruction utilizing vision-related motivational strategies (Intervention 2), and instruction drawing on experience-related and vision-related motivational strategies (Intervention 3). The effects of the interventions were assessed through measures administered at three timepoints to track changes in participants' WTC, self-confidence, and anxiety. A combination of two-way mixed design ANOVAs and post-hoc pairwise comparisons revealed that all three motivational interventions had significantly positive effects on the outcome measures immediately after the interventions. Furthermore, while all three interventions demonstrated sustained effects on L2 self-confidence and anxiety, only the vision and integrated treatments had a lasting impact on L2 WTC. Of the three interventions, integrated motivational strategies produced the strongest effect on L2 WTC, followed by vision-related and experience-related motivational strategies. The vision-related and integrated interventions were equally effective and outperformed the experience-related intervention in their effects on L2 self-confidence. All interventions had comparable effects on L2 anxiety.

Keywords: L2 willingness to communicate, L2 self-confidence, L2 anxiety, L2 motivational strategies, visualization

1. Introduction

Willingness to communicate (WTC) has been identified as a primary predictor of effective second language (L2) use and, therefore, a key enabler of L2 learners' communicative competence (MacIntyre et al., 1998; Mystkowska-Wiertelak & Pawlak, 2017; Yashima, 2002, 2009). Research on L2 WTC has gained momentum, particularly in East Asia, where students tend to be passive and reticent in language classrooms (Shao & Gao, 2016). In English-as-a-foreign-language (EFL) environments, where classrooms are the primary venues for L2 interaction, silence is commonly perceived as an obstacle to developing communicative competence (Al-Murtadha, 2019). Chinese EFL learners were consistently found to be reticent in previous studies (e.g., Jackson, 2002; Liu & Jackson, 2009, 2014). This unwillingness to communicate has been attributed to both internal and external factors, such as inadequate English proficiency, lack of confidence, L2 speaking anxiety, concerns about teacher and peer judgement, limited opportunities for L2 use, teaching strategies, and the prioritization of written exams (e.g., Jackson, 2002; Liu & Jackson, 2009, 2014; Peng, 2012, 2014, 2020). Thus, many Chinese EFL learners struggle to develop functional competence in spoken English, namely the ability to “sustain a conversation beyond initial greetings” (Wei & Su, 2012, p. 12). This deficiency in spoken English diminishes enjoyment, lowers confidence, and increases anxiety, leading to reluctance to speak English (Kiaer et al., 2021). Such outcomes create a vicious cycle, given the well-documented links between L2 WTC and L2 anxiety (e.g., Dewaele, 2019; Liu & Jackson, 2008), L2 WTC and L2 self-confidence (e.g., Cao & Philp, 2006; Ghonsooly et al., 2012; Khajavy et al., 2016; Peng & Woodrow, 2010; Yashima et al., 2018), and L2 anxiety and L2 self-confidence (e.g., Ghonsooly et al., 2012; Hashimoto, 2002). Therefore, it is imperative to find effective strategies that can positively influence these factors to enhance L2 output and break the vicious cycle.

Extant research has indicated that learners with higher levels of motivation typically demonstrate greater L2 WTC (Wu & Lin, 2014). To understand language learning motivation, Dörnyei (2009) proposed the L2 Motivational Self System (L2MSS) theory. The tripartite model consists of the ideal L2 self, the ought-to L2 self, and the L2 learning experience. The growing interest in the L2MSS stems largely from the motivational power of future self-guides (i.e., the ideal and ought-to L2 selves) that work through vision (Dörnyei, 2009), namely learners' vivid mental simulations of the experiential reality of goal attainment (Dörnyei & Chan, 2013), for example, imagining oneself articulating ideas fluently and handling questions competently during

an important presentation. The ideal L2 self represents a visualized future self as a proficient L2 learner or user, activated when one recognizes the gap between one's actual and desired language abilities. Previous research has identified the ideal L2 self as a significant predictor of L2 WTC (e.g., Lee & Lee, 2020a; Zhang et al., 2024). The ought-to L2 self comprises traits that individuals believe they should develop to meet external expectations and avoid potential negative consequences. Studies in Asian contexts, such as South Korea and China, have demonstrated that the ought-to L2 self significantly predicts L2 WTC (Lee & Lee, 2020a; Wei & Xu, 2022). The L2 learning experience encompasses situational motivational factors within the immediate educational context, such as classroom dynamics, peer interactions, instructor influence, and instructional materials. Research indicates that the L2 learning experience directly and positively predicts L2 WTC (Sadoughi & Hejazi, 2024).

To effectively motivate L2 learners, Dörnyei (2014a) recommends implementing two main groups of motivational strategies: vision-related motivational strategies (Dörnyei & Kubanyiova, 2014) that develop learners' vision of their ideal and ought-to L2 selves (e.g., helping students identify step-by-step small goals that contribute to their future ideal L2 self-images) and experience-related motivational strategies (Dörnyei, 2001) that enrich students' L2 learning experience (e.g., teaching students various learning techniques that will make their learning easier and more effective). Dörnyei (2014b) further emphasizes the critical role of the L2 learning experience in bridging the gap between visualized and actual experiences. This suggests that L2 learning motivation can be optimally nurtured if a combination of the two groups of motivational strategies is practiced. Inspired by Dörnyei's recommendations and motivated by the established links between L2 WTC and the three components of the L2MSS, this experimental study aims to investigate whether motivational strategies that help learners refine their future self-guides and L2 learning experience foster positive changes in their L2 WTC, L2 self-confidence, and L2 anxiety.

2. Literature Review

2.1. L2 Willingness to communicate

L2 WTC was introduced by MacIntyre, Clément, Dörnyei, and Noels (1998) in their seminal paper and defined as “a readiness to enter into discourse at a particular time with a specific person or persons, using a L2” (p. 547). To identify variables that influence L2 WTC, they proposed a heuristic pyramid-shaped model that encompasses linguistic, communicative, and social

psychological variables influencing L2 WTC and L2 use. The model consists of six levels, with the top three levels representing situational influences (e.g., desire to communicate with a particular person, state communication confidence) and the bottom three levels capturing enduring influences (e.g., learner personality, communicative competence). Building on this framework, MacIntyre et al. (1999) empirically established trait and state WTC as complementary constructs. Based on her empirical findings, Cao (2014) proposed that it would be more accurate to view WTC as a dynamic situational variable that can be shaped by personal attributes, classroom environment, and language-related factors. This perspective makes L2 WTC particularly relevant for pedagogical interventions. In our study, we conceptualize L2 WTC as having both trait and state dimensions. However, we are more interested in exploring whether targeted situational influences (i.e., motivational interventions) can have an impact on students' enduring communicative tendencies over time, namely L2 WTC as a trait variable. Thus, we have adapted Yashima's (2009) scale to measure the trait dimension of L2 WTC and assess the effect of our interventions on this relatively stable characteristic.

Extensive research has examined the effects of various antecedents (e.g., self-confidence, perceived competence, and anxiety) on L2 WTC. Generally, previous research has revealed that L2 WTC is shaped by a diverse array of individual and situational factors (e.g., L2 proficiency, L2 anxiety, teacher support, and classroom dynamics). Apart from the internal factors discussed earlier (i.e., L2 anxiety, L2 self-confidence, ideal L2 self, ought-to L2 self, and L2 learning experience), extant research has shown that L2 WTC is also influenced by factors such as international posture (e.g., Ghonsooly et al., 2012; Khajavy et al., 2016; Yashima, 2002), motivation (Ghonsooly et al., 2012; Hashimoto, 2002; Yashima, 2002), enjoyment (Dewaele, 2019; Khajavy et al., 2018), mindset (Wang et al., 2021), and boredom (Zhang et al., 2024).

There has also been a rising scholarly interest in external influences on L2 WTC. For example, research has demonstrated a direct and positive association between teacher support and L2 WTC (Hejazi et al., 2023; Wei & Xu, 2022). Conceptualizing teacher support as a crucial element of the classroom dynamics, studies have shown that L2 WTC is directly, positively, and strongly predicted by the overall classroom environment (Khajavy et al., 2016; Khajavy et al., 2018; Peng & Woodrow, 2010). In addition, the literature suggests that L2 WTC is shaped by the interplay of various contextual influences and learner-internal factors. For instance, research has established an indirect link between classroom climate and L2 WTC through the mediating roles

of learner emotions (Hejazi et al., 2023; Wang et al., 2021) and basic psychological needs (Joe et al., 2017). In a similar vein, qualitative inquiries have explored how classroom environmental factors interact with individual and linguistic factors to mediate learners' L2 WTC (Cao, 2011; Peng, 2012). These studies have underscored the importance of creating a positive classroom climate to exert either direct or indirect positive influences on L2 WTC.

2.2. L2 self-confidence

The notion of linguistic self-confidence was initially coined by Clément, Gardner, and Smythe (1977), who highlighted its role as a key determinant of learners' motivation, WTC, and identification with the L2 community. L2 self-confidence was later identified as a potential influence on WTC in MacIntyre et al.'s (1998) pyramid model, defined as an "overall belief in being able to communicate in the L2 in an adaptive and efficient manner" (p. 551). It consists of learners' cognitive evaluation of their L2 abilities and affective experience of L2 anxiety provoked during L2 interactions. According to the model, learners with higher perceptions of their L2 proficiency and lower levels of anxiety are more likely to engage in communication with others. The role of L2 self-confidence as an important antecedent of L2 WTC has been validated by empirical studies (Cao & Philp, 2006; Ghonsooly et al., 2012; Hashimoto, 2002; Yashima, 2002). For example, research has identified L2 self-confidence as a predictor of L2 WTC in Japanese (Hashimoto, 2002; Yashima, 2002) and Iranian contexts (Ghonsooly et al., 2012). Apart from the correlational link between L2 self-confidence and L2 WTC, interviews conducted by Cao and Philp (2006) with eight international learners enrolled in an intensive university language course also revealed L2 self-confidence as an influence on L2 WTC. Additionally, previous research found that L2 self-confidence in communication could be directly affected by the classroom environment (Khajavy et al., 2016; Peng & Woodrow, 2010). This suggests that a supportive classroom atmosphere can foster greater L2 self-confidence by enhancing L2 learners' perceived competence and reducing their anxiety.

2.3. L2 anxiety

L2 anxiety, also known as foreign language classroom anxiety, was coined by Horwitz et al. (1986) to capture the negative emotional reaction experienced during L2 learning or use. According to them, L2 anxiety encompasses "a distinct complex of self-perceptions, beliefs, feelings, and

behaviors related to classroom learning arising from the uniqueness of the language learning process” (p. 128). More recently, Horwitz (2017) has characterized a learner experiencing L2 anxiety as “having the trait of feeling state anxiety when participating in (or sometimes even thinking about) language learning and/or use” (p. 33). L2 anxiety has been identified as a negative predictor of L2 achievement among Chinese junior secondary school students (Li & Li, 2023). This finding aligns with extant reviews (e.g., MacIntyre, 2017; Papi & Khajavy, 2023) and meta-analyses (Botes et al., 2020; Temouri et al., 2019), which have shown a general negative impact of L2 anxiety on language learning in various contexts. Among the macro language skills, speaking triggers the greatest anxiety in L2 learners (Horwitz et al., 1986; Gkonou, 2017). A key source of this anxiety is a perceived poor accent (Price, 1991), or what Baran-Łucarz (2014) termed Pronunciation Anxiety. Such anxiety is particularly relevant in contexts like China, where there is a strong preference for “standard” English pronunciation. L2 anxiety is typically accompanied by cognitive, physiological, and behavioral reactions (Baran-Łucarz, 2022). The physiological dimension includes physical responses such as flushing and rapid heartbeat, and behavioral responses involve avoidance of participation in speaking activities. The cognitive reactions are especially detrimental because anxious individuals often worry constantly about their performance, which impairs concentration. These cognitive, physiological, and behavioral reactions contribute to a vicious cycle (Baran-Łucarz, 2022), where learners’ anxiety-induced reluctance to communicate leads to missed opportunities to practice and reevaluate their speaking, ultimately hindering their L2 communication competence (MacIntyre et al., 1997).

Researchers have identified various linguistic, internal, and external roots of L2 anxiety (see review by Papi & Khajavy, 2023). For instance, studies have found associations between L2 anxiety and factors such as L1 skills and L2 aptitude (Sparks & Patton, 2014), perfectionism (Dewaele, 2017), intended effort (Pan & Zhang, 2023), mindset (Ozdemir & Papi, 2021), the ideal L2 self (Papi & Khajavy, 2021; Peng, 2014), the ought-to L2 self (Pan & Zhang, 2023; Papi & Khajavy, 2021; Peng, 2014), enjoyment (Dewaele & MacIntyre, 2014), L2 achievement (Teimouri et al., 2019), L2 learning experience (Papi, 2010), teacher support (Hejazi et al., 2023), and classroom environment (Khajavy et al., 2018). Research suggests that L2 anxiety can be reduced by acknowledging its existence (Gkonou, 2017), abandoning unrealistic expectations such as acquiring native-like pronunciation (Baran-Łucarz, 2022), focusing on nurturing positive emotions

(MacIntyre & Vincze, 2017), and creating a supportive classroom climate (Baran-Łucarz, 2022; Horwitz, 2017).

2.4. Previous interventions on the three constructs

Several studies (e.g., Alrabai, 2022; Mesgarshahr & Abdollahzadeh, 2014; Munezane, 2015) have explored the effects of interventions on L2 WTC, self-confidence, and anxiety. Some studies (Al-Murtadha, 2019, 2020; Magid & Chan, 2012; Mesgarshahr & Abdollahzadeh, 2014; Munezane, 2015) focused on a single construct, whereas others (Alrabai, 2015, 2022; Mackay, 2014) examined two of these constructs. In an Iranian study, Mesgarshahr and Abdollahzadeh (2014) found that students in the experimental group, who received training in communication strategies, reported significantly higher levels of WTC compared to those in the control group. In Spain, Mackay (2014) observed a statistically significant increase in L2 WTC among university students who participated in a vision-building intervention, although this did not significantly affect their L2 anxiety. In Japan, Munezane (2015) designed an experiment with three groups: a control group taking regular lessons, an experimental group receiving visualization training, and another experimental group engaging in both visualization training and goal-setting activities. The findings indicated that the visualization-only group did not differ in L2 WTC from the control group, but the visualization plus goal-setting group showed significantly greater gains in L2 WTC than the other two groups. Similarly, Al-Murtadha (2019) conducted an intervention study with Yemeni high school students, in which the experimental group engaged in six-week visualization and goal-setting activities, while the control group received regular instruction. The results demonstrated a significant increase in L2 WTC for the experimental group by the end of the intervention.

Regarding L2 self-confidence, Magid and Chan (2012) found that Chinese university students studying in England and Hong Kong experienced enhanced linguistic self-confidence through programs involving visualization and goal-setting activities. Al-Murtadha (2020) also documented significant improvements in L2 self-confidence among Yemeni high school students who worked on visualization tasks. As for L2 anxiety, Alrabai (2015) conducted an experiment with Saudi Arabian high school and university students using anxiety-reducing strategies. The study found a significant decrease in L2 anxiety and an increase in self-confidence among students in the experimental group as a result of these strategies. In a more recent study of Saudi Arabian university students, Alrabai (2022) involved three treatment groups: one receiving anxiety-

controlling strategies, another using motivation-enhancement strategies, and a third group exposed to a combination of both approaches. The results revealed a significant decrease in L2 anxiety and a significant increase in self-confidence across all three experimental groups compared to the control group. Notably, the mixed-strategy group achieved the most desirable outcomes, outperforming the groups exposed to either strategy alone.

The results of these intervention studies provide robust empirical evidence of the relationship established in the extant literature between classroom environment, teacher support, and the three target variables – L2 WTC, self-confidence, and anxiety (e.g., Hejazi et al., 2023; Khajavy et al., 2016; Peng & Woodrow, 2010; Wei & Xu, 2022). This affirms the importance of providing teacher support and a positive classroom climate in interventions designed for similar purposes. Nevertheless, three major gaps remain unaddressed. First, previous interventions either employed vision-related (Al-Murtadha, 2019, 2020; Mackay, 2014; Magid & Chan, 2012; Munezane, 2015) or experience-related (Alrabai, 2015, 2022; Mesgarshahr & Abdollahzade, 2014) strategies/activities in their experimental designs. There is limited understanding of whether a combination of vision- and experience-related motivational strategies can lead to greater effects on the three target variables. Second, previous studies lacked a delayed post-intervention assessment, thereby failing to ascertain the sustainability of the effects of motivational interventions on L2 WTC, self-confidence, and anxiety over an extended period. Third, despite China being home to the largest number of English learners worldwide (Wei & Su, 2012), existing interventions were conducted in settings outside of China. In the Chinese Mainland, reticence is notably prevalent in English classrooms (Liu & Jackson, 2009), and this unwillingness to communicate is often linked to anxiety and self-confidence (Liu & Jackson, 2008). Consequently, the quest for effective instructional strategies to enhance WTC in English classes is both contextually relevant and urgent.

To bridge the gaps identified above, this study aimed to investigate the effects of different types of motivational intervention (i.e., experience-related, vision-related, and integrated motivational strategies) on Chinese junior secondary EFL students' L2 WTC, self-confidence, and anxiety, as well as the sustainability of these effects, if any, over time. The following three research questions guided this study:

- 1) Do motivational interventions (experience-related, vision-related, integrated motivational strategies) lead to positive effects on Chinese junior secondary EFL students' L2 WTC? To what extent do they differ in their effects?
- 2) Do motivational interventions lead to positive effects on participants' L2 self-confidence? To what extent do they differ in their effects?
- 3) Do motivational interventions lead to positive effects on participants' L2 anxiety? To what extent do they differ in their effects?

3. Research design

This study employed a pre-post-delayed quasi-experimental design that involved a control group and three experimental groups receiving instruction supported, respectively, by experience-related motivational strategies, vision-related motivational strategies, and a combination of experience- and vision-related motivational strategies. The interventions lasted 10 weeks, with measurements taken at three points: pre-test (before the interventions), post-test (immediately after the 10-week interventions), and delayed post-test (17 weeks after the post-test). All motivational interventions were discontinued between the post-test and delayed post-test to assess whether any observed effects could be sustained without ongoing motivational support. This longitudinal design allowed for the evaluation of both the respective and relative effectiveness of various motivational treatments, while also examining their sustainability over time after the withdrawal of instructional support.

3.1. Participants and sampling procedures

The participants were EFL students and teachers from a junior secondary school in Southwest China. The study involved 391 Grade-8 students (male = 204; female = 187) from eight intact classes. These students shared similar demographic characteristics, including age, educational, and social background. Matching procedures were applied to ensure baseline comparability between the treatment groups. First, we identified four pairs of classes with minimal differences in average English scores from the available Grade-8 classes. A one-way ANOVA confirmed no significant differences in English proficiency among the paired classes, $F(3, 387) = 0.449, p = .718$. The four pairs of classes were then arbitrarily assigned to four conditions: control ($n = 95$), experience-related motivational strategies ($n = 97$), vision-related motivational strategies ($n = 101$), and

integrated motivational strategies ($n = 98$). As part of our pre-post-delayed quasi-experimental design, we also verified baseline equivalence for the three key outcome variables. Mixed-design ANOVAs with post-hoc pairwise comparisons found no significant differences between any two groups in L2 WTC, L2 self-confidence, and L2 anxiety before the interventions (see Tables 2, 4, and 6 in Section 4 for detailed statistical results). The 10-week treatments were administered in the existing intact classes rather than the predefined treatment groups to preserve the natural classroom environment and minimize disruptions to students' learning routines.

To prevent researcher bias that might inadvertently favor the experimental groups, we had the participants' own teachers deliver all the interventions. Two female oral English teachers, both holding a Bachelor's degree, were recruited for the delivery of the interventions (see Appendix 1). One teacher possessed five years of EFL teaching experience, whereas the other had 16 years. To reduce variability caused by teacher differences, we developed standardized teaching materials and provided both teachers with pre-intervention training on the use and delivery of the materials. We also conducted weekly meetings throughout the intervention period to discuss challenges and offer guidance to maintain accuracy and consistency in implementing the planned motivational activities across the groups. In addition, the teachers were explicitly instructed to maintain distinct approaches for each condition and avoid mixing techniques between the experimental groups to ensure fidelity to the experimental conditions.

3.2. Instruments

A three-part questionnaire was deployed to measure participants' L2 WTC, self-confidence, and anxiety (see Appendix 2). These constructs were measured using a 6-point Likert scale. The first section comprised eight items adapted from Yashima (2009), gauging participants' willingness to engage in speaking activities both in and after class (1 = very unwilling, 6 = very willing). The second section included two scales: a five-item L2 self-confidence scale based on Ryan (2009), measuring both overall confidence in English learning and confidence specific to speaking, and a seven-item L2 anxiety scale adapted from Papi (2010) and Ryan (2009), assessing degrees of nervousness when speaking English (1 = strongly disagree, 6 = strongly agree). The third section collected demographic information such as name and class. The questionnaire was translated into Chinese and reviewed by two doctoral students in applied linguistics to ensure accuracy. A pilot

study involving 193 junior secondary students indicated acceptable internal consistency for all scales ($\alpha = .901$ for L2 WTC, $\alpha = .729$ for L2 self-confidence, $\alpha = .867$ for L2 anxiety).

3.3. Experiment

The motivational interventions were implemented in the participants' oral English classes during the fall semester of the 2021-2022 academic year. Within the school's curriculum structure, students had seven weekly 40-minute core English classes devoted to required curricular content and exam preparation, and two 40-minute oral English classes focused on phonetics, English songs, story role-plays, and drama activities. While these regular oral English classes contained elements that could potentially influence affective experiences, they were primarily content-oriented, paying little or only incidental attention to the psychological aspects of language learning. Our interventions, by contrast, were designed to target L2 WTC enhancement, anxiety reduction, and confidence-building deliberately through structured and research-based motivational strategies. Thus, although role-play and drama activities in the oral English classes could contribute to a positive learning climate, our interventions strengthened such a climate in a more systematic and more focused manner. Furthermore, the oral English classes were supplementary to the main curriculum and not subject to high-stakes assessment, making them an ideal context for our interventions without compromising the school's mandatory curriculum coverage.

During the interventions, the control group engaged exclusively in the usual oral English activities, whereas the treatment groups received specific motivational interventions that incorporated explicit awareness-raising about language learning beliefs, goal-setting, strategy use, and self-reflection – elements absent from the regular curriculum. Since previous research indicated that student perceptions of motivational strategy use are related to student motivation (Bernaus & Gardner, 2008), we explored student perspectives before designing our treatments. Specifically, the motivational strategies selected for the experience-related, vision-based, and integrated motivational treatments were informed by a pre-intervention survey gauging the preferences of 517 junior secondary students for both experience-related (Dörnyei, 2001) and vision-related motivational strategies (Ye & Hu, 2024). We only incorporated motivational strategies that achieved mean scores between 4.67 and 5.35 on a 6-point scale for our interventions. We then developed the chosen motivational strategies into motivational treatments by considering the specific pedagogical context and drawing on the concepts, techniques, and activities outlined

in Dörnyei (2001) and Hadfield and Dörnyei (2013). During one of the two 40-minute sessions per week, the three experimental groups engaged in their targeted motivational teaching activities (see Appendices 3, 4, and 5 for detail).

In the second weekly oral English session, the experience-related motivational strategy group participated in routine speaking activities resembling those used by the control group. Conversely, the vision and the integrated groups partook in oral English activities designed to reflect authentic English use and provide glimpses of desired L2 future states (Dörnyei & Kubanyiova, 2014). Over the 10-week treatment, five oral English activities were tailor-made for the participants by adapting activities and ideas from Hadfield and Dörnyei (2013) and Dörnyei and Kubanyiova (2014). In preparation for each oral activity, students were acquainted with essential vocabulary, language structures, and rules in the initial week, which was crucial for oral expression in the following week. The five oral activities included a shopping simulation, a guacamole preparation demonstration, discussions on constellations, an introduction to the Dragon Boat Festival, and an interview as a successful EFL learner (see Appendix 6).

3.3.1. Experience-related motivational strategy treatment

In Week 1, the focus was on raising students' awareness of the importance of co-creating a supportive learning atmosphere that encourages risk-taking and tolerates mistakes and accented pronunciation. Week 2 aimed to help students develop realistic beliefs about language learning and abandon any misconceptions or unrealistic expectations. During Week 3, students were reminded of the instrumental values of English for their academic studies, personal lives, and future careers. Week 4 introduced the importance of setting specific goals and completion timelines for English learning, with students required to submit goal-setting logbooks to the teacher for follow-up actions. To reinforce the importance of English, Week 5 and Week 6 featured talks from three English teachers and three industry professionals who shared how mastering English positively impacted their lives. Week 7 was devoted to discussing good learner strategies to enable effective English learning. In Week 8, students learned about common communication strategies, such as avoidance (reduction), achievement (compensatory), and time-gaining strategies. Week 9 focused on maintaining students' commitment to English learning by introducing self-motivating strategies. In the final week, students were encouraged to attribute exam success/failure to effort rather than ability.

3.3.2. Vision-related motivational strategy treatment

In the first week, students were encouraged to visualize their ideal L2 self-images with respect to both speaking and writing. Week 2 activities were designed to develop students' feared L2 self-images by discussing the consequences of failing to achieve their ideal L2 self-images. In Week 3, the teacher helped students construct reasonable ought-to L2 self-images by aligning them with the expectations of significant others. Week 4 was intended to help students identify self-barriers that could hinder the realization of their ideal L2 self-images and collaborate on strategies to overcome the obstacles. In Week 5, students learned about the importance of "vision" in English learning. Week 6 aimed to raise awareness of the need to put vision into practice by setting class and personal goals. In Week 7, the teacher provided individual guidance on the plausibility of students' weekly action plans, requiring them to report their progress and submit action plans for the remaining weeks. Week 8 and Week 9 introduced a variety of strategies to help students implement their plans more productively. Week 10 provided exposure to English learning role models through a sharing session to keep their vision alive.

3.3.3. Integrated motivational strategy treatment

The integrated motivational strategy treatment consisted of five weeks of experience-related motivational strategies and five weeks of vision-related motivational strategies. The first two weeks focused on creating a supportive learning atmosphere and developing realistic learner beliefs while identifying misconceptions. From Week 3 to Week 6, efforts were made to establish students' ideal, ought-to, and feared L2 self-images. Weeks 7 and 8 encouraged students to put their vision into practice by setting class and personal goals and making action plans, with one-on-one guidance provided to support and monitor their progress. The last two weeks introduced students to effective learning and communication strategies.

3.4. Data collection and analysis

Before data collection, formal permission was obtained from the school's English panel head, followed by informed consent from all participants. The questionnaire data were collected from the student participants during class time at three points: pre-intervention (T1), immediately post-intervention (T2), and 17 weeks after T2 (T3).

Statistical analyses were run using SPSS 24.0. Two-way mixed design ANOVAs were performed to determine the impact of the motivational interventions on three dependent variables: L2 WTC, self-confidence, and anxiety. The between-subjects independent variable, the treatment, included four levels: control, experience-related, vision-related, and integrated. The within-group independent variable was time (i.e., T1, T2, and T3). A series of post-hoc pairwise comparisons by the Bonferroni procedure was conducted to compare T1 and T2, T1 and T3, and T2 and T3 for each treatment condition to evaluate the respective effectiveness of the interventions. Additional post-hoc pairwise comparisons were performed between each pair of treatment conditions at each measurement time to ascertain the relative effectiveness of the three motivational interventions. The alpha level was set at .05 (two-tailed) for all statistical analyses, with effect sizes calculated using Cohen's *d* for pairwise comparisons.

4. Results

4.1. Effects on L2 willingness to communicate

Since Mauchly's test indicated that the assumption of sphericity was violated, $\chi^2(2) = 19.24$, $p < .001$, the Huynh-Feldt correction was applied ($\epsilon = 0.97$). There was a significant main effect for time, $F(1.93, 747.43) = 9.95$, $p < .001$, $\eta^2_p = .025$. A significant main effect for treatment was identified as well, $F(3, 387) = 11.21$, $p < .001$, $\eta^2_p = .080$, suggesting that the four treatment conditions had different effects on participants' L2 WTC. There was also a significant interaction effect between treatment and time, $F(5.79, 747.43) = 9.73$, $p < .001$, $\eta^2_p = .070$, indicating that the differences in L2 WTC among the treatments did not remain consistent across the three times of measurement.

4.1.1. Respective effectiveness of the motivational treatments

Pairwise comparisons by the Bonferroni procedure revealed significant differences in L2 WTC scores between T1 and T2 and between T1 and T3 for the control group, with small effect sizes ($ds = 0.319, 0.399$). No significant difference was detected between T2 and T3 (see Table 1). These results indicated that students' L2 WTC decreased over time without motivational support. In contrast, all experimental groups witnessed a significant rise in L2 WTC from T1 to T2, with small effect sizes ($ds = 0.259, 0.470, 0.439$), followed by a slight drop at T3 (see Figure 1). Although the differences between T2 and T3 were not significant for any experimental group, significant

differences were found between T1 and T3 for the vision-related and integrated motivational strategy groups, with small effect sizes ($d_s = 0.384, 0.374$). Overall, these results suggested that all three motivational treatments significantly enhanced students' L2 WTC over the 10-week treatment. However, only the vision and the integrated interventions maintained their effects during the non-treatment period.

Table 1. Results of within-group pairwise comparisons on the scale of L2 WTC

| Treatment | Time | Time | $M (SD)$ | $M (SD)$ | p | d |
|------------------------|------|------|-------------|-------------|--------|-------|
| Control | T1 | T2 | 4.03 (1.02) | 3.72 (0.92) | .002 | 0.319 |
| | T1 | T3 | 4.03 (1.02) | 3.59 (1.19) | < .001 | 0.399 |
| | T2 | T3 | 3.72 (0.92) | 3.59 (1.19) | .517 | 0.122 |
| Experience-related MSs | T1 | T2 | 4.17 (1.20) | 4.45 (0.90) | .007 | 0.259 |
| | T1 | T3 | 4.17 (1.20) | 4.34 (1.08) | .369 | 0.147 |
| | T2 | T3 | 4.45 (0.90) | 4.34 (1.08) | .784 | 0.111 |
| Vision-related MSs | T1 | T2 | 4.17 (0.95) | 4.61 (0.91) | < .001 | 0.470 |
| | T1 | T3 | 4.17 (0.95) | 4.52 (0.87) | .003 | 0.384 |
| | T2 | T3 | 4.61 (0.91) | 4.52 (0.87) | 1.000 | 0.101 |
| Integrated MSs | T1 | T2 | 4.04 (1.11) | 4.51 (1.02) | < .001 | 0.439 |
| | T1 | T3 | 4.04 (1.11) | 4.45 (1.11) | < .001 | 0.374 |
| | T2 | T3 | 4.51 (1.02) | 4.45 (1.11) | 1.000 | 0.056 |

Note. The Bonferroni procedure was applied to the post-hoc pairwise comparisons.

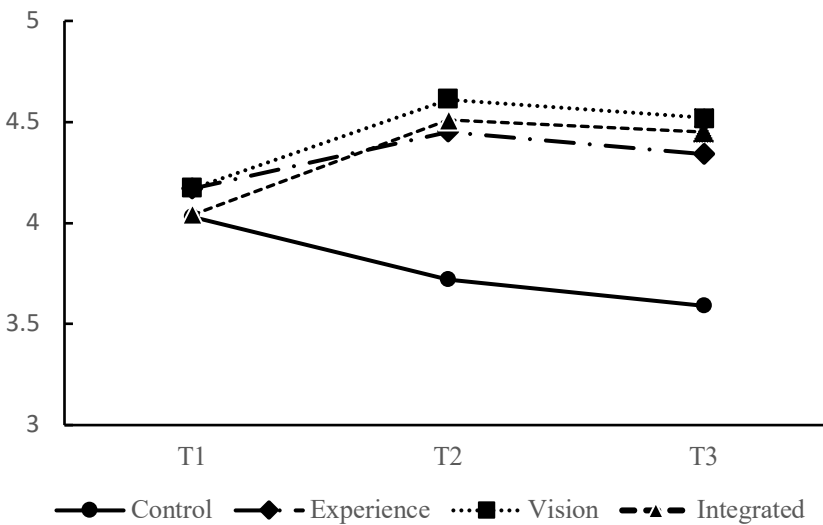


Figure 1. Within-group pairwise comparisons on the scale of L2 WTC

4.1.2. Relative effectiveness of the motivational treatments

To determine the relative effectiveness (i.e., efficiency) of the interventions, pairwise comparisons were performed among the four treatment conditions at each measurement point. As Table 2 shows,

no significant between-groups differences were found at T1 ($ps = 1.000$). However, the control group differed significantly from each of the three experimental groups at T2, with large effect sizes ($ds = 0.794, 0.968, 0.801$). No significant differences were found among the experimental groups at T2. Figure 1 shows that the lines linking the T1 and T2 mean scores for the vision and the integrated groups were parallel. These results indicated that the effects of the vision-related and integrated motivational treatments were practically similar and more efficient in enhancing participants' L2 WTC than the experience-related motivational treatment.

Table 2. Results of between-group pairwise comparisons on the scale of L2 WTC

| Time | Treatment | Treatment | <i>M (SD)</i> | <i>M (SD)</i> | <i>p</i> | <i>d</i> |
|------|-------------|-------------|---------------|---------------|----------|----------|
| T1 | Control | Traditional | 4.03 (1.02) | 4.17 (1.20) | 1.000 | 0.125 |
| | Control | Vision | 4.03 (1.02) | 4.17 (0.95) | 1.000 | 0.142 |
| | Control | Combined | 4.03 (1.02) | 4.04 (1.11) | 1.000 | 0.001 |
| | Traditional | Vision | 4.17 (1.20) | 4.17 (0.95) | 1.000 | 0.000 |
| | Traditional | Combined | 4.17 (1.20) | 4.04 (1.11) | 1.000 | 0.112 |
| | Vision | Combined | 4.17 (0.95) | 4.04 (1.11) | 1.000 | 0.126 |
| T2 | Control | Traditional | 3.72 (0.92) | 4.45 (0.90) | < .001 | 0.794 |
| | Control | Vision | 3.72 (0.92) | 4.61 (0.91) | < .001 | 0.968 |
| | Control | Combined | 3.72 (0.92) | 4.51 (1.02) | < .001 | 0.801 |
| | Traditional | Vision | 4.45 (0.90) | 4.61 (0.91) | 1.000 | 0.177 |
| | Traditional | Combined | 4.45 (0.90) | 4.51 (1.02) | 1.000 | 0.062 |
| | Vision | Combined | 4.61 (0.91) | 4.51 (1.02) | 1.000 | 0.103 |
| T3 | Control | Traditional | 3.59 (1.19) | 4.34 (1.08) | < .001 | 0.661 |
| | Control | Vision | 3.59 (1.19) | 4.52 (0.87) | < .001 | 0.892 |
| | Control | Combined | 3.59 (1.19) | 4.45 (1.11) | < .001 | 0.747 |
| | Traditional | Vision | 4.34 (1.08) | 4.52 (0.87) | 1.000 | 0.184 |
| | Traditional | Combined | 4.34 (1.08) | 4.45 (1.11) | 1.000 | 0.100 |
| | Vision | Combined | 4.52 (0.87) | 4.45 (1.11) | 1.000 | 0.070 |

Note. The Bonferroni procedure was applied to the post-hoc pairwise comparisons.

Figure 1 shows a slight decline in L2 WTC mean scores for all four groups at T3. Consistent with observations at T2, the differences between the control group and the three intervention groups remained statistically significant, with medium to large effect sizes ($ds = 0.661, 0.892, 0.747$). No significant differences were detected between the experimental groups ($ps = 1.000$). Considering the differences in mean scores for the experimental groups across the three measurement points (see Figure 1) and the effect sizes associated with the pairwise comparisons, these results indicated that all three motivational treatments were able to sustain participants' L2 WTC after the interventions stopped, with the integrated group being the most efficient, followed by the vision- and experience-related treatments.

4.2. Effects on L2 self-confidence

A two-way mixed ANOVA was run on students' L2 self-confidence and yielded a significant main effect for time, $F(2, 774) = 13.33, p < .001, \eta^2_p = .033$. The main effect for treatment was also significant, $F(3, 387) = 4.41, p = .005, \eta^2_p = .033$, indicating differences in the relative effectiveness of the four treatments. A significant interaction effect between treatment and time was also observed, $F(6, 774) = 3.97, p = .001, \eta^2_p = .030$, showing that intervention effects varied across the three measurement points.

4.2.1. Respective effectiveness of the motivational treatments

As Table 3 and Figure 2 show, the control group's L2 self-confidence mean scores dropped significantly from T1 to T2 and from T1 to T3, with small and medium effect sizes ($ds = 0.461, 0.521$). No significant difference was found between T2 and T3. These results suggested that without motivational treatments, the participants' L2 self-confidence was prone to a substantial long-term drop. Conversely, the three experimental groups experienced a marginal increase in L2 self-confidence from T1 to T2, although these differences were not statistically significant. However, a decline for all three treatment groups at T3 resulted in significant differences in T2-T3 comparisons for the experience-related and integrated motivational strategy groups, with small effect sizes ($ds = 0.267, 0.261$). Despite this drop, the differences between T1 and T3 for all experimental groups were non-significant. Given the substantive and continuous decreases observed in the control group at T2 and T3, it could be concluded that the interventions effectively prevented the deterioration of learners' L2 self-confidence, with effects sustained during the 17-week non-treatment period.

Table 3. Results of within-group pairwise comparisons on the scale of L2 self-confidence

| Treatment | Time | Time | $M (SD)$ | $M (SD)$ | p | d |
|------------------------|------|------|-------------|-------------|--------|-------|
| Control | T1 | T2 | 4.07 (1.09) | 3.63 (0.75) | < .001 | 0.461 |
| | T1 | T3 | 4.07 (1.09) | 3.53 (0.97) | < .001 | 0.521 |
| | T2 | T3 | 3.63 (0.75) | 3.53 (0.97) | .891 | 0.115 |
| Experience-related MSs | T1 | T2 | 4.11 (1.00) | 4.15 (0.91) | 1.000 | 0.048 |
| | T1 | T3 | 4.11 (1.00) | 3.90 (0.96) | .111 | 0.215 |
| | T2 | T3 | 4.15 (0.91) | 3.90 (0.96) | .022 | 0.267 |
| Vision-related MSs | T1 | T2 | 4.13 (0.95) | 4.21 (0.96) | 1.000 | 0.092 |
| | T1 | T3 | 4.13 (0.95) | 4.01 (1.10) | .733 | 0.112 |
| | T2 | T3 | 4.21 (0.96) | 4.01 (1.10) | .091 | 0.194 |
| Integrated MSs | T1 | T2 | 4.04 (1.10) | 4.19 (1.03) | .380 | 0.147 |
| | T1 | T3 | 4.04 (1.10) | 3.95 (0.79) | 1.000 | 0.092 |

| | | | | | | |
|--|----|----|-------------|-------------|------|-------|
| | T2 | T3 | 4.19 (1.03) | 3.95 (0.79) | .030 | 0.261 |
|--|----|----|-------------|-------------|------|-------|

Note. The Bonferroni procedure was applied to the post-hoc pairwise comparisons.

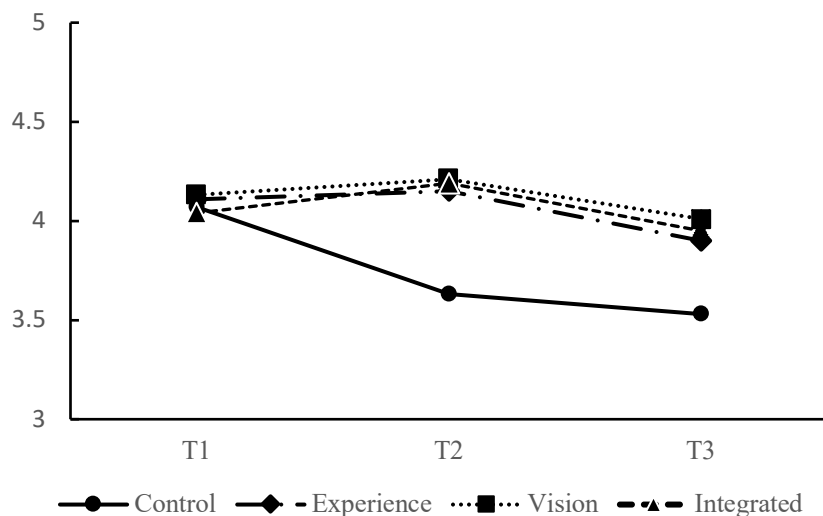


Figure 2. Within-group pairwise comparisons for the scale of L2 self-confidence

4.2.2. Relative effectiveness of the motivational treatments

Post-hoc pairwise comparisons by the Bonferroni procedure detected no significant differences between each pair of the treatment conditions at T1 (see Table 4 and Figure 2). However, the differences between the control group and each of the three experimental groups widened substantively at T2 and reached statistical significance. The effect sizes for these observed differences were all medium ($ds = 0.622, 0.676, 0.622$). The experimental groups did not differ significantly from each other ($ps = 1.000$), suggesting that the three motivational interventions were similarly effective in maintaining students' L2 self-confidence during the treatment period.

Table 4. Results of between-group pairwise comparisons on the scale of L2 self-confidence

| Time | Treatment | Treatment | $M (SD)$ | $M (SD)$ | p | d |
|------|-------------|-------------|-------------|-------------|--------|-------|
| T1 | Control | Traditional | 4.07 (1.09) | 4.11 (1.00) | 1.000 | 0.038 |
| | Control | Vision | 4.07 (1.09) | 4.13 (0.95) | 1.000 | 0.061 |
| | Control | Combined | 4.07 (1.09) | 4.04 (1.10) | 1.000 | 0.026 |
| | Traditional | Vision | 4.11 (1.00) | 4.13 (0.95) | 1.000 | 0.021 |
| | Traditional | Combined | 4.11 (1.00) | 4.04 (1.10) | 1.000 | 0.067 |
| | Vision | Combined | 4.13 (0.95) | 4.04 (1.10) | 1.000 | 0.088 |
| T2 | Control | Traditional | 3.63 (0.75) | 4.15 (0.91) | .001 | 0.622 |
| | Control | Vision | 3.63 (0.75) | 4.21 (0.96) | < .001 | 0.676 |
| | Control | Combined | 3.63 (0.75) | 4.19 (1.03) | < .001 | 0.622 |
| | Traditional | Vision | 4.15 (0.91) | 4.21 (0.96) | 1.000 | 0.064 |
| | Traditional | Combined | 4.15 (0.91) | 4.19 (1.03) | 1.000 | 0.041 |

| | | | | | | |
|----|-------------|-------------|-------------|-------------|-------|-------|
| T3 | Vision | Combined | 4.21 (0.96) | 4.19 (1.03) | 1.000 | 0.020 |
| | Control | Traditional | 3.53 (0.97) | 3.90 (0.96) | .053 | 0.381 |
| | Control | Vision | 3.53 (0.97) | 4.01 (1.10) | .003 | 0.466 |
| | Control | Combined | 3.53 (0.97) | 3.95 (0.79) | .016 | 0.476 |
| | Traditional | Vision | 3.90 (0.96) | 4.01 (1.10) | 1.000 | 0.107 |
| | Traditional | Combined | 3.90 (0.96) | 3.95 (0.79) | 1.000 | 0.057 |
| | Vision | Combined | 4.01 (1.10) | 3.95 (0.79) | 1.000 | 0.063 |

Note. The Bonferroni procedure was applied to the post-hoc pairwise comparisons.

The pairwise comparisons found no significant differences among the experimental groups ($ps = 1.000$) at T3. Figure 2 shows narrower differences between the control group and each experimental group at T3 than at T2. Only the control group differed significantly from the vision and integrated groups, with small effect sizes ($ds = 0.466, 0.476$). These results indicated that the vision and integrated treatments were equally effective and surpassed the experience-related motivational treatment in sustaining the interventional effects on L2 self-confidence.

4.3. Effects on L2 anxiety

As Mauchly's test indicated that the assumption of sphericity was violated, $\chi^2(2) = 6.11, p = .047$, degrees of freedom were corrected using the Huynh-Feldt estimate of sphericity ($\epsilon = 0.997$). Results showed a significant main effect for time, $F(1.99, 771.84) = 13.11, p < .001, \eta^2_p = .033$. There was also a significant main effect for treatment, $F(3, 387) = 4.40, p < .001, \eta^2_p = .033$, suggesting that the four treatments differed in their efficiency. A significant interaction effect was also identified between treatment and time, $F(5.98, 771.84) = 8.72, p < .001, \eta^2_p = .063$, indicating that the intervention effects were not consistent across the three measurement points.

4.3.1. Respective effectiveness of the motivational treatments

Post-hoc pairwise comparisons using the Bonferroni procedure located significant increases in L2 anxiety from T1 to T2 and from T1 to T3 for the control group, with small effect sizes ($ds = 0.249, 0.376$). No significant difference was found between T2 and T3. These observations indicated that without motivational treatments, the students were likely to undergo heightened L2 anxiety over time. By contrast, the experimental groups experienced a striking drop from T1 to T2 and from T1 to T3, with small effect sizes for these significant differences (see Table 5). As Figure 3 indicates, although the mean scores for these experimental groups rose slightly at T3, no significant difference was found between T2 and T3 for these groups. Together with the significant and

continuous increases in L2 anxiety detected in the control group, it can be concluded that all three motivational treatments were successful in reducing participants' L2 anxiety. These effects were sustained 17 weeks after the treatments ended.

Table 5. Results of within-group pairwise comparisons on the scale of L2 anxiety

| Treatment | Time | Time | <i>M (SD)</i> | <i>M (SD)</i> | <i>p</i> | <i>d</i> |
|------------------------|------|------|---------------|---------------|----------|----------|
| Control | T1 | T2 | 3.33 (1.20) | 3.62 (1.06) | .029 | 0.249 |
| | T1 | T3 | 3.33 (1.20) | 3.75 (1.00) | .001 | 0.376 |
| | T2 | T3 | 3.62 (1.06) | 3.75 (1.00) | .532 | 0.126 |
| Experience-related MSs | T1 | T2 | 3.61 (1.05) | 3.13 (1.12) | < .001 | 0.445 |
| | T1 | T3 | 3.61 (1.05) | 3.25 (0.87) | .004 | 0.368 |
| | T2 | T3 | 3.13 (1.12) | 3.25 (0.87) | .591 | 0.120 |
| Vision-related MSs | T1 | T2 | 3.31 (1.20) | 2.93 (1.20) | .001 | 0.323 |
| | T1 | T3 | 3.31 (1.20) | 3.00 (1.12) | .011 | 0.270 |
| | T2 | T3 | 2.93 (1.20) | 3.00 (1.12) | 1.000 | 0.060 |
| Integrated MSs | T1 | T2 | 3.63 (1.15) | 3.16 (1.18) | < .001 | 0.401 |
| | T1 | T3 | 3.63 (1.15) | 3.20 (1.14) | < .001 | 0.377 |
| | T2 | T3 | 3.16 (1.18) | 3.20 (1.14) | 1.000 | 0.034 |

Note. The Bonferroni procedure was applied to the post-hoc pairwise comparisons.

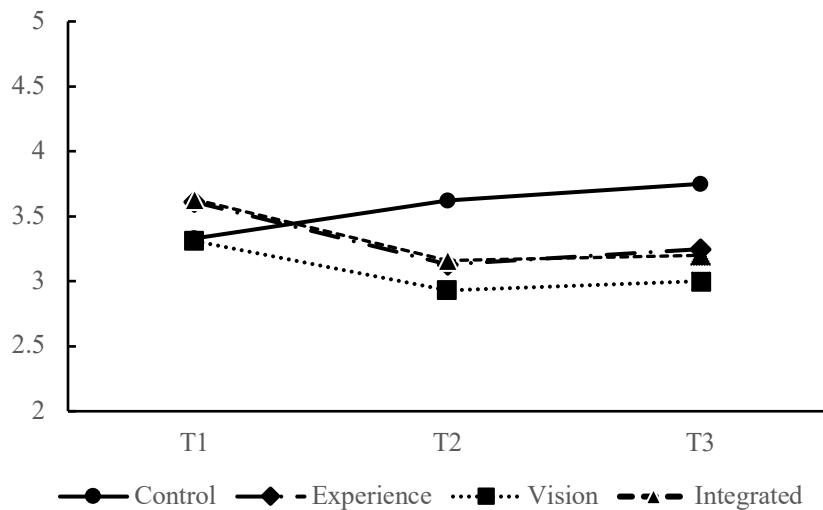


Figure 3. Within-group pairwise comparisons on the scale of L2 anxiety

4.3.2. Relative effectiveness of the motivational treatments

Pairwise comparisons by the Bonferroni procedure were also made between each pair of treatment conditions at each measurement point on L2 anxiety. Although there were tangible between-groups differences at T1 (see Figure 3), they were statistically non-significant ($ps = .591, 1.000, .462$). Nevertheless, the differences between the control group and each experimental group widened

tremendously at T2 and reached statistical significance, with either small or medium effect sizes ($ds = 0.449, 0.610, 0.405$). No significant differences were observed between the experimental groups ($ps = 1.000, .893$). As depicted in Figure 3, the lines connecting the T1 and T2 mean scores for all experimental groups were roughly parallel, suggesting that the three motivational interventions were equally efficient in lowering students' L2 anxiety.

Table 6. Results of between-group pairwise comparisons on the scale of L2 anxiety

| Time | Treatment | Treatment | <i>M (SD)</i> | <i>M (SD)</i> | <i>p</i> | <i>d</i> |
|------|-------------|-------------|---------------|---------------|----------|----------|
| T1 | Control | Traditional | 3.33 (1.20) | 3.61 (1.05) | .591 | 0.245 |
| | Control | Vision | 3.33 (1.20) | 3.31 (1.20) | 1.000 | 0.017 |
| | Control | Combined | 3.33 (1.20) | 3.63 (1.15) | .462 | 0.251 |
| | Traditional | Vision | 3.61 (1.05) | 3.31 (1.20) | .424 | 0.266 |
| | Traditional | Combined | 3.61 (1.05) | 3.63 (1.15) | 1.000 | 0.018 |
| | Vision | Combined | 3.31 (1.20) | 3.63 (1.15) | .325 | 0.272 |
| T2 | Control | Traditional | 3.62 (1.06) | 3.13 (1.12) | .019 | 0.449 |
| | Control | Vision | 3.62 (1.06) | 2.93 (1.20) | < .001 | 0.610 |
| | Control | Combined | 3.62 (1.06) | 3.16 (1.18) | .035 | 0.405 |
| | Traditional | Vision | 3.13 (1.12) | 2.93 (1.20) | 1.000 | 0.172 |
| | Traditional | Combined | 3.13 (1.12) | 3.16 (1.18) | 1.000 | 0.026 |
| | Vision | Combined | 2.93 (1.20) | 3.16 (1.18) | .893 | 0.193 |
| T3 | Control | Traditional | 3.75 (1.00) | 3.25 (0.87) | .006 | 0.527 |
| | Control | Vision | 3.75 (1.00) | 3.00 (1.12) | < .001 | 0.704 |
| | Control | Combined | 3.75 (1.00) | 3.20 (1.14) | .002 | 0.514 |
| | Traditional | Vision | 3.25 (0.87) | 3.00 (1.12) | .526 | 0.249 |
| | Traditional | Combined | 3.25 (0.87) | 3.20 (1.14) | 1.000 | 0.049 |
| | Vision | Combined | 3.00 (1.12) | 3.20 (1.14) | 1.000 | 0.177 |

Note. The Bonferroni procedure was applied to the post-hoc pairwise comparisons.

Figure 3 also shows a slight increase in L2 anxiety for all four groups from T2 to T3. The pairwise comparisons revealed significant differences between the control group and the three experimental groups, with medium effect sizes ($ds = 0.527, 0.704, 0.514$). No significant differences were observed among the three motivational interventions ($ps = .526, 1.000$). Additionally, the lines linking the mean scores at T2 and T3 for the three experimental groups were nearly parallel (see Figure 3). Taken together, these results suggested that the three experimental treatments were equally effective in keeping participants' L2 anxiety at a relatively low level during the post-intervention period.

5. Discussion

The present study investigated the respective and relative effectiveness of three motivational interventions on Chinese junior secondary students' L2 WTC, L2 self-confidence, and L2 anxiety.

The results revealed that all three motivational interventions yielded immediate positive effects on these outcome measures, with sustained effects on L2 self-confidence and anxiety observed at T3. However, only the vision-related and integrated interventions sustained their effects on L2 WTC. Comparatively, the vision-related and integrated treatments demonstrated equal and superior efficiency compared to the experience-related intervention in enhancing L2 WTC at T2. Among these, the integrated treatment was the most impactful in terms of sustained effects, followed by the vision- and experience-related interventions. The three interventions were equally effective for L2 self-confidence in terms of immediate effects, with the vision-related and integrated treatments outperforming the experience-related treatment post-intervention. Additionally, all motivational treatments had similar effects on L2 anxiety reduction at both measurement points. These results align with extant research documenting the positive effects of experience or vision promotion programs on L2 anxiety (Alrabai, 2015, 2022), L2 self-confidence (Alrabai, 2015, 2022; Al-Murtadha, 2020; Magid & Chan, 2012), and L2 WTC (Al-Murtadha, 2019; Mackay, 2014; Mesgarshahr & Abdollahzadeh, 2014; Munezane, 2015). The relatively superior overall effects of the integrated motivational strategies on L2 WTC empirically validated Dörnyei's (2014a) recommendation to combine vision- and experience-related motivational teaching practices to effectively motivate L2 learners. This approach was particularly effective given the direct and positive link between L2 WTC and motivation/L2MSS (e.g., Sadoughi & Hejazi, 2024; Joe et al., 2017; Wei & Xu, 2022; Zhang et al., 2024).

The positive effects of the motivational interventions observed in our study could be primarily attributed to the creation of a supportive classroom environment that valued mutual respect and peer support. This corroborated previous studies that identified the association of classroom climate with L2 WTC (e.g., Joe et al., 2017; Peng & Woodrow, 2010; Wang et al., 2021), L2 self-confidence (Khajavy et al., 2016; Peng & Woodrow, 2010), and L2 anxiety (Hejazi et al., 2023; Khajavy et al., 2018). In our study, students in different intervention groups engaged in activities designed to enhance their language learning environment. Specifically, the vision group was encouraged to identify self-barriers and collaborate with peers to brainstorm solutions. The experience and integrated groups participated in public discussions on topics such as face-threatening acts in English classes, tolerance of mistakes, and encouragement for students who make mistakes. They were also guided to take a reasonable stance on accented English versus standard/native-like pronunciation. The noteworthy positive changes in participants' L2 anxiety,

L2 self-confidence, and L2 WTC underscore the importance of explicitly addressing culturally relevant classroom norms and fostering their acceptance in EFL classrooms to cultivate a supportive classroom climate (Dörnyei & Muir, 2019).

In Chinese EFL classrooms, reticence is notably prevalent (Liu & Jackson, 2009) and often connects with anxiety and self-confidence (Liu & Jackson, 2008). This unwillingness to communicate can be attributed to both educational and cultural factors. From an educational perspective, one significant factor is that speaking proficiency is not a compulsory component of high-stakes exams, which discourages students from valuing oral English skills (Peng, 2012). Culturally, Chinese students' communication behaviors are deeply influenced by other-directedness. This cultural trait is reflected in students' reluctance to speak due to norms of modesty, deference to teachers, and face concerns about making mistakes or failing to meet teacher expectations (Hu, 2002; Liu, 2005; Peng, 2014; Sang & Hiver, 2021). Additionally, there is a prevailing expectation among peers that only students with exceptional English proficiency should volunteer answers (Peng, 2012). Such a cultural trait makes individuals susceptible to the evaluation of significant others, as these are closely tied to interpersonal relations (Hu, 2002; Wen & Clément, 2003). This leads to a tendency to adhere to community standards, which explains the strong preference among Chinese EFL learners for sounding like native speakers (He & Li, 2009). However, the focus on "standard" English pronunciation among teachers and students can result in what Baran-Łucarz (2014) described as Pronunciation Anxiety. Our experience-related and integrated treatments aimed to reduce learners' unrealistic expectations of attaining native-like pronunciation (Baran-Łucarz, 2022) by establishing an environment where students felt safe from humiliation or criticism when making mistakes or speaking English with an accent. The support and acceptance in the classroom helped reduce L2 anxiety, boost confidence in their English proficiency, and decrease reluctance to engage in communication activities. Additionally, the positive emotions generated by the supportive classroom environment likely played a role in the success of our interventions, as such emotions have been shown to reduce L2 anxiety and/or enhance L2 WTC (Dewaele, 2019; MacIntyre & Vincze, 2017; Wang et al., 2021).

In addition to peer support, the structured academic support deliberately provided by the English teachers emerged as another crucial factor within the classroom environment that contributed to the effectiveness of the motivational interventions. Unlike the control group, where the teachers facilitated activities such as drama and English songs without explicit motivational

guidance, the intervention groups received teacher support that targeted students' metacognitive awareness. For instance, the teachers helped students in the treatment groups develop realistic beliefs about L2 learning, identify self-barriers and solutions, and deliberately fostered their awareness of the need to co-create a supportive classroom atmosphere. Students in the experience-related and integrated groups also received instruction in communication strategies designed to compensate for deficiencies in English speaking. These strategies equipped students with practical tools for managing communication challenges, such as handling pauses. The development of strategic competence likely led to perceptions of enhanced language competence and decreased L2 anxiety. These improvements would contribute to increased L2 self-confidence (Hashimoto, 2002) and eventually lead to higher L2 WTC (MacIntyre et al., 1998). Our results paralleled those of Mesgarshahr and Abdollahzadeh (2014), who found a significant increase in L2 WTC among students receiving communication strategy training. The effectiveness of the deliberate and explicit teacher support implemented in our motivational interventions aligns with previous research suggesting a connection between teacher academic support and L2 WTC, mediated by factors such as L2 anxiety (Hejazi et al., 2023) and basic psychological needs (Joe et al., 2017).

The significant positive effects of the motivational interventions could be ascribed to the personalized goal-setting and action-planning activities designed for the three experimental groups as well. The teachers' continuous monitoring of the action plans ensured that students remained on track toward their objectives. Accompanied were targeted learning strategies that helped students overcome various challenges and cultivate L2 self-confidence (Dörnyei, 2001). As students aligned their efforts with their plans, they were able to reach their goals, leading to an enhanced perception of their English abilities and a greater willingness to participate meaningfully in speaking activities (Cao, 2011). These observations resonated with previous intervention studies that underscored the pivotal role of action plans in building up L2 self-confidence (Al-Murtadha, 2020; Magid & Chan, 2012) and enhancing L2 WTC (Al-Murtadha, 2019). A possible explanation for the success and higher efficiency of the vision-related and integrated treatments on L2 WTC and self-confidence might lie in the focus on helping students formulate well-rounded ideal L2 self-images. Specifically, beyond excelling in written exams, they were encouraged to include proficiency in spoken English as part of their ideal L2 selves, which likely motivated their increased willingness to participate in speaking activities. This finding added empirical support to previous research on the ideal L2 self as a significant predictor of L2 WTC (Lee & Lee, 2020a;

Teimouri, 2017; Wei & Xu, 2022; Zhang et al., 2024). As extant studies found the ideal L2 self negatively correlated with L2 anxiety (Peng, 2015; Papi & Khajavy, 2021), our participants in these two groups were likely to experience reduced L2 anxiety. Furthermore, the weekly oral English classes for the vision-related and integrated groups offered authentic scenarios for students to practice speaking while trying out their ideal L2 selves. Such practices potentially resulted in perceived and actual enhancement of L2 speaking proficiency (MacIntyre et al., 1997). As self-evaluation of L2 skills and L2 anxiety underlie L2 self-confidence (MacIntyre et al., 1998), these oral practices may explain why the vision-related and integrated interventions led to higher levels of L2 self-confidence compared to the experience-related treatment.

The findings reveal a consistent pattern: all three motivational treatment groups experienced decreased L2 WTC and self-confidence, along with an increase in L2 anxiety, during the post-intervention period when no further motivational support was provided. Similarly, the control group, despite participating in activities such as drama that might foster L2 WTC and self-confidence (e.g., Lee et al., 2020), demonstrated persistent underperformance on all the outcome measures. These unexpected results warrant further explanation. First, the implementation of these potentially beneficial activities was inconsistent due to the peripheral status of the oral English classes. These classes were sometimes repurposed by the English teachers for exam preparation, thereby limiting students' engagement in these activities. Second, without exposure to explicit strategy instruction and awareness-raising activities, which were key components of our motivational interventions, students in the control group likely lacked the tools and awareness needed to overcome cultural barriers to participation (e.g., other-directedness), leading to a tendency to remain silent unless they were confident in their answers (Peng, 2012). This tendency may have been further intensified by participants' developmental stage. As Ye and Hu (2024) argued, adolescents' psychological changes during puberty can intensify social awareness and reluctance to volunteer answers. Third, as students progressed through the school year, increasing academic demands and more challenging language content might have negatively impacted their achievement in exams, thus diminishing their self-confidence and further affecting their anxiety and WTC.

The trends discussed above are reflective of the broader context of English language education in China, where the primary motivation for learning English is exam success rather than communicative competence (Peng & Woodrow, 2010), a consequence of China's deeply

entrenched exam culture (Hu, 2002; Hu & West, 2015). The gatekeeping function of English exams in determining academic and career opportunities is ubiquitous (Hu, 2021). For the participants in this study, excelling in written exams represented a critical pathway to gaining admission to prestigious senior secondary schools, which would subsequently increase the likelihood of attending top universities and securing promising career prospects. This exam-oriented system exerts substantial washback effects on all stakeholders involved. Teachers, in particular, are inclined to motivate students by helping them gain higher exam scores (Huang, 2012; Ye & Hu, 2024) instead of deploying activities that promote actual L2 use. Such a focus may contribute to lowered L2 WTC and higher speaking anxiety among students. Furthermore, students may become more susceptible to a loss of confidence in response to fluctuations in their exam performance. Our findings suggested that in exam-oriented contexts, isolated spoken English activities without systematic motivational support may be insufficient to counteract the negative pressures on students' L2 WTC, L2 confidence, and L2 anxiety. To protect and raise students' L2 WTC and L2 self-confidence, the present study pointed to the need for an overhaul of China's exam-oriented education. Without addressing the disproportionate emphasis on written tests, stakeholders are unlikely to truly appreciate the importance of L2 use. A shift toward balanced attention to writing and speaking skills is essential for fostering a language learning environment that enhances L2 WTC, fosters L2 self-confidence, and reduces L2 anxiety.

6. Conclusion

This quasi-experimental longitudinal study examined and compared the effects of three motivational interventions on Chinese junior secondary EFL learners' L2 WTC, self-confidence, and anxiety. The results indicated that experience-related motivational strategies, vision-related motivational strategies, and a combination of both types of motivational strategies were all able to produce significantly positive effects on the outcome measures. The integrated intervention was most effective in enhancing L2 WTC, followed by the vision- and experience-related treatments. Additionally, both the integrated and vision-related treatments were superior to the experience-related intervention in fostering L2 self-confidence. All three treatments were similarly effective in reducing L2 anxiety.

This study bears important implications for practitioners and researchers in motivational teaching. Firstly, the success of these interventions highlights the importance of tailoring

motivational treatments to local realities (i.e., educational contexts, student characteristics, and cultural norms). Secondly, the effectiveness of the interventions underscores the paramount importance of establishing a supportive classroom environment, which is directly related to L2 WTC, self-confidence, and anxiety (Khajavy et al., 2016; Khajavy et al., 2018; Peng & Woodrow, 2010). Experience-related motivational strategies (Dörnyei, 2001), especially those emphasizing teacher support and peer support, are particularly advantageous in building a positive classroom climate, as they enhance the L2 learning experience (Dörnyei, 2014b). Thirdly, our results support early research indicating that the success of motivational programs hinges on learners' actions (Al-Murtadha, 2019, 2020; Magid & Chan, 2012). Motivational teaching practices should be systematically developed to help learners transform their vision into reality (Hadfield & Dörnyei, 2013). This involves guiding learners in setting actionable goals, breaking them down into study plans, and introducing useful learning strategies to enhance plan implementation. Finally, the observed post-intervention decline among participants on all the outcome measures suggests that motivational interventions should not be viewed as isolated activities but rather as continuous endeavors demanding persistent teacher involvement. Integrating knowledge and awareness of L2 motivational strategies into the professional development agenda for EFL teachers can improve teacher agency in motivational teaching practices (Ye & Hu, 2024).

While this study provides important implications, one limitation stems from its utilization of a quasi-experimental design rather than a true experimental design due to practical constraints inherent in educational research. This may restrict the generalizability of the results. Future research could mitigate this limitation by exploring the effects of motivational interventions across diverse educational and cultural settings to strengthen the validity of the findings. Additionally, the exclusive reliance on self-reported data from students could introduce potential response biases, such as social desirability bias and acquiescence bias. To enhance methodological rigor, future motivational intervention studies should adopt a multi-method data collection strategy. Specifically, incorporating classroom observations would triangulate self-reported measurements and provide objective behavioral evidence of the self-reported changes. Such methodological triangulation would yield a more comprehensive understanding of the effects of motivational treatments. In addition, supplementary interview data from both teachers and students could further enrich our understanding of the motivational dynamics and inform the development of future motivational interventions.

References

- Al-Murtadha, M. (2019). Enhancing EFL learners' willingness to communicate with visualization and goal-setting activities. *TESOL Quarterly*, 53, 133–157. <https://doi.org/10.1002/tesq.474>
- Al-Murtadha, M. (2020). Increasing EFL learner self-confidence with visualization. *ELT Journal*, 74, 166-174. <https://doi.org/10.1093/elt/ccaa009>
- Arabai, F. (2015). The influence of teachers' anxiety-reducing strategies on learners' foreign language anxiety. *Innovation in Language Learning and Teaching*, 9, 163-190. <https://doi.org/10.1080/17501229.2014.890203>
- Arabai, F. (2022). The predictive role of anxiety and motivation in L2 proficiency: An empirical causal model. *Language Teaching Research*. <https://doi.org/10.1177/13621688221136247>
- Baran-Lucarz, M. (2014). The link between pronunciation anxiety and willingness to communicate in the foreign-language classroom: The Polish EFL context. *Canadian Modern Language Review*, 70, 445–473. <https://doi.org/10.3138/cmlr.2666>
- Baran-Lucarz, M. (2022). Language anxiety. In T. M. Derwing, M. J. Munro & R. I. Thomson (Eds.), *The Routledge handbook of second language acquisition and speaking* (pp. 83–96). Routledge.
- Botes, E., Dewaele, J. M., & Greiff, S. (2020). The foreign language classroom anxiety scale and academic achievement: An overview of the prevailing literature and a meta-analysis. *Journal for the Psychology of Language Learning*, 2, 25–56. <https://doi.org/10.52598/jpll/2/1/3>
- Cao, Y. (2011). Investigating situational willingness to communicate within second language classrooms from an ecological perspective. *System*, 39, 468-479. <https://doi.org/10.1016/j.system.2011.10.016>
- Cao, Y. (2014). A sociocognitive perspective on second language classroom willingness to communicate. *TESOL Quarterly*, 48, 789-814. <https://doi.org/10.1002/tesq.155>
- Cao, Y., & Philp, J. (2006). Interactional context and willingness to communicate: a comparison of behavior in whole class, group and dyadic interaction. *System*, 34, 480-493. <https://doi.org/10.1016/j.system.2006.05.002>
- Clément, R., Gardner, R. C., & Smythe, P. C. (1977). Motivational variables in second language acquisition: a study of francophones learning English. *Canadian Journal of Behavioural Science*, 9, 123-133. <https://doi.org/10.1037/h0081614>

- Dewaele, J. M., Finney, R., Kubota, T., & Almutlaq, S. (2017). Are perfectionists more anxious foreign language learners and users? In C. Gkonou, M. Daubney & J.-M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 70-90). Multilingual Matters.
- Dewaele, J. M. (2019). The effect of classroom emotions, attitudes toward English, and teacher behavior on willingness to communicate among English foreign language learners. *Journal of Language and Social Psychology*, 38, 523–535. <https://doi.org/10.1177/0261927X19864996>
- 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, 237-274. <https://doi.org/10.14746/ssllt.2014.4.2.5>
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge University Press.
- Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9-42). Multilingual Matters.
- Dörnyei, Z. (2014a). Motivation in second language learning. In M. Celce-Murcia, D. M. Brinton & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 518-531). National Geographic Learning/Cengage Learning.
- Dörnyei, Z. (2014b). Future self-guides and vision. In K. Csizér & M. Magid (Eds.), *The impact of self-concept on language learning* (pp. 7-18). Multilingual Matters.
- Dörnyei, Z., & Chan, L. (2013). Motivation and vision: An analysis of future L2 self images, sensory styles, and imagery capacity across two target languages. *Language Learning*, 63, 437–462. <https://doi.org/10.1111/lang.12005>
- Dörnyei, Z., & Kubanyiova, M. (2014). *Motivating learners, motivating teachers: Building vision in the language classroom*. Cambridge University Press.
- Dörnyei, Z., & Muir, C. (2019). Creating a motivating classroom environment. In X. Gao (Ed.), *Second handbook of English language teaching* (pp. 719-736). Springer.
- Ghonsooly, B., Khajavy, G. H., & Asadpour, S. F. (2012). Willingness to communicate in English among Iranian non - English major university students. *Journal of Language and Social Psychology*, 31, 197–212. <https://doi.org/10.1177/0261927X12438538>
- Gkonou, C. (2017). Towards an ecological understanding of language anxiety. In C. Gkonou, M. Daubney & J. M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and*

- educational implications* (pp. 135–155). Multilingual Matters.
- Hadfield, J., & Dörnyei, Z. (2013). *Motivating learning*. Longman.
- Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: the Japanese ESL context. *Second Language Studies*, 20, 29-70.
- He, D., & Li, D. C. S. (2009). Language attitudes and linguistic features in the ‘China English’ debate. *World Englishes*, 28, 70-89. <https://doi.org/10.1111/j.1467-971X.2008.01570.x>
- Hejazi, S. Y., Sadoughi, M., & Peng, J. E. (2023). The structural relationship between teacher support and willingness to communicate: The mediation of L2 anxiety and the moderation of growth language mindset. *Journal of Psycholinguistic Research*, 52, 2955-2978. <https://doi.org/10.1007/s10936-023-10026-9>
- Horwitz, E. K. (2017). On the misreading of Horwitz, Horwitz, and Cope (1986) and the need to balance anxiety research and the experiences of anxious language learners. In C. Gkonou, M. Daubney & J. M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 31–47). Multilingual Matters.
- Horwitz, E. K., Horwitz, M., & Cope, J. A. (1986). Foreign language classroom anxiety. *Modern Language Journal*, 7, 125–132. <https://doi.org/10.2307/327317>
- Hu, B., & West, A. (2015). Exam-oriented education and implementation of education policy for migrant children in China. *Educational Studies*, 41, 249–267. <https://doi.org/10.1080/03055698.2014.977780>
- Hu, G. (2002). Potential cultural resistance to pedagogical imports: The case of communicative language teaching in China. *Language, Culture and Curriculum*, 15, 93-105. <https://doi.org/10.1080/07908310208666636>
- Hu, G. (2021). English language policy in Mainland China: History, issues, and challenges. In E. L. Low & A. Pakir (Eds.), *English in East and South Asia: Policy, features and language in use* (pp.19-32). Routledge.
- Huang, S.-C. (2012). Pushing learners to work through tests and marks: Motivating or demotivating? A case in a Taiwanese university. *Language Assessment Quarterly*, 9, 60–77. <https://doi.org/10.1080/15434303.2010.510898>
- Jackson, J. (2002). Reticence in second language case discussions: anxiety and aspirations. *System*, 30, 65–84. [https://doi.org/10.1016/S0346-251X\(01\)00051-3](https://doi.org/10.1016/S0346-251X(01)00051-3)

- Joe, H. K., Hiver, P., & Al-Hoorie, A. H. (2017). Classroom social climate, self-determined motivation, willingness to communicate, and achievement: A study of structural relationships in instructed second language settings. *Learning and Individual Differences, 53*, 133–144. <https://doi.org/10.1016/j.lindif.2016.11.005>
- Khajavy, G. H., Ghonsooly, B., Hosseini, A., & Choi, C. W. (2016). Willingness to communicate in English: A microsystem model in the Iranian EFL Classroom Context. *TESOL Quarterly, 50*, 154–180. <https://doi.org/10.1002/tesq.204>
- 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*, 605–624. <https://doi.org/10.1017/S0272263117000304>
- Kiaer, J., Morgan-Brown, J. M., & Choi, N. (2021). *Young children's foreign language anxiety: The case of South Korea*. Multilingual Matters.
- Lee, J. S., & Lee, K. (2020a). Role of L2 motivational self system on willingness to communicate of Korean EFL university and secondary students. *Journal of Psycholinguistic Research, 49*, 147–161. <https://doi.org/10.1007/s10936-019-09675-6>
- Lee, J.S., & Lee, K. (2020b). Affective factors, virtual intercultural experiences, and L2 willingness to communicate in in-class, out-of-class, and digital settings. *Language Teaching Research, 24*, 813–833. <https://doi.org/10.1177/1362168819831408>
- Lee, K. K., Abbott, M., & Chen, N. (2020). Increasing students' willingness to communicate: Drama-based approaches to language instruction in English for academic purposes classes. *TESL Canada Journal, 37*, 75-87. <https://doi.org/10.18806/tesl.v37i3.1346>
- Li, C., & Li, W. (2023). Anxiety, enjoyment, and boredom in language learning amongst junior secondary students in rural China: How do they contribute to L2 achievement? *Studies in Second Language Acquisition, 45*, 93–108. <https://doi.org/10.1017/S0272263122000031>
- Liu, M. (2005). Reticence in oral English language classrooms: A case study in China. *TESL Reporter, 38*, 1-16.
- Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *Modern Language Journal, 92*, 71–86. <https://doi.org/10.1111/j.1540-4781.2008.00687.x>

- Liu, M., & Jackson, J. (2009). Reticence in Chinese EFL students at varied proficiency levels. *TESL Canada Journal*, 26, 65–81. <https://doi.org/10.18806/tesl.v26i2.415>
- Liu, M., & Jackson, J. (2014). Reticence and anxiety in oral English lessons: a case study in China. In L. Jin & M. Cortazzi (Eds.), *Research Chinese learner: Skills, perceptions, and intercultural adaptations* (pp. 119–137). Palgrave Macmillan.
- MacIntyre, P. D. (2017). An overview of language anxiety research and trends in its development. In C. Gkonou, M. Daubney & J. M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 11–30). Multilingual Matters.
- MacIntyre, P. D., Babin, P. A., & Clément, R. (1999). Willingness to communicate: Antecedents and consequences. *Communication Quarterly*, 47, 215–229. <https://doi.org/10.1080/01463379909370135>
- MacIntyre, P. D., Dörnyei, Z., Clément, R., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82, 545–562. <https://doi.org/10.1111/j.1540-4781.1998.tb05543.x>
- MacIntyre, P. D., Noels, K. A., & Clément, R. (1997). Biases in self-ratings of second language proficiency: The role of language anxiety. *Language learning*, 47, 265–287. <https://doi.org/10.1111/0023-8333.81997008>
- MacIntyre, P. D., & Vincze, L. (2017). Positive and negative emotions underlie motivation for L2 learning. *Studies in Second Language Learning and Teaching*, 7, 61–88. <https://doi.org/10.14746/ssllt.2017.7.1.4>
- Mackay, J. (2014). Applications and implications of the L2 motivational self system in a Catalan EFL context. In K. Csizér & M. Magid (Eds.), *The impact of self-concept on language learning* (pp. 377–400). Multilingual Matters.
- Magid, M., & Chan, L. (2012). Motivating English learners by helping them visualize their ideal L2 self: Lessons from two motivational programs. *Innovation in Language Learning and Teaching*, 6, 113–125. <https://doi.org/10.1080/17501229.2011.614693>
- Mesgarshahr, A., & Abdollahzadeh, E. (2014). The impact of teaching communication strategies on EFL learners' willingness to communicate. *Studies in Second Language Learning and Teaching*, 4, 51–76. <https://doi.org/10.14746/ssllt.2014.4.1.4>
- Munezane, Y. (2015). Enhancing willingness to communicate: Relative effects of visualization and goal setting. *Modern Language Journal*, 99, 175–191. <https://doi.org/10.1111/modl.12193>

- Mystkowska-Wiertelak, & Pawlak, M. (2017). *Willingness to communicate in instructed second language acquisition: Combining a macro- and micro-perspective*. Multilingual Matters.
- Ozdemir, E., & Papi, M. (2021). Mindsets as sources of L2 speaking anxiety and self-confidence: the case of international teaching assistants in the U.S. *Innovation in Language Learning and Teaching*, *16*, 234-248. <https://doi.org/10.1080/17501229.2021.1907750>
- Pan, C., & Zhang, X. (2023). A longitudinal study of foreign language anxiety and enjoyment. *Language Teaching Research*, *27*, 1552-1575. <https://doi.org/10.1177/1362168821993341>
- Papi, M. (2010). The L2 motivational self system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, *38*, 467-479. <https://doi.org/10.1016/j.system.2010.06.011>
- Papi, M., & Khajavy, G. H. (2021). Motivational mechanisms underlying second language achievement: A regulatory focus perspective. *Language Learning*, *71*, 537-572. <https://doi.org/10.1111/lang.12443>
- Papi, M., & Khajavy, H. (2023). Second language anxiety: Construct, effects, and sources. *Annual Review of Applied Linguistics*, *43*, 127-139. <https://doi.org/10.1017/S0267190523000028>
- Peng, J.-E. (2012). Towards an ecological understanding of willingness to communicate in EFL classroom in China. *System*, *40*, 203-213. <https://doi.org/10.1016/j.system.2012.02.002>
- Peng, J.-E. (2014). *Willingness to communicate in the Chinese EFL university classroom: An ecological perspective*. Multilingual Matters.
- Peng, J.-E. (2015). L2 motivational self system, attitudes, and affect as predictors of L2 WTC: An imagined community perspective. *The Asia-Pacific Education Researcher*, *24*, 433-443. <https://doi.org/10.1007/s40299-014-0195-0>
- Peng, J.-E. (2020). Willing silence and silent willingness to communicate (WTC) in the Chinese EFL classroom: A dynamic systems perspective. In J. King & S. Harumi (Eds.), *East Asian perspectives on silence in English language education* (pp. 143-165). Multilingual Matters.
- Peng, J.-E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language Learning*, *60*, 834-876. <https://doi.org/10.1111/j.1467-9922.2010.00576.x>
- Price, M. L. (1991). The subjective experience of foreign language anxiety: Interviews with highly anxious students. In E. K. Horwitz & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp. 101-108). Prentice Hall.

- Ryan, S. (2009). Self and identity in L2 motivation in Japan: The ideal L2 self and Japanese learners of English. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 120-143). Multilingual Matters.
- Sadoughi, M., & Hejazi, S. Y. (2024). How can L2 motivational self system enhance willingness to communicate? The contribution of foreign language enjoyment and anxiety. *Current Psychology, 43*, 2173-2185. <https://doi.org/10.1007/s12144-023-04479-3>
- Sang, Y., & Hiver, P. (2021). Using a language socialization framework to explore Chinese students' L2 reticence in English language learning. *Linguistics and Education, 61*, 100904. <https://doi.org/10.1016/j.linged.2021.100904>
- Shao, Q., & Gao, X. A. (2016). Reticence and willingness to communicate (WTC) of East Asian language learners. *System, 63*, 115-120. <https://doi.org/10.1016/j.system.2016.10.001>
- Sparks, R., & Patton, J. (2014). Relationship of L1 skills and L2 aptitude to L2 anxiety on the foreign language classroom anxiety scale (FLCAS): Language ability or anxiety? *Language Learning, 63*, 870–895. <https://doi.org/10.1111/lang.12025>
- Teimouri, Y. (2017). L2 selves, emotions, and motivated behaviors. *Studies in Second Language Acquisition, 39*, 681–709. <https://doi.org/10.1017/S0272263116000243>
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019). Second language anxiety and achievement: A meta-analysis. *Studies in Second Language Acquisition, 41*, 363-387. <https://doi.org/10.1017/S0272263118000311>
- Wang, H., Peng, A., & Patterson, M. M. (2021). The roles of class social climate, language mindset, and emotions in predicting willingness to communicate in a foreign language. *System, 99*, 102529. <https://doi.org/10.1016/j.system.2021.102529>
- Wei, R., & Su, J. (2012). The statistics of English in China: An analysis of the best available data from government sources. *English Today, 28*, 10–14. <https://doi.org/10.1017/S0266078412000235>
- Wei, X., & Xu, Q. (2022). Predictors of willingness to communicate in a second language (L2 WTC): Toward an integrated L2 WTC model from the socio-psychological perspective. *Foreign Language Annals, 55*, 258-282. <https://doi.org/10.1111/flan.12595>
- Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *Modern Language Journal, 86*, 54–66. <https://doi.org/10.1111/1540-4781.00136>

- Yashima, T. (2009). International posture and the ideal L2 self in the Japanese EFL context. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 144-163). Multilingual Matters.
- Yashima, T., MacIntyre, P. D., & Ikeda, M. (2018). Situated willingness to communicate in an L2: Interplay of individual characteristics and context. *Language Teaching Research*, 22, 115–137. <https://doi.org/10.1177/1362168816657851>
- Ye, X., & Hu, G. (2024). Teachers' stated beliefs and practices regarding L2 motivational strategies: A mixed-methods study of misalignment and contributing factors. *System*, 121. <https://doi.org/10.1016/j.system.2024.103236>
- Zhang, L. J., Saeedian, A., & Fathi, J. (2024). Testing a model of growth mindset, ideal L2 self, boredom, and WTC in an EFL context. *Journal of Multilingual and Multicultural Development*, 45, 3450-3465. <https://doi.org/10.1080/01434632.2022.2100893>

Appendix 1: Profiles of Instructors Delivering the Interventions

| Name | Sex | Age | Nationality | Educational background | Teaching experience | Oral English teaching experience | Treatment groups taught |
|--------|-----|-----|-------------|-------------------------|---------------------|----------------------------------|---|
| Fanny | F | 26 | Chinese | BA in English | 5 years | 5 years | Control (Classes A and B) Experience-related MS (Classes A and B) Vision-related MS (Class A) |
| Blaire | F | 38 | Chinese | BA in English Education | 16 years | 3 years | Vision-related MS (Class B) Integrated MS (Classes A and B) |

Note.

1. Pseudonyms are used to maintain teacher anonymity.
2. Letters A and B represent the two intact classes assigned to each treatment condition.
3. Both teachers received standardized training on intervention protocols to ensure fidelity of treatment conditions.

Appendix 2: The Questionnaire

Instructions for the questionnaire

Please respond to each statement below by selecting a number from 1 to 6 that best indicates how much you are willing to communicate in English in each of the following situations.

| 1 | 2 | 3 | 4 | 5 | 6 |
|----------------|-----------|--------------------|------------------|---------|--------------|
| Very unwilling | Unwilling | Slightly unwilling | Slightly willing | Willing | Very willing |

Example: If you are very willing to do the following statement, choose “6” as your response:

| | |
|--|--------------------|
| I practice oral English after finishing my English homework. | 1 2 3 4 5 6 |
|--|--------------------|

L2 willingness to communicate

1. When you have a chance to make a presentation in front of a large group.
2. When you have a group/pair discussion in an English class.
3. When you are given a chance to talk freely in an English class.
4. When you have a chance to talk in front of the class in an English class.
5. Volunteer to respond to or ask questions in English classes.
6. Talk with friends/classmates in English after class.
7. Talk to foreigners on the street (e.g., giving directions) in China.
8. Talk to foreigners or the local people when traveling outside of China.

Instructions for the questionnaire

Please respond to each statement below by selecting a number from 1 to 6 that best indicates your level of agreement/disagreement described by the statement.

| 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|----------|-------------------|----------------|-------|----------------|
| Strongly disagree | Disagree | Slightly disagree | Slightly agree | Agree | Strongly agree |

Example: If you strongly agree with the following statement, choose “6” as your response:

| | |
|---------------------------------|--------------------|
| English is my favorite subject. | 1 2 3 4 5 6 |
|---------------------------------|--------------------|

L2 self-confidence

1. I am sure I will be able to learn a foreign language.
2. I worry that the other students will laugh at me when I speak English.
3. Learning a foreign language is a difficult task for me.
4. I think I am the type who would feel anxious and ill at ease if I had to speak to someone in a foreign language.
5. I always feel that my classmates speak English better than I do.

L2 anxiety

1. I am worried that other speakers of English would find my English strange.
2. If I met an English speaker, I would feel nervous.
3. I get nervous and confused when I am speaking in my English class.
4. I'm not very good at volunteering answers in our English class.
5. I would feel uneasy speaking English with a native speaker.
6. I would get tense if a foreigner asked me for directions in English.
7. I think I sound stupid in English because of the mistakes I make.

Appendix 3: Treatment Activities for the Experience-related MS Group

| Timeline | Experience-related motivational treatment |
|----------|---|
| Week 1 | <p>Primary purpose: to raise learners' awareness of establishing an enjoyable and supportive learning atmosphere within the classroom</p> <p>Description: (1) sharing views toward a few face-threatening scenarios; (2) discussing the issues of spoken English, mistakes, standard pronunciation, and fluency; (3) sharing opinions and suggestions on how students can support each other and make improvements together; (4) a summary on the topic</p> |
| Week 2 | <p>Primary purpose: to help students develop realistic beliefs about L2 learning and sort out misconceptions and prejudices about L2 learning</p> <p>Description: (1) having students discuss some statements about language learning; (2) correcting any erroneous beliefs in the sharing session</p> |
| Week 3 | <p>Primary purpose: to remind students of the instrumental values of English</p> <p>Description: (1) having students share English using experiences in real situations; (2) having students discuss the potential benefits of knowing English to their study, life, and career; (3) a short lecture on the importance of English to various aspects of China (e.g., economy)</p> |
| Week 4 | <p>Primary purpose: to raise learners' awareness of the importance of setting specific learner goals and a completion timeline</p> <p>Description: (1) inviting students to share goal-setting experiences; (2) giving some basic ideas that students can use when setting goals; (3) sharing exemplars of good and bad goal-setting practices; (4) requiring students to submit their goal-setting logbook within one week</p> |
| Week 5 | <p>Primary purpose: to expose students to the benefits of English learning with real examples (A)</p> <p>Description: (1) sharing the positive changes that English has brought to the teacher; (2) inviting two teachers with rich global experiences to share the positive changes that English has brought to them; (3) conducting an interactive session between the speakers and the students</p> |
| Week 6 | <p>Primary purpose: to expose students to the benefits of English learning with real examples (B)</p> <p>Description: (1) inviting three speakers who are engaged in different industries to share the importance of English to their life and career; (2) conducting an interactive session between the speakers and the students</p> |
| Week 7 | <p>Primary purpose: to teach students some good learner strategies</p> <p>Description: (1) having students discuss their views toward good learning habits and learning methods; (2) asking students to share some good learning methods; (3) inviting a "star student" (who gained access to a world-renowned university) to share English learning experience and strategies (pre-recorded)</p> |
| Week 8 | <p>Primary purpose: to teach students some good English communication strategies</p> <p>Description: (1) having students discuss the potential problems of their spoken English; (2) a lecture on communication strategies students can adopt when speaking English</p> |
| Week 9 | <p>Primary purpose: to teach students some self-motivating strategies</p> <p>Description: (1) having students share their reaction to a few scenarios that may disappoint or distract them; (2) a lecture on some self-motivating strategies students can resort to when encountering difficulties</p> |
| Week 10 | <p>Primary purpose: to teach students to make motivational attributions</p> <p>Description: (1) discussing issues relevant to failures in exams; (2) a lecture on common attributions and explaining their advantages and disadvantages</p> |

Appendix 4: Treatment Activities for the Vision-related MS Group

| Timeline | Vision-related motivational treatment |
|----------|---|
| Week 1 | Primary purpose: to help students build up a realistic ideal L2 self-image Description: (1) introducing the concept of the ideal L2 self; (2) narrating the script and asking students to visualize their general ideal self; (3) sharing the short-term and long-term ideal L2 self-images with neighbors; (4) doing reality checks to see if the ideal self-image is plausible |
| Week 2 | Primary purpose: to help students build up their feared self-images Description: (1) asking students to think about the possibility of realizing their ideal L2 self-images; (2) discussing the consequences of failing to achieve the ideal L2 self-images using the given texts; (3) thinking about the personal consequences of not learning English |
| Week 3 | Primary purpose: to help students build up a reasonable ought-to L2 self-image Description: (1) introducing the concept of the ought-to L2 self; (2) asking students to think about the ought-to self-images from the eyes of themselves, family members, teachers, classmates, and society; (3) discussing whether their ought-to L2 self-images match their ideal L2 self-images; (4) sharing ways to balance two types of self-images; (5) aligning students' ought-to selves with parents' expectations via parental involvement |
| Week 4 | Primary purpose: to help students identify self-barriers and solutions Description: (1) matching the descriptions of self-barriers with corresponding names; (2) grouping the given strategies which are used to overcome self-barriers under a strategies mindmap, and thinking of some new ones; (3) asking students to share their own barriers and come up with solutions with their peers; (4) asking students to note down their self-barriers and solutions and submit them to teachers |
| Week 5 | Primary purpose: to introduce learners to the importance of "vision" to learning Description: (1) introducing the concept of "vision"; (2) giving examples of its application in other fields, e.g., sports; (3) encouraging students to visualize ideal self-images |
| Week 6 | Primary purpose: to raise students' awareness of the need to put vision into practice Description: (1) setting class goals; (2) asking students to think about extra personal goals; (3) introducing students to different ways they can use to break down weekly goals into precise tasks |
| Week 7 | Primary purpose: to provide one-on-one guidance on the learning plans and monitor students' action Description: (1) asking students to make weekly learning plans which uses/adapts the ideas introduced previously; (2) providing suggestions for refining the learning plans; (3) monitoring students' action by requiring students to submit plans each week |
| Week 8 | Primary purpose: to introduce students to a range of strategies to improve learning techniques (A) Description: (1) introducing students to different study habits and learning styles, and reflecting on those of theirs; (2) introducing some time management, time allocation, distraction reduction, relaxation, and help-seeking skills |
| Week 9 | Primary purpose: to introduce students to a range of strategies to improve learning techniques (B) Description: (1) introducing learners to the importance of positive thinking and ways to maintain positive; (2) getting students to identify factors that contribute to a good work environment and steps they could take to create this for themselves; (3) getting students to summarize various macro and micro strategies that facilitate learning |
| Week 10 | Primary purpose: to expose students to role models Description: (1) asking students to brainstorm the characteristics of a good language learner; (2) asking students to compare these characteristics with those of theirs; (3) inviting three top students to share good learning methods |

Appendix 5: Treatment Activities for the Integrated MS Group

| Timeline | Integrated motivational treatment |
|----------|--|
| Week 1 | <p>Primary purpose: to raise learners' awareness of establishing an enjoyable and supportive learning atmosphere within the classroom</p> <p>Description: (1) sharing views toward a few face-threatening scenarios; (2) discussing the issues of spoken English, mistakes, standard pronunciation, and fluency; (3) sharing opinions and suggestions on how students can support each other and make improvements together; (4) a summary on the topic</p> |
| Week 2 | <p>Primary purpose: to help students develop realistic beliefs about L2 learning and sort out misconceptions and prejudices about L2 learning</p> <p>Description: (1) having students discuss some statements about language learning; (2) correcting any erroneous beliefs in the sharing session</p> |
| Week 3 | <p>Primary purpose: to expose students to the benefits of English learning with real examples (B)</p> <p>Description: (1) inviting three speakers who are engaged in different industries to share the importance of English to their life and career; (2) conducting an interactive session between the speakers and the students</p> |
| Week 4 | <p>Primary purpose: to help students build up a realistic ideal L2 self-image</p> <p>Description: (1) introducing the concept of the ideal L2 self; (2) narrating the script and asking students to visualize their general ideal self; (3) sharing the short-term and long-term ideal L2 self-images with neighbors; (4) doing reality checks to see if the ideal self-image is plausible</p> |
| Week 5 | <p>Primary purpose: to help students build up their feared self-images</p> <p>Description: (1) asking students to think about the possibility of realizing their ideal L2 self-images; (2) discussing the consequences of failing to achieve the ideal L2 self-images using the given texts; (3) thinking about the personal consequences of not learning English</p> |
| Week 6 | <p>Primary purpose: to help students build up a reasonable ought-to L2 self-image</p> <p>Description: (1) introducing the concept of the ought-to L2 self; (2) asking students to think about the ought-to self-images from the eyes of themselves, family members, teachers, classmates, and society; (3) discussing whether their ought-to L2 self-images match their ideal L2 self-images; (4) sharing ways to balance two types of self-images; (5) aligning students' ought-to selves with parents' expectations via parental involvement</p> |
| Week 7 | <p>Primary purpose: to raise students' awareness of putting vision into practice</p> <p>Description: (1) setting class goals; (2) asking students to think about extra personal goals; (3) introducing students to different ways they can use to break down weekly goals into precise tasks</p> |
| Week 8 | <p>Primary purpose: to provide one-on-one guidance on the learning plans and monitor students' action</p> <p>Description: (1) asking students to make weekly learning plans which uses/adapts the ideas introduced previously; (2) providing suggestions for refining the learning plans; (3) monitoring students' action by requiring students to submit plans each week</p> |
| Week 9 | <p>Primary purpose: to teach students some good learner strategies</p> <p>Description: (1) having students discuss their views toward good learning habits and learning methods; (2) asking students to share some good learning methods; (3) inviting a "star student" (who gained access to a world-renowned university) to share English learning experience and strategies (pre-recorded)</p> |
| Week 10 | <p>Primary purpose: to teach students some good English communication strategies</p> <p>Description: (1) having students discuss the potential problems of their spoken English; (2) a lecture on communication strategies students can adopt when speaking English</p> |

Appendix 6: Oral English Activities for the Vision-related and Integrated Treatment Groups

| Timeline | Oral English activity |
|-------------------|--|
| Week 1 Week 2 | Topic: doing the shopping Primary purpose: to practice shopping in the L2 culture Activities: (1) introducing new words, phrases, and expressions; (2) introducing the rules and making preparations; (3) practicing with group members and displaying results |
| Week 3 Week 4 | Topic: making guacamole Primary purpose: to let students experience eating and making food from the L2 culture Activities: (1) introducing the culture of guacamole and relevant words, and expressions regarding the making of it; (2) practicing the introduction of guacamole while making it with peers |
| Week 5 Week 6 | Topic: talking about the constellation Primary purpose: to let students understand and talk about western constellations Activities: (1) introducing western constellations in relation to the Chinese zodiacs ; (2) introducing words and expressions relevant to constellations and personality; (3) guessing star signs based on descriptions of classmates' personality |
| Week 7 Week 8 | Topic: talking about the dragon boat festival Primary purpose: to enable students to introduce their own culture and culturally related food Activities: (1) reviewing the origin, and customs of the festival (2) introducing words, phrases, and expressions concerning the festival; (3) practicing introducing the festival to foreigners by role-playing with peers |
| Week 9 Week 10 | Topic: interviewing a role model Primary purpose: to let students envisage an ideal L2 self-image Activities: (1) asking students to envisage a scenario where they are participating in a sharing session for their fellow schoolmates after being admitted to a prestigious university or achieving prominence in a particular field; (2) having students practice interviewing their peers and exchange roles based on a list of questions; (3) inviting students to display their role-play products |