

Relationships among Willingness to Communicate, Self-Perceived Communication Competence and Communication Anxiety

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Article History

Received: 14.02.2024

Accepted: 27.03.2024

Published: 03.04.2024

Abstract: This study investigated the relationships among L2 communicative willingness (WTC), self-perceived communicative competence (SPCC), and communication anxiety (CA) of English as a foreign language (EFL) learners in northwestern China. 71 English majors participated in the study and 10 of them also took part in the structured interview. The results indicated that: (1) SPCC had a positive correlation with WTC and negative correlation with CA while CA showed a negative relationship with WTC and SPCC; (2) SPCC held a positive predictive power on WTC. Both qualitative and quantitative results of the study showed that students with high SPCC also had strong WTC and low CA. Students with high CA had relatively low WTC and SPCC. Based on the current findings, some practical implications about enhancing EFL learners' willingness to communicate were discussed.

Keywords: Willingness to Communicate, Self-Perceived Communicative Competence, Communication Anxiety, English as a Foreign Language, Language Learning; Language Teaching.

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INTRODUCTION

Speaking, recognized as a way to learn a language, is the dominant goal of language learning. English as foreign language (EFL) learners may be excellent at English reading or writing but they prefer not to speak English. It is generally acknowledged that there is something that blocks their communication. The study of something blocking communication is the major concern in the study of willingness to communicate (WTC) in foreign language.

WTC serves as a person's intention to speak or to remain silent. It can be treated as the most dominant determinant of language use, through which the culmination of a variety of primary clouts are reflected (principally state anxiety and perceived communication competence) and indirect influences including personality features such as being

extroverted (MacIntyre *et al.*, 1996; MacIntyre *et al.*, 1998; Clement *et al.*, 2003). EFL learners' participation is crucial in a communicative language class, and WTC plays a key role in influencing students' classroom interaction (Peng *et al.*, 2010).

Learners with high WTC, according to MacIntyre *et al.*, (1998), seek out more opportunities to engage in communication, which contributes to their L2 learning. In the context of language education, the study of WTC in target language is of great significance for decoding learners' communication psychology and promoting their participation in classroom communication. The present research, inspired by the path model by MacIntyre (1994), explores the respective current levels of Chinese English learners' WTC, self-perceived communicative competence (SPCC), and

Citation: Zhang Qinghe (2024). Relationships among Willingness to Communicate, Self-Perceived Communication Competence and Communication Anxiety. *Glob Acad J Linguist Lit*; Vol-6, Iss-2 pp-69-77.

communication anxiety (CA) in English class and their relationships.

Previous studies focused on communication competence, and different theories and measures were proposed by scholars. For example, McCroskey *et al.*, (1988) proposed *Self-Perceived Communication Competence Scale*. Results of different research works in multiple settings have been presented including different settings and speakers from different language backgrounds (Gardner & MacIntyre, 1993; Legatto, 2011; Yashima, 2020). These studies conclude that five communication traits (CA, SPCC, WTC, Shyness and Compulsive Communication) have strong associations among them.

Mark (2020) conducted a comparative study between students exhibiting low WTC and those with high WTC. The findings revealed that participants with high WTC tend to envision a future where their English abilities are crucial. They were motivated by integrative factors, including interactions with fellow classmates and teachers. Additionally, their positive personality traits including resilience and persistence facilitated their willingness to communicate (Lee *et al.*, 2022). Despite these insights, the concept of WTC remains underexplored within the fields of applied linguistics and Second Language Acquisition (SLA), particularly in the Chinese context of EFL learning.

Hence, this study, based on the path model by MacIntyre (1994) and applying both qualitative and quantitative methodology, attempts to explore the current state of WTC, SPCC and CA and their

relationships in a Chinese context. Moreover, this study aims to provide pedagogical implications for English teaching.

Research Questions

This study aims to test MacIntyre’s (1994) path model by involving EFL learners from a university in China as participants. The goal is to gain insights into EFL learners’ Willingness to Communicate (WTC), Self-Perceived Communication Competence (SPCC), and Communication Apprehension (CA) within English classes, along with their interrelationships.

Furthermore, we explore the relationships among these variables concerning their predictive impact on Chinese EFL learners’ WTC. Previous studies consistently indicate that CA directly influences SPCC and WTC (Dewaele, 2019; Lee *et al.*, 2022; Lee *et al.*, 2023; MacIntyre *et al.*, 1998). However, Baker *et al.*, (2000) found that WTC was predicted by SPCC only for students without prior English immersion experience. Given that Chinese college students lack daily communication in the target language, we propose a direct path from SPCC to WTC in this study, considering English as a foreign language.

Hypothesis 1: SPCC directly affects WTC during EFL classroom interaction.

Hypothesis 2: CA is indirectly related to WTC through SPCC and simultaneously directly associated with WTC.

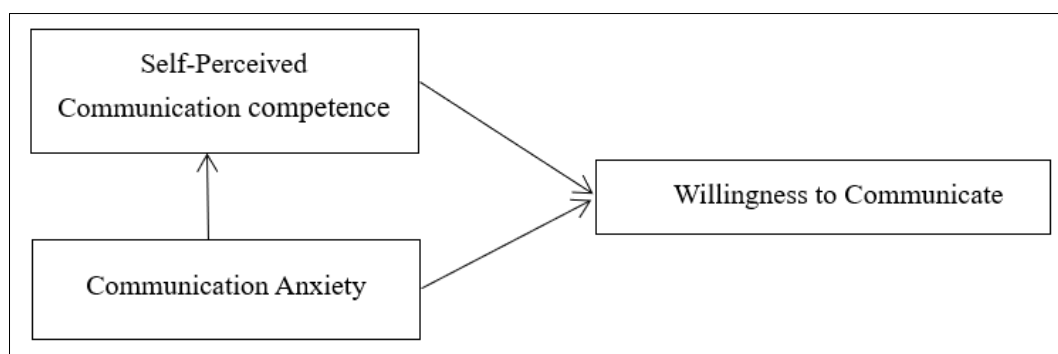


Fig. 1: Correlations among participants’ SPCC, CA, and WTC

To examine these hypotheses, we employ a path model that integrates communicative variables (CA, SPCC) and WTC in English class (see Fig. 1.).

RESEARCH METHODOLOGY

Participants

This study was conducted at a public University in China. Participants comprised 71 sophomores majoring in English and all of them were enrolled in an oral English course offered by the same

instructor. Each of them completed three questionnaires. All their parents are Chinese. Before entering university, they all had already studied English as a subject for more than 6 years. In addition, none of them had any experience of studying abroad. They were chosen because they now have quite a lot of chances to speak English in class despite their lack of chance to study abroad.

Instruments

This study employed a mixed-method approach utilizing both quantitative and qualitative research methods aiming to capture a comprehensive picture. Participants’ WTC, SPCC, and CA were measured with previously established self-report questionnaires. Instructions and instruments in Chinese were given to participants. A slight adaptation was made ensuring language familiarity for participants. All assessments used five-point Likert scale questions to assess and quantify participants’ perception of WTC, CA, and SPCC.

Questionnaire of Willingness to Communicate

WTC in English was assessed through 20 items from McCroskey *et al.*, (1991) in terms of communication contexts and interlocutor types. The participants indicated the degree (from “strongly agree” to “strongly disagree”) to which they would be inclined to use English in each situation. The alpha coefficient of this scale was 0.944, which meant the questionnaire was reliable enough to be conducted to investigate L2 WTC.

Questionnaire of Self-Perceived Communication Competence

Having been slightly modified, a 12-item questionnaire by MacIntyre *et al.*, (1996) was used to measure the learners’ SPCC. Like the WTC scale, the items in the SPCC scale indicate common communication settings and types of receivers. The alpha coefficient of this scale was 0.948, which meant the questionnaire was reliable enough to be conducted to investigate SPCC.

Questionnaire of Communication Anxiety

Personal Report of Communication Apprehension (PRCA) by Dewaele *et al.*, (2014) was used to describe participants’ CA. In order to meet the true situation of English learners in China, 12 questions were selected from them to test research participants’ communication anxiety. It was also in terms of contexts of communication and types of receivers. The alpha coefficient of this scale was 0.900, which means the questionnaire was reliable enough to be conducted to investigate students’ CA.

Structured Interview

Structured interview was involved for qualitative research one week later after the digital questionnaires. 10 students (5 from each class respectively) were invited for the interview. They

were asked two questions: (1) what is the situation where you wanted to speak English most (such as the speaker you talk to, the place, and so on) and why? (2) What is the situation where you do not want to speak English at all (such as the speaker you talk to, the place, and so on) and why? To guarantee the linguistic familiarity, the interview was conducted in Mandarin Chinese. Each interview lasted for 10 to 15 minutes.

Data Collection

All questionnaires were distributed to participants in class. The investigation was carried out among 71 sophomores majoring in English. Questionnaires were translated into Chinese for the sake of any misunderstanding. Before filling in the questionnaires, explanations and instructions were given to the participants to solve the ambiguities connected with the terms. They were given around 20 minutes to accomplish the questionnaires in the class.

The structured interview was conducted among 10 students chosen randomly one week later after the survey completion. Each interview lasted 10 to 15 minutes. The author explained the interview questions before the interview.

Data Analysis

All data were analyzed using SPSS 25.0. Means and standard deviations were calculated to test the WTC, SPCC and CA levels. Reliability and validity of the questionnaire were assessed. Correlation analysis and multiple regression analysis were used to study the associations among the three factors. In addition, as the complementary study to the results of questionnaires, the interview data were analyzed to provide a holistic picture of the study results. Representative comments have been selected and translated into English.

RESULTS AND DISCUSSION

RESULTS

Current Level of EFL learners’ WTC

Table 1 presents the results of descriptive analyses. As observed, learners’ attitudes range from “unwilling” to “not sure” when encountering English communication activities (M = 2.87, SD = .85). Consequently, it can be conducted that EFL learners exhibit a generally modest level of WTC.

Table 1: Descriptive Statistics of L2 WTC.

	N	Minimum	Maximum	Mean	SD
L2 WTC	71	1.00	4.45	2.87	0.85
Valid N (listwise)	71				

Analysis of different context types and types of interlocutors (Table 2) shows that among all communication contexts, students are most willing to use English in English corner (M = 3.23; SD = .79). Conversely, they are least willing to speak English in the public setting (M = 2.80; SD = .71). Among all

interlocutors, students exhibit a preference for communication with their friends (M = 3.36; SD = .76), while they express the least willingness to engage in conversation with strangers (M = 2.50, SD = .85).

Table 2: Mean Value of Each Context Type and Interlocutor Type.

	Mean	SD
Group Discussion	3.16	.82
English Corner	3.23	.79
Dyad	2.89	.86
Public Speaking	2.80	.71
Stranger	2.50	.85
Acquaintance	3.19	.79
Friend	3.36	.76
Total Score	3.02	.89

Current Level of EFL learners' SPCC

Table 3 shows the results of descriptive analyses. Learners' SPCC remains modest (M = 3.20, SD = .95). Their SPCC ranges from "not sure" to "relatively confident".

Table 3: Descriptive Statistics of SPCC

	N	Minimum	Maximum	Mean	SD
SPCC	71	1.00	5.00	3.20	.95
Valid N (listwise)	71				

Analysis of different types of contexts and receivers (Table 4) shows that among all contexts, students are most confident to talk in the English corner (M = 3.27; SD = .76) and least confident to speak English in the public settings (M = 3.05; SD = .84). And among all receiver types, students feel most

confident when communicating with their friends (M = 3.60; SD = .89) and least confident when communicating with strangers (M = 2.77; SD = .79). This pattern aligns with the results of the subjects' WTC.

Table 4: Mean Value of Each Context Type and Interlocutor Type

	Mean	SD
Group Discussion	3.27	.76
English Corner	3.26	.87
Dyad	3.20	.81
Public Speaking	3.05	.84
Stranger	2.77	.79
Acquaintance	3.11	.83
Friend	3.60	.89
Total Score	3.20	.90

Current Level of EFL learners' CA

Results of descriptive statistics is shown in table 5. According to the mean value of CA (M = 2.76; SD = .81), EFL learners possessed a moderate level of CA in general.

Table 5: Descriptive Statistics of CA

	N	Minimum	Maximum	Mean	SD
CA	71	1.00	4.80	2.76	0.81
Valid N (listwise)	71				

It is worth noticing that the four types of CA discussed here do not refer to different types of people speakers are talking to. Analysis of different context types (Table 6) shows that students exhibit

the highest level of CA when speaking English in public setting (M = 3.03, SD = .76). Conversely. They exhibit the least CA during group discussion (M = 2.62, SD = .81).

Table 6: Mean Value of Each Context Type and Interlocutor Type

	Mean	SD
Group Discussion	2.62	.81
English Corner	2.77	.79
Dyad	2.79	.81
Public Speaking	3.03	.76
Total Score	3.18	.91

Intercorrelations among WTC, SPCC and CA

The results of correlation analysis are shown in Table 7. WTC is positively correlated with SPCC ($r = 0.53, p < .01$) and negatively correlated with CA ($r = -0.36, p < .01$). SPCC is negatively associated with CA ($r = -0.38, p < .01$).

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Table 7: Correlations

	1	2	3
WTC	-		
SPCC	.529**		
CA	-.362**	-.382**	-

Note. WTC = Willingness to communicate; SPCC = Self perceived communication competence; CA = Communication anxiety
* $p < .05$, ** $p < .01$, *** $p < .001$.

Regression analysis is employed to examine the predictive power of students' SPCC and CA on their WTC respectively by taking SPCC and CA as the predictive variables and WTC as the criterion

variable. As shown in Table 8 and Table 9, only SPCC ($sig < .000$) succeeded in entering the model while CA failed ($sig = 0.091$). It is consequently removed from the regression model.

Table 8: Variable Entered^a

Model	Variables Entered	Variables Removed	Method
1	SPCC ^b	.	Enter

a. Dependent Variable: WTC

Table 9: Variable Excluded^b

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	42.281	10.470		4.038	.000
	CA	-.390	.227	-.187	-1.715	.091

a. Dependent Variable: WTC; b. Predictors: (Constant). CA

Table 10 presents that the adjusted R-square value of this model is 0.270. This indicates that SPCC can account for 27.0% of the variance. Thus, this

regression model is satisfactory. Students' SPCC, as the independent variable, can reliably predict their WTC.

Table 10: Model Summary^a

	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
SPCC	1	.529 ^a	.280	.270	14.48153	26.834	.000

a. Predictors: (Constant), SPCC

Through the computation of standardized beta coefficients, we assessed the strength of the independent variable SPCC on the dependent variable WTC. In Table 11, the beta coefficient

associated with SPCC is reported as 0.529, suggesting a statistically significant association between SPCC and WTC.

Table 11: Coefficients^b

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.484	6.014		4.570	.000
	SPCC	.781	.151	.529	5.180	.000

a. Dependent Variable: WTC

DISCUSSION

Major Findings

This study sets out to examine the current levels of WTC, SPCC and CA of EFL learners in northwestern China and test whether and to what extent SPCC and CA are associated with WTC. Statistical analysis revealed that EFL learners' WTC remains a bit low ($M = 2.87$), manifesting that the majority of participants' attitude range from "a bit unwilling" to "not sure" when encountering English communication activities. This finding aligns with recent studies showing that the level of EFL learners is low (Lee *et al.*, 2023; Zhang *et al.*, 2023).

It can be accounted for by the typical approach of English teaching in China. Students have spent the majority of their time on reading and writing, hardly practicing their English listening and speaking skills (Peng *et al.*, 2010). As a result, they tend to be reluctant when it comes to speaking English despite possessing a relatively deep knowledge of grammar and an extensive vocabulary. This can be amplified well by students' answers to questions about why they are unwilling to speak English. "I am abashed at speaking English because I cannot express myself effectively", said one student, "thus, I only prefer chatting with foreign teachers in English because I have no other options." Another student felt that, "I feel disrupted when speaking English because I cannot find proper English words to speak myself out even though I have learned English for so many years and can achieve high scores in reading and writing. I just cannot think of the exact words when I need to speak English". On one hand, students demonstrate great WTC in specific communication activities, such as English corners. Communicating with friends in English is preferred. "I am more willing and relaxed to speak English in the English corner because members of it are to improve their spoken English", said one student, adding that "even when I make mistakes, nobody will laugh at me". Another student felt that, "I'm willing to speak English with my friends because we have a lot in common to talk about. I feel interested in and relatively familiar with our conversation topics. I am quite chill to speak English with my good friends. I get less fear when we chat with each other in English". On the other hand, they are least inclined to speak English in public and particularly reluctant to speak English with strangers. For example, one student said "I would avoid attending an English speech competition due to poor spoken English. I do not think others can understand what I say because I have a heavy accent". Another student commented that "It is so awkward to talk to strangers, not to mention do that in English". This reluctance may stem from a tendency to avoid risking their social image. They worry that they will make mistakes during the public English conversations. They are too shy to

speak English with those who share their native language. Interestingly, this hesitancy persists even when interacting with English native speakers or their foreign teachers.

Secondly, students' SPCC falls within the moderate range ($M = 3.20$), indicating that the majority of EFL learners are uncertain about their confidence levels when they have to communicate in English with others. They feel more assured to speak English in interpersonal situations and less confident in the English corner, consistent with previous studies (Madkur, 2018). Students perceive themselves as more competent when conversing in English with friends, but less so when interacting with strangers. They lack confidence in their own English proficiency, especially when engaging in English conversations with strangers during public meetings. The finding adds support to SLA studies that have detected a positive correlation between WTC and SPCC (Hodis *et al.*, 2021; MacIntyre & Charos, 1996; MacIntyre *et al.*, 1998; Yashima, T, 2020). Their studies have attributed variables such as peers, conversation climate, and task topics to potentially facilitating or undermining students' L2 in some situations. Based on previous studies and current findings, two insights appear. Firstly, students who are more confident in their own spoken English abilities are more likely to be willing to communicate in English (Yashima, 2002). English learners who are more confident in their L2 and more eager to participate in language activities are more likely to initiate L2 communication. One commented that "I believe I can make progress in my English levels through lots of practice. I major in English and I should grasp every chance and opportunity to speak English". Secondly, when students are asked about their willingness to speak English, they perceive themselves as more willing to get involved in the English corner, whereas they express a slightly higher level of confidence during the group discussions. This divergence from previous studies prompts the consideration of culture variation as a contributing factor. For Asian students, silence serves as a mode of communication. Modesty is highly valued and seen as a sign of maturity and good manners (Peng *et al.*, 2010). Consequently, students may remain quite in order to exhibit respectful behaviors, particularly in classroom settings. Thus, communication can manifest as both intentional and unintentional expressions.

Students often employed a strategic approach to communication. It can be seen as a tactic to demonstrate deference to others, avoid conflict, or seek harmony within the group. As one student reported, "I hesitate to speak English in group discussions because I often disagree with their opinions. However, I think that expressing my dissent

could cause unnecessary misunderstandings”. “I am confident participating in group discussions. The consistent and familiar topics allow me to structure my conversations effectively”, said another student.

In group discussions, communication is subtly filtered through hesitation and pauses. Students carefully construct their messages to prevent any potential misunderstanding or offense. This cautious approach contributes to the formation and maintenance of positive relationships within the group, often referred to as the inter-group climate (Dewaele *et al.*, 2018). Interestingly, students may exhibit a seemingly paradoxical pattern: while they display strong confidence, their WTC appears lower in group discussions. This phenomenon could be attributed to the influence of emotional filtering where students balance assertiveness with the desire to maintain harmonious interactions (Peng *et al.*, 2010).

Thirdly, EFL learners’ CA level is also modest. When performing self-report communication anxiety evaluations, the majority of students feel between “not totally disagree” and “not sure” (M = 2.76). It is worth noticing that most of them do not feel so anxious when they have to speak English, which is in slight contrast with their evaluations of self-report communication competence (M = 3.20). They assess they lack self-confidence when speaking English while they do not anticipate that they will become that anxious. Their low assessment of their own English ability may be more connected with lacking chances to speak English in daily life. Moreover, there

is no causal correlation between WTC and CA, which indicates CA holds no predictive power on WTC even though there is a negative relationship between them. This can be supported by the interview answers by participants. One student said, “I do not mind speaking English even when facing a lot of people, which makes me feel nervous. Because I want to enhance my spoken English. Practice makes perfect”. “To be honest, I am afraid of giving an English speech. But I still want to try it because only when we challenge ourselves can we make improvements”, added another student. This result is not totally aligned with the one that CA can negatively predicate WTC (MacIntyre, 1994). Whereas speaking anxiety is found to play a significant role in affecting WTC, this study makes a hypothesis that CA is not necessarily the main reason in blocking Chinese students’ WTC. Informed by past studies and current results, it appears plausible to argue that speaking anxiety plays a significant role in influencing foreign language learners’ WTC. However, it is worth bearing in mind that the same association may not be observed in different social culture and educational contexts, as well as different modes of communication (for example, online chatting by texting), which highlights the need for further research on how different the institutional, social-cultural and means of communication may come into play in influencing WTC.

Lastly, their relationships have been investigated and general correlations can be seen in Fig 2. below.

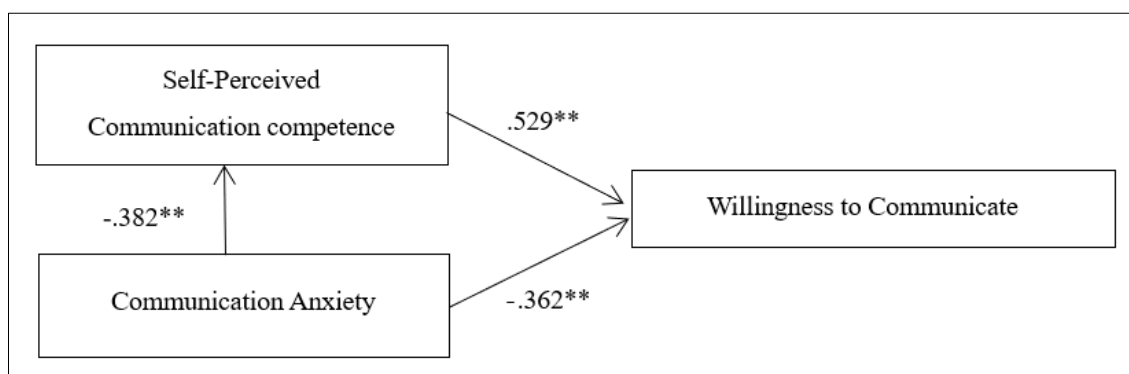


Fig. 2: Correlations among participants’ SPCC, CA, and WTC

Note. *p < .05, **p < .01, ***p < .001

Here are three associations among them: SPCC and CA, SPCC and WTC as well as CA and WTC. A negative correlation exists between SPCC and CA (r = -0.38, p < 0.005) as well as between CA and WTC (r = -0.36, p < 0.005). Learners with higher levels of CA tend to report having lower levels of SPCC and WTC. Conversely, learners with great SPCC exhibit higher WTC. A positive correlation between SPCC and WTC has also been observed (r = 0.53, p < 0.005).

Specifically, learners with elevated SPCC are more willing to engage in communicative activities. They embrace a positive attitude towards English communication while students with low SPCC tend to show avoidance or withdrawal from English activities. Therefore, it is implied that more attention should be paid to the cultivation and promotion of students’ SPCC.

Implications for Education Practice

The results of the current study are aligned with much other research in which SPCC is a significant predictor of WTC. In other words, working on promoting students' SPCC is crucial to increase students' level of WTC to help them with language learning. Considering students prefer speaking English in dyadic communication settings and with their friends, more partner discussions should be arranged to provide students more chances to practice their spoken English. They should be able to choose their partners by themselves and have chances to let topics they like or are familiar with be discussed. In other words, teachers can help students by increasing opportunities for students to initiate questions and engage themselves in self-directed class as well as extramural activities. In the light of the fact that students seem to be more willing to communicate in the target language in digital environments (e.g., chatting in English via WeChat), teachers can take advantage of digital technology such as social media and digital game to organize students own cross-culture online activities and experiences based on their needs and interests, which can potentially enhance their L2 communicative performance and frequency of language use (Lee *et al.*, 2023).

Moreover, our data reveals a negative association between WTC and CA. It should be born in the mind that fear and anxiety are natural responses of human beings to a threatening or challenging situation. It is advisable that learners with traits like CA should search for some situations where they can communicate comfortably. Anxiety can affect learners' understandable input, short-term linguistic processing abilities, and memory output, causing students' inability to give full play to positive factors in cognitive structures (MacIntyre *et al.*, 2012). As a consequence, the output of language cannot be effectively promoted. It is highly suggested that teachers help students build up their grit as well as confidence and reduce their communication shyness and anxiety. More attention and respect should be paid to students' feelings, which is helpful to alleviate students' over-caution and tension and contribute to helping them get rid of their insecurities (Dewaele *et al.*, 2018; Li *et al.*, 2022; Peng *et al.*, 2010). Immediate recognition is highly effective in helping students build their confidence. The highlight of students' great performance and reference of the progress in their study can give students a positive hint both mentally and cognitively.

CONCLUSIONS AND LIMITATIONS

The current study shows that EFL learners exhibit relatively low and modest levels of WTC and SPCC, alongside modest level of CA. These factors are setting and interlocutor dependent. Moreover, the

study detects a positive correlation between SPCC and WTC, while CA exhibits negative associations with both SPCC and WTC. The findings from multiple regression analyses highlight the critical role of SPCC in enhancing WTC. For educators who aim to enhance students' WTC, it is imperative to recognize the importance of SPCC. To achieve this, educators are encouraged to implement various strategies to help students use English for communication, including fostering autonomy in partner and topic selection, creating a safe and enjoyable English interaction environment, and providing immediate support to students during communication activities.

However, this study has several limitations. First, the study exclusively consisted of college students majoring in English. This exclusion may limit the generalizability of our findings to other populations. Therefore, caution shall be warranted to interpret the results.

Second, this study used self-reported survey data and only cross-sectional data was obtained for the research. While the relationships among variables can be dynamic (Larsen-Freeman, 2012; Kruk, 2022). Longitudinal study is expected to gain a more comprehensive picture of the interactions between the factors and capture their dynamic relationships.

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