The Relationship between Second Language Competence and Willingness to Communicate: The Moderating Effect of Foreign Language Anxiety

Abstract

The present study aimed to explore the potential moderating effect of foreign language anxiety (FLA) on the relationship between second language (L2) competence and willingness to communicate (WTC) in 129 Chinese study-abroad English learners in Belgium. Descriptive analyses revealed fairly low levels of FLA and high levels of WTC of the participants. Furthermore, correlation analyses confirmed strong links between L2 competence (including overall competence and listening, speaking, reading, and writing competence) and WTC of Chinese study-abroad learners beyond the classroom context. More importantly, hierarchical regression analyses confirmed that FLA moderated the relationships between overall competence and WTC, between reading competence and WTC, and between writing competence and WTC, whereas it did not moderate the relationships between listening competence and WTC, and between speaking competence and WTC.

Keywords: L2 competence; Willingness to communicate; Foreign language anxiety; Moderating effect; Moderator

Introduction

Willingness to communicate (WTC) has been widely recognized as an immediate determinant of foreign language (FL) learners’ communicative behavior and language achievement (Clément, Baker, and MacIntyre, 2003; Peng, 2015). Since the introduction of WTC in a second language (L2) learning context, numerous attempts have been made to explore and validate individual and situational factors that potentially affect L2 WTC, particularly those factors proposed in the multi-layered WTC model (Cao, 2014; Dewaele, 2019; Hashimoto, 2002; MacIntyre, Clément, Dornyei, and Noels, 1998; Peng, 2010; Yashima, MacIntyre, and Lketa, 2018). Chief among them are linguistic variables, including overall language competence and specific language abilities in L2, which have been reported to be closely related to L2 WTC (Chichon, 2019; Khajavy, Ghonsooly, Fatemi, and Choi, 2014; Lee, 2018; Wood, 2016). Research shows that FL learners with low language competence often choose not to risk using or speaking the target language (Liu, 2018).
Poor comprehension, either in listening or reading, is considered to be a major interruption that hinders L2 speakers’ intention to communicate (Cao, 2011). However, it remains to be seen whether the seemingly remarkable relationship between L2 competence and learners’ mental readiness to communicate is moderated by other language-related psychological factors, such as foreign language anxiety (FLA).

Great importance has been attached to FLA in the emerging field of emotion research in SLA because of its significant effect on learners’ cognitive performance in L2. MacIntyre, Noels, and Clément (1997) proposed that FLA can interfere with individuals’ self-ratings of their own competence in L2, such that “anxious individuals tend to perceive their communication competence to be lower than it is rated by a neutral observer” (MacIntyre, Baker, Clément, and Donovan, 2002, p.540). This bias in self-ratings was attributed to the assumption that anxious language users may divide their attention on “their perceived inadequacies, the potential for failure, and the consequences of that imagined failure, rather than concentrating on the task itself” (MacIntyre et al., 1997, p.269), which results in the impairments of self-assessment of language proficiency and communicative competence. According to the attentional control theory (ACT) (Eysenck, Derakshan, Santos, and Calvo, 2007), which explains the internal mechanism of anxiety, anxiety impairs cognitive processing performance because of its adverse effect on attentional control, such that anxious individuals are more vulnerable to task-irrelevant (threat-related) stimuli or distractors. Therefore, it is reasonable to expect that FLA may impair L2 speakers’ self-assessment of their own language competence, which may in turn lead to less willingness to initiate communication in the target language. In other words, the relationship between L2 competence and WTC may be negatively moderated by FLA.

Recent studies have predominantly focused on the pairwise correlations between L2 competence, FLA, and WTC (Dewaele, 2019; Halupka-Rešetar, Knežević, and Topalov, 2018; Kim, 2004; Lin, 2019; Peng and Woodrow, 2010). However, no previous research has verified with empirical evidence that the linear relationship between L2 competence and WTC is moderated by FLA. In other words, it is still not known whether and in what way L2 competence and FLA may simultaneously interact to influence WTC. Even in those recent studies adopting a complex and dynamic view to explore the interplay of relevant variables related to WTC (Cao, 2011; Pawlak, Mystkowska-Wiertelak, Bielak, 2016; Yashima, MacIntyre, and Lketa, 2018), researchers reported the links between the target individual or contextual variables and WTC separately and thus fell short of exploring the “simultaneity” of the functioning of these variables. Furthermore, most of the research on Chinese English as a foreign language (EFL) learners’ FLA and WTC has been conducted in FL classroom contexts (Jiang and Dewaele, 2019; Li, Jiang, and Dewaele, 2018; Liu, 2006, 2018; Liu and Jackson, 2008). Few studies have addressed these two important individual differences in Chinese learners outside the classroom context. However, for Chinese study-abroad college students who have passed through the phase of acquiring foreign languages in an instructed context, L2 is rather used as a tool when communicating with various interlocutors in spontaneous situations. Despite the importance of a situated classroom context for language learning, it was not from that context that learners report the most intense and dynamic emotional experiences, but rather from outside the classroom in everyday encounters (Ross and Rivers, 2018). Thus, a systematic investigation is needed to examine Chinese EFL learners’ emotions conveyed beyond
in the classroom setting, particularly in the study-abroad context where complex and dynamic emotional states are believed to be frequently experienced.

The present study has two aims: (1) To validate the relationship between L2 competence, including overall language competence and competence in the four language skills (listening, speaking, reading, and writing), and WTC in Chinese study-abroad EFL learners outside the classroom context; (2) To verify the moderating effect of FLA on the relationship between L2 competence (including overall language competence and the four language competences) and WTC.

**Literature Review**

**L2 competence and WTC**

WTC is defined as “a readiness to enter into discourse at a specific time with a specific person or persons” (MacIntyre, Clément, Dornyei, and Noels, 1998, p.547). WTC was originally conceived of as a stable and personality-based trait in the context of L1 communication before being introduced into L2 research to examine FL learners’ communicative behavior (McCroskey and Baer, 1985). Other than its trait nature in the L1, WTC in L2 displays both trait and state characteristics that jointly govern L2 speakers’ readiness to engage in communication. This has been systematically formulated in the multi-layered heuristic model proposed by MacIntyre et al. (1998), which emphasizes both enduring and situational effects on L2 WTC. Trait (enduring) and state (situational) WTC are complementary in L2 speakers’ engagement in communication, rather than being independent from each other (MacIntyre, Babin, and Clément, 1999). The former plays a preparatory role in one’s engagement in L2 communication, whereas the latter determines whether he or she is willing to do so in a specific context or with a specific interlocutor.

A number of studies have explored the impact of L2 competence, particularly competence in listening (comprehension) and speaking (fluency), on WTC within a Chinese or Asian FL learning context. In an investigation into WTC in the English classroom in China, Peng (2012) found that linguistic factors such as difficulties in comprehension and lack of vocabulary greatly restrained learners’ WTC. She argues that it is normal for Chinese EFL learners to experience various degrees of difficulties in retrieving correct expressions in English, which often reduce their WTC or drive them to resort to their first language. Cao’s (2011) study, adopting an ecological perspective, found that a deficiency in Chinese and Korean learners’ English competence impairs their communication in the FL classroom in terms of both comprehension and production, which affects their willingness to talk, and consequently gives rise to negative emotions, such as boredom. What is more, recent empirical evidence suggests that the relationship between L2 competence and WTC may not be as easily constructed as it looks when other psychological factors, such as anxiety, are taken into consideration. A mediation study by Khajavy, Ghonsooly, Fatemi, and Choi (2014) suggested that EFL learners’ actual language competence indirectly affects their WTC through communication confidence, a construct composed of two dimensions: perceived language competence and anxiety (Clément et al., 2003). More specifically, EFL learners with a high level of language competence tend to perceive themselves as more competent and feel less anxious in English communication,
and thus become more willing to interact in English. This finding is, to a certain degree, in line with MacIntyre et al.’s (1997) assumption and the hypothesis of the present study presented above that FLA may bias learners’ self-assessment of language competence, such that anxious learners tend to assess their language competence to be lower than when it is rated by a neutral observer, and as a result, become less willing to communicate in the target language.

To sum up, although some attempts have been made to examine the impact of L2 competence on WTC in a Chinese FL learning context, the primary focus was on the FL classroom context. More empirical investigation into Chinese FL learners’ WTC beyond the classroom context is needed, since intense and dynamic emotional experiences are more likely to be reported outside the classroom in everyday encounters (Ross and Rivers, 2018). Furthermore, most empirical investigations of WTC antecedents have focused on language competence as an integral variable or emphasized one specific language skill, listening and speaking in particular. Considering the fact that Chinese FL classroom instruction is normally focused on developing students’ reading and writing abilities and mastery of grammatical rules, with little attention paid to the cultivation of speaking and listening abilities (Derwing, Munto, and Thomson, 2007; Shi, 2008), a systematic investigation on how overall language competence and all the four language competences (listening, reading, speaking, and writing) may affect Chinese EFL learners’ WTC still needs to be provided. Moreover, a deeper understanding of the seemingly direct relationship between L2 competence and WTC could be generated with FLA as a covariate.

Role of anxiety

Early-stage researchers proposed that FLA and general anxiety were independent from each other as the former was restricted to the communicative aspects of language use (Dewaele and Al-Saraj, 2013). However, subsequent research found strong correlations between FLA and general anxiety (Horwitz, 1986), and between FLA and a number of personality dimensions such as neuroticism, psychoticism, and extraversion (Dewaele, 2002, 2013).

Anxiety is an aversive emotional condition which occurs in threatening circumstances (Eysenck et al., 2007). Spielberger (1966) divided anxiety into trait and state anxiety. The state anxiety refers to a transient emotional state that is subject to change across situations and over time, while the trait anxiety means a general disposition to experience frequent and intense state anxiety (Spielberger, 1979). Anxiety has increasingly been receiving research interest because of its distinctive adverse effect on individuals’ cognitive processing performance (Eysenck, 1992). According to the processing efficiency theory (Eysenck and Calvo, 1992), anxiety impairs cognitive performance due to its “preemption” of the attentional resources of working memory. Specifically, the limited cognitive resources are consumed by the worrisome thoughts and thus reduced to be less available for concurrent task processing (Eysenck, 2007). Moreover, tasks or situations that require intensive cognitive resources and instant responses would disallow anxious individuals to compensate for the impairments of performance “effectiveness” at the expense of processing “efficiency” (Sadeh and Bredemeier, 2015). Evidently, the risky and real-time L2 communication is a task or situation of this kind.

To identify the specific cognitive functions that are mostly impaired by anxiety, Eysenck et al. (2007) further introduced the attentional control theory (ACT), which represents a major revision on
the process efficiency theory. ACT posits that anxiety impairs attention control in cognitive processing because anxious individuals would experience the imbalance between the goal-directed (cognitive factors, such as knowledge, expectation and current goals) and stimulus-driven (factors that reflect sensory stimulation) attentional systems (Corbetta & Shulman, 2002) that jointly govern attention control. In other words, the goal-directed system exerts less influences on attentional processes than the stimuli-driven system does, leading to “reduced attention control and the impairments of the inhibition (resistance against disruption or interference from task-irrelevant stimuli) and shifting (adaptive changes in attentional control between multiple tasks) functions” (Eysenck et al., 2007, p.338). More specifically, anxious individuals are believed to be more susceptible to task-irrelevant stimuli or distractors, whether internal (e.g., worrisome thoughts) or external (e.g., threat-related irrelevant distractors), that impair their cognitive processing efficiency. This clearly fits FL users’ self-perception of language competence in the context of L2 communication which is a risky task and requires instant responses. FL users are vulnerable to communication-irrelevant distractors aroused by anxiety, such as excessive self-evaluation, worry over potential failure, and concern over the opinions of others (Dewaele, 2013, p.670), which result in the impairments of their self-assessment of language competence in L2 communication, thereby lowering WTC. Dornyei (2009) also suggests that anxious individuals tend to have their attention consumed by self-related cognition other than task-related cognition, thus impairing cognitive performance. Dewaele (2019) claims that FL learners’ WTC was dampened by anxiety based on the research finding that anxiety was the strongest (negative) predictor of Spanish learners’ WTC in using English.

In a comprehensive empirical study, MacIntyre et al. (1997) found that language anxiety can interfere with individuals’ self-perception of their actual competence in L2. Specifically, anxious FL users tend to assess their language competence to be lower than it is rated by a neutral observer (MacIntyre et al., 2002), which, as suggested in the present study, may in turn result in an attenuated initiation of communication in L2 and as a result, a weakened relation between language competence and WTC. To explore the underling mechanism behind this, MacIntyre et al. (1997) further proposed that “anxious language users may focus their attention on their perceived inadequacies, the potential for failure, and the consequences of that imagined failure, rather than concentrating on the task itself” (p. 269), which inevitably results in divided mental resources, less concentration and suffered performance on the task.

In conclusion, we formulate the hypothesis that FLA impairs L2 users’ self-assessment of language competence in L2 communication, thereby weakening the positive effect of high L2 competence on WTC. This means that FLA may have a negative moderating effect on the relationship between L2 competence and WTC.

**Research Questions:**

1. What are the levels of FLA and WTC in Chinese study-abroad students in Belgium?
2. What is the relationship between L2 competence and WTC in Chinese study-abroad students in Belgium?
3. Does and in what way does FLA moderate the relationship between L2 competence and L2 WTC?

Methods

Participants

The participants of the present study were 129 Chinese study-abroad students (49 males, 80 females) from universities in Brussels and Leuven with English as their second language. 51.2% of the total were within the age range of 21-25, and 34.9% were between 26-30. 16.3% were pre-course or undergraduate students, 50.4% were master’s students, and 33.3% were PhD students or above. The students were enrolled in various disciplines, including science, engineering, economics, management, literature, education, law, philosophy, medicine and arts, of which science and engineering major accounted for 46.5%. The participants varied in their duration of residency in Belgium. 40.3% of them reported they had stayed in Belgium no more than 6 months; 31% reported a residence period between 6-24 months; and 28.7% reported more than two years.

The electronic questionnaires were distributed via WeChat, a popular Chinese social media. Participants filled in the questionnaires anonymously with information concerning demographics, IELTS scores, language anxiety and WTC.

Research instruments

L2 competence

IELTS scores were used as the operational variable of English language competence in the present study. The validity of using standardized test results as the objective indicator of language competence has been proved in previous studies (Khajavy et al., 2014; Yashima et al., 2018). Participants were asked to fill in the questionnaire with the scores they obtained in the most recent IELTS test. In addition to IELTS overall score used to measure participants’ overall competence in L2, sub-scores on listening, speaking, writing, and reading were also collected as important language competence indicators in this study.

Foreign language anxiety

The five-item FLA scale in Bilingualism and Emotions Questionnaire (BEQ) (Dewaele and Pavlenko, 2001-2003) was used to measure anxiety in using English. The original English items were translated into Chinese by two professional bilinguals. Participants were asked to indicate their levels of anxiety when using English in five different situations (with friends, with classmates, with strangers, on the phone, and in public) based on a 6-point Likert scale (1 = 0% anxious; 6 = 100% anxious). A total score for FLA was calculated. One sample item is: How anxious are you when speaking English on the phone. The Cronbach’s alpha of this scale was .91.
Willingness to communicate.

The Willingness to Communicate Scale (McCroskey, 1992) was adapted to measure WTC in using English. The original scale was translated into Chinese by two professional bilinguals. In considering the circumstances in which Chinese study-abroad students interact with other English speakers, a new dimension of interlocutor (teachers or supervisors) was added in this study. The scale included 10 filler items and 16 meaningful items to measure WTC in 16 different situations which were based on the combinations of two dimensions: context (in public, in a large meeting, in a small group, in dyad) and interlocutor (strangers, classmates or colleagues, friends, teachers or supervisors). Participants were asked to indicate their levels of WTC in using English in these situations based on a 6-point Likert scale (1 = 0% willing; 6 = 100% willing). A total score for WTC was calculated. One sample item is: Talk to a teacher or supervisor when waiting in line. The Cronbach’s alpha of the 16 items was very high (.96).

Results

1. Descriptive and correlation analyses

As shown in Table 1, the means and standard deviations were calculated for WTC, FLA, overall language competence, and listening, speaking, reading, and writing competence. Bivariate correlations between the target variables were analyzed. The correlations between all the seven variables were significant (ranging from p<.05 to p<.001) except the correlation between speaking competence and FLA. These results paved the way for the moderation analysis in the next step. Firstly, all the linguistic variables, including overall competence and listening, speaking, reading, and writing competence, had positively significant correlations with WTC; secondly, it was implied that the three types of target variables (language competence, FLA and WTC) were discriminant constructs because the correlations between them were fairly low, particularly the correlation between FLA and WTC (r=-0.17, p <.05).

Table 1 inserted here.

2. Regression Analysis.

2.1 Regression effect of overall competence on WTC

Hierarchical regression analyses were run in three steps. In Model 1, overall competence was used as the independent variable. As seen from Table 2, overall competence had a significant effect on WTC (b=0.21, P<0.01), and explained 6% of the total R square.

Model 2 served as the comparative model in which the moderating variable (FLA) was added on the basis of Model 1. Table 2 showed that although the addition of the moderating variable led to the decrease of the effect of overall competence on WTC from 0.21 to 0.19, it remained significant (b=0.19, P<0.05). The change in R square was 1%, that is, 1% of the variance in WTC was further explained compared to Model 1. In addition, the regression effect of the moderating variable (FLA)
on WTC was not significant in Model 2 ($b=-0.10, P>0.05$). This suggested that with the existence of overall competence, the moderating variable (FLA) did not have direct explanatory power over WTC.

In Model 3, the interaction term of overall competence and FLA was added on the basis of Model 2. Results showed that the interactive effect of overall competence and FLA on WTC was negative and significant ($b=-0.11, P<0.05$), and further explained 4% of the variance in WTC. In other words, the relationship between overall competence and WTC was negatively moderated by FLA. When FLA was at a high level, the relationship between overall language competence and WTC was weakened.

Table 2 inserted here.

**2.2 Regression effects of listening competence and speaking competence on WTC**

Similarly, hierarchical regression analyses were conducted using listening competence and speaking competence as the independent variables. Table 3 reported on the regression effects of listening competence and writing competence on WTC.

In Model 1 and Model 2, listening competence and speaking competence were used as the independent variable respectively. Results showed that the regression effects of listening competence ($b=0.12, P<0.05$) and speaking competence ($b=0.15, P<0.05$) on WTC were both significant, with 4% of the total R square explained by listening competence, and 4% explained by speaking competence as well.

Model 3 and Model 4 served as the comparative model in which the moderating variable (FLA) was added on the basis of Model 1 and Model 2 respectively. With the addition of the moderating variable (FLA), both the regression effect of listening competence on WTC in Model 3 ($b=0.11, P>0.05$) and the regression effect of speaking competence on WTC in Model 4 ($b=0.13, P>0.05$) became insignificant. In addition, the regression effect of the moderating variable (FLA) on WTC was not significant in both Model 3 ($b=-0.11, P>0.05$) and Model 4 ($b=-0.12, P>0.05$). This suggested that with the existence of listening competence or speaking competence, the moderating variable (FLA) did not have direct explanatory power over WTC.

In Model 5, the interaction term of listening competence and FLA was added on the basis of Model 3; in Model 6, the interaction term of speaking competence and FLA was added on the basis of Model 4. Results showed that although the addition of interaction terms further explained 2% of the variance in WTC respectively, compared to Model 3 and Model 4, the interactive effects of listening competence and FLA ($b=-0.06, P>0.05$) and speaking competence and FLA ($b=-0.07, P>0.05$) on WTC both turned out to be insignificant. This means that the relationships between listening competence and WTC and between speaking competence and WTC were not moderated by FLA.

Table 3 inserted here.
2.3 Regression effects of reading and writing competence on WTC

Again, reading competence and writing competence were used as the independent variables in hierarchical regression analysis. Table 4 reports on the regression effects of reading competence and writing competence on WTC.

In Model 1 and Model 2, reading competence and writing competence were used as the independent variable respectively. Results revealed that the regression effects of reading competence (b=0.12, P<0.05) and writing competence (b=0.23, P<0.01) on WTC were both significant, with 4% of the total R square explained by reading competence and 6% by writing competence.

In Model 3 and Model 4, the moderating variable (FLA) was added on the basis of Model 1 and Model 2 respectively. With the addition of the moderating variable (FLA), the regression effect of reading competence on WTC became insignificant in Model 3 (b=0.10, P>0.05), while the regression effect of speaking competence on WTC remained significant in Model 4 (b=0.20, P<0.05). And, similar to all the regression models discussed above, the regression effect of the moderating variable (FLA) on WTC was not significant in both Model 3 (b=-0.11, P>0.05) and Model 4 (b=-0.09, P>0.05). This suggested that with the existence of reading competence or writing competence, the moderating variable (FLA) did not have direct explanatory power over WTC.

In Model 5, the interaction term of reading competence and FLA was added on the basis of Model 3; in Model 6, the interaction term of writing competence and FLA was added on the basis of Model 4. Results showed that the interactive effect of reading competence and FLA on WTC in Model 5 (b=-0.08, P<0.05) and the interactive effect of writing competence and FLA on WTC in Model 6 (b=-0.14, P<0.05) were both negative and significant, with 3% of the variance in WTC further explained by the interaction term of reading competence and FLA, and 4% explained by the interaction term of writing competence and FLA. Therefore, the relationships between reading competence and WTC and between writing competence and WTC were negatively moderated by FLA. That is to say, when FLA was high, the relationships between reading competence and WTC and between writing competence and WTC were weakened.

Table 4 inserted here.

To further illustrate the interactive effect of L2 competence and FLA on WTC presented above, we graphed the regression lines of high and low anxiety by plotting the simple slopes at one standard deviation above and below the mean of language competence. Because of failing to validate the moderating effect of FLA on the relationships between listening competence and WTC and between speaking competence and WTC, we only drew the graphs which indicated the moderating effect of FLA on the relationship between overall competence and WTC (see Figure 1), between reading competence and WTC (see Figure 2), and between writing competence and WTC (see Figure 3). As shown in Figure 1, when FLA was low, overall competence substantially increased WTC; when FLA was at a high level, the promoting effect of overall competence on WTC was weakened.
Similar results were shown in Figure 2 and Figure 3 that reading competence and writing competence remarkably boosted WTC when FLA was low; when FLA was high, the promoting effects of reading competence and writing competence on WTC were both weakened.

Figure 1 inserted here.

Figure 2 inserted here

Figure 3 inserted here

Discussion

WTC and FLA levels

The first research question examined levels of WTC and FLA beyond the classroom context in Chinese study-abroad EFL learners in Belgium. In the present study, participants reported fairly high levels of WTC and low levels of FLA in L2 communication outside the classroom. The mean reported for WTC was 4.82 on a 6-point scale (80.33%), which shows Chinese study-abroad students are more than 80% willing to communicate in English outside the classroom. The mean for FLA was 3.06 on a 6-point scale (51%), showing that Chinese study-abroad students are less swayed by anxiety in English communication. These two figures are significantly favorable considering that Chinese EFL learners are often reported to remain reticent and feel nervous in L2 interaction in the at-home context (Derwing et al., 2007; Dewaele and MacIntyre, 2014; Jiang and Dewaele, 2019).

The results from the present study show that Chinese EFL learners experience relatively high WTC and low FLA outside the classroom in the study-abroad context. This, to a certain degree, supports the argument that a study-abroad experience has a positive impact in lowering learners’ FLA and promoting their WTC, echoing the findings of previous studies (D’Amico, 2012; Kang, 2014; Lee, 2018). This can be attributed to a higher frequency of language use, which has been proved to be a strong predictor of FLA and WTC (Dewaele and Dewaele, 2018; Sevinç and Backus, 2019). Chinese EFL learners in a study-abroad context may have more opportunities to practice and use English compared to their peers in an at-home context, thereby becoming increasingly relaxed and enthusiastic in L2 interaction.

The relationship between L2 competence and WTC

Prior to approaching the potential moderating effect of FLA, the relationship between L2 competence and WTC was analyzed. The analyses showed that WTC correlated significantly with all the target linguistic variables, including L2 overall competence and listening, speaking, reading, and writing competence. This suggests that Chinese study-abroad students with higher levels of English language competence or who are more competent in any one of the four language skills (listening, speaking, reading, and writing) tend to get themselves involved in English communication beyond the classroom. This is consistent with the previous findings on Chinese EFL
learners’ WTC (Hu, 2016; Liu, 2008; Peng, 2014), and again confirmed the argument that language competence is one of the most powerful factors related to WTC (Baer and MacIntyre, 2000; Cao, 2011; McCroskey and Baer, 1985).

Distinct from studies merely focusing on listening or speaking competence as indicators involved in WTC (Liu, 2018; MacIntyre and Charos, 1996), it is verified in the present study that it is not only listening or speaking competence that plays a role in WTC, high reading or writing competence can also promote EFL learners’ readiness to enter into L2 communication.

The relationship between overall competence and WTC: FLA as a moderator

Hierarchical regression analyses were run to verify the moderating effect of FLA on the relationship between L2 competence (including L2 overall competence and the four language competences) and WTC. The results suggest a complex picture of how L2 competence and FLA may simultaneously interact to affect EFL learners’ initiation of L2 communication.

In line with our expectation, the results confirmed the negative moderating effect of FLA on the relationship between L2 overall competence and WTC. More specifically, the promoting effect of high overall competence on WTC was weakened by FLA. Highly competent Chinese EFL users became less willing to communicate in English due to high levels of language anxiety. Previous research has predominantly focused on the direct links between L2 competence and WTC (Cao, 2011; Chichon, 2019) and between FLA and WTC (Kalsoon, Soomro, and Pathan, 2020; Liu, 2018; Marashi and Sahafnia, 2020). The verification of the moderating effect of FLA in this study may provide a new research focus that FLA may lead to a “restricted functionality” of high language competence in promoting WTC. Emotions serve to constitute the psychological environment in which foreign languages are used, and anxiety might represent a typical negative psychological state or an inadequate mental readiness. Hence, in order to boost EFL learners’ WTC, teachers and learners should focus not only on improving language competence but also on the role of a positive psychological state that is compatible with the “functionality” of language competence.

The relationships between listening, speaking, reading, and writing competence and WTC: FLA as a moderator

Hierarchical regression analyses did not confirm the moderating effect of FLA on the relationships between listening competence and WTC and between speaking competence and WTC in Chinese study-abroad EFL learners. In other words, the promoting effects of high listening and speaking competence on WTC were not weakened by FLA. Despite high levels of language anxiety, Chinese EFL learners who were highly competent in listening or speaking remained interested in and ready for English communication.

In contrast, regression analyses confirmed the moderating effect of FLA on the relationships between reading competence and WTC and between writing competence and WTC in Chinese study-abroad EFL learners. That is to say, the promoting effects of high reading and writing competence on WTC were weakened by FLA. High competence in reading and writing was not
able to rid Chinese learners of the negative influence of language anxiety, leading to reduced willingness to interact in English.

Researchers have focused on the role of specific language skills, especially listening and speaking, in promoting learners’ WTC (Cao, 2011; D’Amico, 2012; Halupka-Rešetar et al., 2018; Jiang and Dewaele, 2019; Kang, 2014). The assumption raised by these studies is that different language skills may have different effects on WTC, which necessitates investigating whether and to what extent different aspects of language competence have an impact on WTC. From this perspective, the present study found different moderating effects of FLA on the relationships between listening, speaking, reading, and writing competence and WTC, which supported the argument that language skills differ in their contribution to WTC.

In addition, there have been studies highlighting the role of listening and speaking competence in promoting learners’ WTC while downplaying the role of reading and writing competence (Liu, 2018; MacCrosky, 1977, MacIntyre and Charos, 1996). In the present study, it was found that FLA did not exert significant influence on the promoting effects of listening and speaking competence on WTC, but did impair the effects of reading and writing competence on WTC. It implies the paramount importance of listening and speaking competence in warding off language anxiety and improving learners’ communicative behaviors. Thus, support for the unique benefits of listening and speaking competence in improving WTC was obtained.

Limitations and pedagogical implications

Although the present study contributed to the exploration into individual differences in FL learning, there are also limitations that need to be addressed in future studies. The major criticism could be directed at the relatively small sample size of the study, which was restricted to a group of Chinese study-abroad students in one single country. Thus, the research findings reported here may not be generalizable. More research with a larger sample size needs to be done to verify whether and in what way the moderating effect of FLA exists in other FL contexts. In addition, the present study only investigated FLA as a potential moderator in stimulating EFL learners’ WTC. Considering the pivotal role of individual differences in language learners’ communicative behavior and language achievement, more learner- and situation-related variables can be verified with their potential moderating effect by observing how they affect other variables in the same model, so as to provide a dynamic picture of how multiple factors interact simultaneously to affect EFL learners’ emotional and psychological experiences.

The findings of this study could provide important pedagogical insights for second language learning and teaching in Chinese contexts. Although this study only focused on FL learners outside the classroom, we recognize the role of classroom instruction in shaping learners’ long-lasting communicative behavior as their previous language acquisition process mostly occurs within the classroom context. First, in EFL teaching and learning practice, teachers should be aware of the vital role of language competence in improving learners’ communicative behavior and academic achievement; in the meantime, EFL teachers and learners should also be mindful of the existence of language anxiety which can impair the functionality or performance of learners’ language
competence. The solutions to this could be two-fold: (1) EFL learners could make full use of emotional control to reduce FL learning anxiety, focus their attention on language learning and use instead of irrelevant distractors (e.g., perceived inadequacies), and boost self-confidence (Clément 1986; MacIntyre 1995); (2) For EFL teachers, it is advisable to incorporate psychological counseling for learners in FL instruction, such as running psychological courses to help ease learners’ anxious feelings, or create more opportunities for real language practice in order to reduce learners’ anxiety in using the target language. All these measures are recommended with the purpose of stimulating EFL learners’ willingness to interact both in- and outside the target language.

Second, considering the distinctive role of listening and speaking competence in warding off language anxiety and improving WTC, more attention should be paid to EFL learners’ listening and speaking development, especially so for Chinese EFL learners who have been overshadowed by the deep-rooted tradition of FL education oriented towards the mastery of grammatical rules and vocabulary (Derwing et al, 2007; Shi, 2008). Therefore, more practice in listening and speaking in Chinese EFL classroom needs to be developed in an effort to strengthen language learners’ competence in listening and speaking, thereby minimizing the influence of language anxiety and boosting their WTC.

**Conclusion**

This study investigated FLA and WTC outside the classroom context in Chinese study-abroad EFL learners and, for the first time, verified the interactive effect of L2 competence and FLA on WTC. First, participants reported fairly high levels of WTC and low levels of FLA in using English in the given context. Furthermore, the positive relationship between L2 competence (including overall competence, and listening, speaking, reading, and writing competence) and WTC in Chinese EFL learners was further confirmed in the study-abroad and beyond the classroom context. Last but foremost, it was found that FLA negatively moderated the relationships between L2 overall competence and WTC, between reading competence and WTC, and between writing competence and WTC, whereas it did not moderate the relationships between listening competence and WTC and between speaking competence and WTC.

The study on the moderating effect of FLA filled one of the gaps in the existing research on individual differences which is predominantly focused on the pairwise correlations between individual difference variables. This study calls for more attention in quantitative research to the interactive effect of two or more learner- or situation-related variables on EFL learners’ psychological experiences and cognitive performance, so as to obtain an authentic depiction of both emotional and cognitive development of learners in SLA.
References


Table 1 Means, Standard Deviations, Correlations for Target Variables

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N =129. *P < .05, **P < .01, ***P < .001. Internal consistency reliabilities are on the diagonal.

Table 2 Regression on WTC (Overall Competence)

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Table 3 Regression on WTC (Listening and Speaking Competence)

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Interaction term

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*P < .05; **P < .01; ***P < .001
Table 4 Regression on WTC (Reading and Writing Competence)

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*p < .05; **p < .01; ***p < .001
Figure 1. Interactive effects of overall competence and FLA on WTC
Figure 2. Interactive effects of reading competence and FLA on WTC
Figure 3. Interactive effects of writing competence and FLA on WTC