

ORIGINAL ARTICLE

The development of Chinese university students' intercultural competence in a short-term study-abroad program

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Abstract: With increasing internationalization in higher education, more and more Chinese universities are providing students with exchange programs in cooperation with foreign universities. Hitherto, however, research about Chinese university students' intercultural competence in a study-abroad context has been relatively rare. The present study, adopting a mixed-method research design, examines the development of Chinese students' intercultural competence in a short-term study-abroad program, as well as the factors that might have a role to play in the process. It is found that the students made significant progress in intercultural competence after participating in the program and factors such as attitudes towards intercultural communication, cultural knowledge storage, English language proficiency and engagement in intercultural communication are important contributors to the development of intercultural competence in a short-term study-abroad context.

Keywords: study-abroad program; short-term; intercultural competence; development

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1. Introduction

In the current age of globalization, during which interactions among culturally diverse people are increasingly more common, the development of intercultural communicative competence (ICC) is of great importance in tertiary education. ICC is defined as a set of abilities to interact effectively and properly across cultures in various contexts (see Arasaratnam, 2015, 2016; Deardorff, 2009; Fantini, 2000). While the influences of classroom interventions on the development of ICC have been explored by researchers (e.g., Schuetze, 2008; Wang and Kulich, 2015), the impact of short-term study-abroad (STSA for short) experiences has been less well documented (Czerwionka et al., 2015). With more and more university students participating in STSA programs, research investigating ICC development during short-term programs abroad bears both academical and practical implications.

Drawing on Fantini's (2000) theoretical framework of ICC, which proposes that intercultural knowledge, skills, attitudes and awareness converge together as main components that contribute to ICC, the current research focuses on Chinese English-as-a-Foreign-Language (EFL) learners' development of ICC in a STSA program.

2. Defining and measuring intercultural competence

The concept of ICC has been given numerous definitions in the literature over the past several decades (Byram, 1997; Lustig and Koester, 2003; Deardorff, 2004; Fantini, 2000, 2006). Many researchers focused on the components of ICC while defining this concept. Pusch (1994), for example, proposes that the most important aspects of ICC include thoughtfulness, cognitive flexibility, ambiguity tolerance, behavioural flexibility, and intercultural identity. Byram's (1997) multi-dimension theory of ICC postulates that intercultural knowledge, skills, attitudes and awareness converge together as main components that contribute to ICC. In similar vein, Fantini (2000, 2006) holds that ICC is a complex of abilities with the four main dimensions of knowledge, attitudes, skills and awareness. He argues that awareness is the most important dimension of ICC and builds a graphical model in which attitudes, skills, and knowledge surround the core component of awareness. Deardorff (2004) notes that ICC is composed of three dimensions, including attitudes, skills, and knowledge. Among the three components, she emphasizes that attitudes are the most critical one.

Researchers generally agree that knowledge, attitudes, skills, and awareness are the main components of ICC (see, e.g., Lustig and Koester, 2003; Byram, 1997; Fantini, 2000, 2006; Deardorff, 2004, 2006; Spitzberg and Changnon, 2009; Peng et al., 2015). Based on this idea, scholars have designed various assessment tools to measure the extent to which an individual has the skills related to various dimensions of ICC, for example, "Assessment of Intercultural Competence" (AIC) (Fantini, 2000, 2006) and "Intercultural Development Inventory" (IDI) (Hammer et al., 2003).

In China, researchers have also developed a number of assessment tools to measure Chinese EFL learners' ICC (e.g., Wang, 1990; Liu, 2004; Wu, 2013; Peng et al., 2015). An early study by Wang (1990) designed a set of socio-cultural questions on "common culture" (e.g., social customs) and "formal culture" (e.g., geography, history, literature, and other subjects). A similar study by Liu (2004) attempted to incorporate culture test in language test. On the basis of large-scale empirical research, Liu concluded that the culture test in his study was a theoretically sound and practically feasible measurement system for assessing students' intercultural competence. In a more recent study, Peng et al. (2015) adapted Fantini's (2000, 2006) "Assessment of Intercultural Competence" and designed "Intercultural Competence Evaluation Scale for Chinese College Students". The scale enjoyed high validity and reliability (as measured by Cronbach's α , see Peng et al., 2015). In the present study, the scale was employed to measure the changes in the students' ICC before and after taking part in the STSA program.

3. Research on the development of ICC in a study-abroad context

Increasing globalisation has led more and more people to set out to study in foreign countries. Studying abroad is an experiential learning process which immerses the students in another culture (Kolb, 1984) and many researchers believe that studying abroad is an ideal way to improve one's

intercultural competence (Deardorff, 2006; Watson and Wolfel, 2015). In recent years, quite a few scholars have used empirical research approaches to explore the development of students' ICC in study-abroad contexts (e.g., Behrnd and Porzelt, 2012; Gregersen-Herman, 2015; Czerwionka et al., 2015). For example, Behrnd and Porzelt (2012) compared the development of intercultural competence of college students with and without study-abroad experiences. The results showed that while there is no significant difference in intercultural competence between the two groups at the beginning of the study, the improvement of intercultural competence of overseas students is more significant over time. Gregersen-Herman (2015) investigated the development of college students' cross-cultural ability and found that merely placing students in a multicultural environment without intervention or guidance cannot improve their cross-cultural ability. Czerwionka et al. (2015) measured the change of students' cross-cultural knowledge in a STSA program. They found that the students' attention to cross-cultural knowledge changed after studying abroad. Besides, the students' intercultural knowledge increased during their exchange abroad, with the most significant increase in cultural and historical knowledge.

Over the past decade, STSA programs of one to eight weeks have been gaining increasing popularity among Chinese university students. Compared with long-term study-abroad programs, STSA programs are less time-consuming and more economical, and are therefore favoured by many Chinese students. However, at present there is still controversy concerning the role of STSA programs in the development of students' ICC. While a number of researchers believe that STSA programs can broaden the students' international perspectives, cultivate global mindset, enhance cultural sensitivity, and empower the students to cope with cultural conflicts, some scholars question the influence of STSA programs on the development of the students' intercultural competence (Dwyer, 2004; Medina-Lopez-Portillo, 2004). Medina-Lopez-Portillo (2004), for example, studied the relationship between the length of study-abroad programs and the development of students' intercultural sensitivity. The study focused on 28 students who went abroad for exchange, 18 of whom participated in long-term exchange programs, and ten participated in short-term exchange programs. Results showed that the length of the project has a significant impact on the improvement of the students' cross-cultural sensitivity. However, Dwyer's (2004) research discovered that the advantages of long-term exchange programs over short-term exchange programs are not absolute. Dwyer noted that while having an entire academic year abroad has a more significant impact on students, "in some cases, students in short-term exchange programs may be more likely to derive more lasting benefits from their study abroad experience than students who participate in long-term study abroad programs" (Dwyer, 2004: 161).

In recent years, some Chinese scholars probed into the development of ICC of Chinese students in a study-abroad context (Lu and Li, 2012; Cui, 2013). Lu and Li (2012) used "Intercultural Sensitivity Inventory" to explore the differences in cross-cultural sensitivity of Chinese postgraduate students at home and abroad. The results showed that Chinese graduate students who studied abroad had a higher level of cross-cultural sensitivity than their counterparts in China, and they were more likely to accept and identify with different cultures and to enjoy diverse cultural interactions. Cui (2013) explored the influence of STSA experience on Chinese EFL students' cultural sensitivity and language proficiency by observing their cultural sensitivity, motivation, and relationship with the host family. The results showed that the overall level of language proficiency of the study-abroad group improved. While these studies in general showed a positive effect of studying abroad on the

development of Chinese ELF learners' intercultural sensitivity, more research is needed to examine the overall development of ICC in a study-abroad context.

4. Research methods

4.1. Research questions

This study set out to investigate the development of Chinese EFL students' intercultural competence in a STSA program. Specifically, two research questions have been formulated:

Research Question 1: What is the impact of a STSA program on the development of ICC of Chinese EFL students?

Research Question 2: What factors have a role to play in the students' development of ICC in the STSA program?

4.2. Research setting

The study took the ** program between a public research university in **southwest** China and a public research university in the **northeast** of the United States as a specific case to explore the impact of short-term exchange programs on ICC development of Chinese students. The program spanned two weeks, in which Chinese students studied in the American university and experienced American university teaching, academic lectures, campus life, as well as other cultural activities, around themes of international diplomacy, international business and global leadership. The American university appointed a highly international teaching team for the program, including an African-American program director and an Anglo-American supervisor, a Turkish-American lecturer, and three teaching assistants from the U.S., Japan, and China respectively. This, in addition to the study-abroad context, offered the students ample opportunities to interact with people from diverse cultural backgrounds. One of the authors of this paper also participated in the program as a student, which facilitated the data collection process. To ensure the reliability of the study, the data of this participant was not included in data analysis.

4.3. Participants of the study

Thirty-five members of the program participated in the study¹, the demographic information of the participants can be seen in **Table 1**. All of them were students of ** University, and their majors ranged from English, Literature, International Politics, to Law, Finance, Microelectronics, and Civil Engineering.

All the thirty-five participants took part in the online questionnaire survey. Twelve participants were invited to participate in in-depth semi-structured interviews concerning the strategies that they employed to develop ICC in the study-abroad context.

4.4. Research instruments

In order to fathom thoroughly the development of the students' ICC in STSA programs, this

¹ Originally there were 36 participants in the study-abroad program as one of the authors was also a member of the program as a student at the time of investigation. To ensure the reliability of research, the data of the author was taken out, leaving a total of 35 participants (see Table 1).

Table 1. Demographic information of the participants

	Categories	No. of participants
Gender	Female	27
	Male	8
Age	19–23 yrs	19
	24–29 yrs	16
Education background	Undergraduate	16
	Graduate	19

Table 2. Reliability test results of the self-assessment ICC questionnaire

Dimension	Number of items	Cronbach's alpha	Sample items
Knowledge of domestic culture	3	0.896	Knowledge of the domestic country's history, geography, and social politics
Knowledge of foreign culture	7	0.862	Knowledge of foreign history, geography and social politics
Attitude	4	0.877	Willing to communicate and study with foreigners from different cultures
Cross-cultural communication skills	9	0.911	Skills to negotiate and explain one's own culture to the satisfaction of the interlocutor when cross-cultural misunderstandings occur
Cross-cultural cognitive skills	3	0.848	Skills to acquire knowledge related to cross-cultural communication through direct contact with foreigners
Cross-cultural communication awareness	3	0.929	Awareness of cultural similarities and differences when communicating with foreigners
Total	29	0.954	

study employed a variety of ways to collect data, including questionnaire surveys, semi-structured interviews and field observations.

The questionnaire used in this study consisted of three parts. The first part was the participant's personal information, including gender, age, major, grade, previous study abroad experience, and English proficiency. The second part was the intercultural competence self-assessment scale, adapted from Peng et al.'s (2015) "Intercultural Competence Evaluation Scale for Chinese College Students", including six dimensions: knowledge of domestic culture, knowledge of foreign culture, attitude, cross-cultural communication skills, cross-cultural communication skills, and cross-cultural communication awareness, with a total of 29 items.

The researchers piloted the questionnaire with students who have taken similar exchange programs in ** University and calculated the reliability of the questionnaire. As can be seen (Table 2), the Cronbach's α coefficient of each dimension was between 0.848 and 0.929, and the Cronbach's α coefficient of the overall questionnaire was 0.954, indicating that the questionnaire enjoyed high reliability.

Following Peng et al. (2015: 149), the scale data were weighted in the following manner:

The weight of the first-layer index u_i , which is related to target layer U is:

$$A = (a_1, a_2, a_3, a_4, a_5, a_6) = (0.05, 0.30, 0.19, 0.25, 0.06, 0.15)$$

The weight of the second-layer index u_{ij} under the i th first-layer index u_i is:

$$A_1 = (a_{11}, a_{12}, a_{13}) = (0.33, 0.27, 0.4),$$

$$A_2 = (a_{21}, a_{22}, a_{23}, a_{24}, a_{25}, a_{26}, a_{27}) = (0.18, 0.18, 0.20, 0.14, 0.12, 0.06, 0.12),$$

$$A_3 = (a_{31}, a_{32}, a_{33}) = (0.5, 0.17, 0.33),$$

$$A_4 = (a_{41}, a_{42}, a_{43}, a_{44}, a_{45}, a_{46}, a_{47}, a_{48}, a_{49}) = (0.09, 0.18, 0.15, 0.13, 0.09, 0.09, 0.09, 0.09, 0.09),$$

$$A_5 = (a_{51}, a_{52}, a_{53}) = (0.34, 0.25, 0.41),$$

$$A_6 = (a_{61}, a_{62}, a_{63}) = (0.40, 0.20, 0.40).$$

The third part is open-ended questions to understand the participants' perceptions of intercultural competence, self-assessment of their own intercultural competence, and their strategies for improving intercultural competence.

In addition to the questionnaire, we also conducted semi-structured interviews with 12 students randomly selected from the 35 participants. The semi-structured interviews focused on eight questions, such as, "How do you understand intercultural competence?" "How do you rate your intercultural competence?" "Has the STSA program helped you develop your intercultural skills?" "What methods have you adopted to improve your intercultural competence?". Interviews were conducted in Chinese and lasted approximately 40 minutes for each student.

4.5. Data collection and analysis

The students completed the "Intercultural Competence Evaluation Scale for Chinese College Students" before they left China and did it again upon their return to China. We performed statistical analysis of the questionnaire data using SPSS 24.0.

For the interview recordings, we first transcribed the interviews verbatim, then labelled and coded the transcriptions with the help of the qualitative analysis software MAXQDA. To increase the reliability of the qualitative analysis, the two authors of this paper jointly analysed the transcribed utterances.

5. Results and discussion

5.1. The development of the participants' ICC during the study-abroad program

To understand the changes of students' cross-cultural competence before and after participating in the STSA program, we calculated the scores of each dimension as well as the total score of the questionnaire for each participant according to the data weighting scheme mentioned above (Peng et al., 2015; Wu, 2013). Paired sample t -test was conducted to compare the scores before and after studying abroad. Data analysis showed that participants' intercultural competence changed significantly before and after their STSA experience, with remarkable improvements in all six dimensions of intercultural competence, as well as the overall intercultural competence assessment (**Table 3**).

Figure 1 shows the changes in each dimension of intercultural competence of university students before and after they participated in the STSA program.

Table 3. Participants' self-assessment of ICC before and after the STSA program

		Mean	SD	Mean difference	t	Sig. (2-tailed)
KD	Before	0.595	0.142			
	After	0.676	0.107	-0.080	-5.088	0.000
KF	Before	0.426	0.106			
	After	0.627	0.100	-0.201	-8.973	0.000
AT	Before	0.700	0.154			
	After	0.769	0.105	-0.069	-3.649	0.001
ComS	Before	0.600	0.131			
	After	0.723	0.109	-0.123	-8.693	0.000
CogS	Before	0.542	0.132			
	After	0.700	0.139	-0.127	-6.881	0.000
AW	Before	0.577	0.176			
	After	0.747	0.119	-0.170	-5.766	0.000

Note: KD = Knowledge of domestic culture; KF = Knowledge of foreign culture; AT = Attitude towards cross-cultural communication; ComS = Cross-cultural communication skills; CogS = Cross-cultural cognitive skills; AW = Cross-cultural communication awareness.

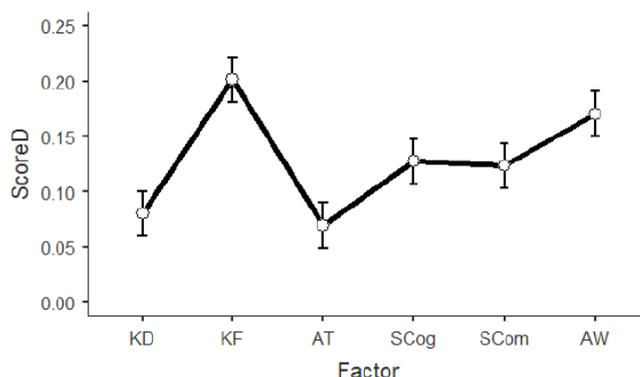


Figure 1. Numerical gains in the participants' ICC scores along the six dimensions.

As shown in Table 3, the students' scores in attitudes towards intercultural competence (AT for short) are at a relatively high level both before and after the STSA program, showing that students had positive attitudes towards cross-cultural communication. In other words, they were willing to communicate and learn with foreigners from different cultures, to tolerate foreigners' different values, living habits and taboos, and are eager to learn foreign languages and understand foreigners. On the contrary, although the "Knowledge of foreign culture" (KF for short) was dramatically improved after studying abroad, it still ranked the lowest among the six dimensions. A possible reason might be that although STSA program helped to enhance the students' knowledge of foreign history, geography, society and politics, the students were unable to acquire systematic and sufficient expertise in such a short time. More extended programs and more elaborate learning are needed to enrich students' knowledge of foreign cultures.

It is noteworthy that in STSA programs, students were immersed in a foreign language and cultural environment, which undoubtedly contributed to their acquisition of foreign cultural knowledge. Surprisingly, as can be seen from Table 4, the students' knowledge of domestic culture (KD for short) also experienced a noticeable increase after the STSA program. Interviews showed that many

Table 4. Participants' self-assessment of overall ICC before and after the STSA program (*t*-test)

		Mean	SD	Mean difference	<i>t</i>	Sig. (2-tailed)
ICC	Before	0.559	0.108	-0.142	-9.437	0.000
	After	0.701	0.086			

students believed that knowledge of their own culture was a prerequisite for successful cross-cultural communication, and only with this premise could they communicate with people from different cultural backgrounds calmly and confidently. As student F1² stated in her interview:

“Intercultural competence, first of all, includes the understanding of the politics and history of one’s own country. Then there is one’s view of life and values, some local customs and manners of one’s own country, and such a knowledge of one’s own culture. It is through the understanding of one’s own culture and the mastery of some local knowledge and skills, that we build up cultural confidence. And then when it comes to intercultural communication, we can be neither cringing nor arrogant, and communicate with the other side confidently, even promote our culture.” (F1)

Through cross-cultural communication, students gradually realised the importance of understanding their own culture, and which fuelled them to expand their relevant knowledge and deepened their knowledge of Chinese culture. As Jiang (2012) proposed, the more profound the mastery of one’s native culture, the easier the understanding of western culture, because culture is both national and global, and there are commonalities and universal laws in different cultures. Therefore, understanding foreign cultures also deepens our understanding of the cultural differences between China and foreign countries, which in turn deepens our understanding of our own culture.

5.2. Factors affecting the development of ICC during STSA programs

Through analysis of the interview data, we identified five main factors that influenced Chinese students’ development of intercultural competence in STSA programs.

5.2.1. Attitudes towards intercultural communication

Attitude is an essential component of intercultural competence (Allport, 1954; Orlandi, 1992; Byram, 1997). According to Allport (1954), attitudes are prerequisites for successful intercultural interaction, and people need to be curious, open-minded, and ready to learn about and explore the meanings, beliefs, and behaviours of others. In similar vein, Orlandi (1992) also proposed that among the five components of intercultural competence, i.e., skills, understanding, appreciation, willingness, and ability, willingness was the most important one. Similarly, Byram (1997) stated that part of the success of such interaction will depend on the establishment and maintenance of human relationships, something which depends on attitudinal factors.

Our analysis of the interview data borne out the above views. In response to the question, “What qualities did you observe in the students who were interculturally competent in this exchange program?” All participants believed that students with strong cross-cultural abilities have a higher willingness to contact people from different cultures and actively seek opportunities for cross-cultural communication. As the following two students said in the interview:

² This is a pseudonym given to the participant. It is the same with the other participants appearing in the rest of the paper.

“The students who behaved well (in intercultural communication) were often curious about new cultures that they were not very familiar with. I think it’s more... let’s say, they want to know more about another culture, another place, another city, another country, ‘what would it be like?’ They have this kind of curiosity.” (M3)

“They are more willing to step out of their comfort zone and communicate and make friends with people from other countries, compared with those who prefer to communicate with their Chinese classmates.” (M2)

According to the interview data, the language difference between Chinese and English did not seem to be a problem for these students who actively participated in cross-cultural communication, as they did not perceive it as a barrier to their participation in cross-cultural communication. They were able to listen actively to gain new knowledge and express themselves confidently in English during intercultural communication.

“I think it depends on the mindset of the person you are communicating with interculturally. If you are shy about your language, and you feel that it is one of your weaknesses, then this can be a hindrance. But if I accept the fact that my English is not good and I can still communicate bravely, then language has no significant impact on cross-cultural communication.” (M2)

In cross-cultural communication, the students not only got a sense of accomplishment in learning new knowledge and improving their abilities but also encountered frequent setbacks and difficulties, resulting in a sense of frustration and loss. Therefore, confusion, conflict and frustration were a constant part of intercultural communication, and students need to adjust their mindsets and deal with these challenges actively.

“I think there’s a lot of joy in intercultural communication, but the frustration it can bring is also deep... It is inevitable to encounter such things (frustration in the process of intercultural communication). I think the ability to resist setbacks in cross-cultural communication must be high.” (F2)

As Deardorff (2006) stated, the key to the development of intercultural competence is personal attitudes, such as respect and curiosity about different cultures and values. These attitudes stimulate self-consciousness of culture, a deep understanding of other cultures, and the ability and willingness to behave accordingly. Some scholars pointed out that many Chinese students learned English from an early age, and have been exposed to Western culture both inside and outside the classroom since then, and they are curious and open-minded to Western language and culture (Peng et al., 2015). This study also finds that although the language proficiency and intercultural competence of the participants varied, all of them showed positive attitudes towards cross-cultural communication, which was beneficial to the improvement of intercultural competence.

5.2.2. Cultural knowledge

According to Rosen et al. (2000), the key elements of cross-cultural communication are: valuing one’s own culture, understanding the culture of others, using cultural knowledge to strengthen one’s own culture, and using culture to create advantages for oneself. A good intercultural interlocutor should have competent cultural knowledge, such as knowledge of domestic culture, knowledge of foreign culture, knowledge of the culture of the destination to bring about successful intercultural communication. Wiseman (2001) addressed the knowledge component a critical indicator of one’s

intercultural competence. He highlighted that successful intercultural communication requires information about the people, the context, and communication rules governing the interaction with the members of another culture. Wiseman's research shows that competent intercultural communicators are willing to spend time listening to and learning from different cultures. They know about cultural matters and are good at dealing with intercultural issues. Our analysis of the interview data confirms these views. For example, F1 stated in the interview that:

“I think the people around me with good cross-cultural communication skills have a common trait, that is, they can integrate Chinese and western cultures. They can talk about the similarities and differences between Chinese and western cultures based on understanding, or even their origin to explain why such similarities and differences would appear, and then treat these differences rationally. Then I think the deeper reason is that they can integrate Chinese and Western cultures. Because they have accumulated a large amount of reading, they have formed an extensive knowledge. Then these students can build up a complete knowledge framework in their mind so that they can integrate these different cultures. And then I think they also have the common trait of always being tolerant and open-minded to different cultures, and will take the initiative to understand each other's culture in the process, probably starting from a minimal level.” (F1)

Intercultural knowledge increases intercultural communicators' understanding of others and self to facilitate making accurate predictions and attributions in intercultural communication (Wiseman et al., 1989). The interview data of this study revealed that students considered intercultural knowledge to be an essential element of intercultural competence and were willing to spend time learning about domestic and foreign cultures. For example, student M1 gave the following example in the interview.

“I had an undergraduate classmate who went to Canada when he was in high school. During his communication with Westerners, he gradually realised that he needed to have a deeper understanding of his own culture. Then he went to learn how to make tea. Right. Then when he returns home every summer vacation, he goes to the mountains to learn how to pick tea, how to make tea and how to taste tea, that is, to study this series of tea culture knowledge. Then, when he was an undergraduate, he had some local Canadian students, and he would take the initiative to exchange tea culture with these students and other international students, and then promote Chinese tea knowledge. Then, in this way, many foreigners would know some of our cultures. In this way, on the one hand, he has been affirmed by others; on the other hand, he also has a considerable sense of trust or confidence in himself. In this way, when he is communicating, he will benefit from this knowledge a lot.” (M1)

To conclude, a distinctive feature of higher-intercultural-competent students was a more affluent knowledge base of both domestic and foreign cultures, which enabled them to promote their own culture confidently, to view cultural differences rationally, to digest and integrate different cultures.

5.2.3. *English proficiency*

Successful communication undoubtedly requires communicative skills, which includes linguistic, sociolinguistic and pragmatic abilities. However, researchers are not unanimous as to whether foreign language proficiency is a necessity for successful intercultural communication. Studies such as Carrell (1984), Koike (1996), Olson and Kroeger (2001), and Hismanoglu (2011) argue that stu-

dents with higher language proficiency are more competent in intercultural communication than students with lower language proficiency. However, the results of Watson and Wolfel (2015) do not align with this view. They conducted a two-year language training program for over two hundred students and examined their intercultural competence before and after participating in a STSA program. Surprisingly, the results of the study failed to obtain significant correlation between language proficiency and the development of intercultural competence.

The interview data in this study partially supports the findings of Watson and Wolfel (2015). When asked how much impact English proficiency had on intercultural communication, most students believed that English proficiency did not hinder intercultural communication if the conversation did not involve expertise. As M1 stated:

“In similar contexts, or if both sides have related majors and are interested in similar subjects, or if the topic is frequently discussed, then there is no problem in communicating with each other. And if these conditions are not met, then a high level of language proficiency alone will not help intercultural communication.” (M1)

While the students generally agreed that language proficiency had little impact on everyday cross-cultural communication, the role of language came to the fore if cross-cultural communication involved more specialised issues. Some students suggested that:

“In a way, if we are not engaged in profound cross-cultural communication, which may involve a particular area of expertise, our English proficiency is not very important. But suppose we are trying to explore cross-cultural communication deeply, with topics including politics, economics, international relations, and so on, the accumulation of professional vocabulary and the way we express ourselves will make our English proficiency very important... and very important indeed.” (F6)

Although the students had different views on the impact of foreign language proficiency on cross-cultural communication, they all agreed that low language proficiency did have a negative impact on their confidence and attitude to participate in cross-cultural communication. The higher the level of language, the more confident the students were in cross-cultural communication and the higher their participation in cross-cultural interaction. On the contrary, lower language proficiency would reduce their enthusiasm to participate in cross-cultural communication and cause them to miss some opportunities for cross-cultural communication, which would consequently result in limited gains in cross-cultural communication competence. In the interview, a student reported that:

“I can't understand what the professor said for most of the time, but I ask the person next to me the meaning of some words that confused me, it will interrupt the learning process for both of us. There is tremendous nervousness and begin to doubt myself, as I didn't feel that my English is so poor when I was in China, and how could it be so different when I was in America? Then I am afraid to communicate with the teacher, and consequently, there is a lot of information I will miss.” (F2)

Although the students held that language did not pose a threat to cross-cultural communication in general, in some cases, inadequate language proficiency did cause problems in cross-cultural communication, as shown in the following example described by the student:

“When the first time I entered this kind of English working environment, I had many difficulties in adapting to it. For example, our teaching secretary sent us an email with a request to reply, but he used a word we don’t often use in everyday English. So, none of us noticed this request, and nobody sent him a message back. The next day when he met us, he was furious about it and doubted our working attitude. Since then, I realised that English does have a vital role to play in intercultural communication. You couldn’t tell which side should be blamed for the failure of cross-cultural communication, but this kind of thing often happens. That’s where poor language proficiency can lead to.” (M4)

As can be seen, the English proficiency of these university students was sufficient for everyday intercultural communication activities. Therefore, they believed that language level had little effect on cross-cultural communication. However, if intercultural communication involved in-depth discussion of professional or academic issues, a good mastery of the English language turned out to be an essential prerequisite. Only with a high level of English proficiency can one navigate through highly specialised intercultural communication and achieve satisfactory communicative effects.

5.2.4. *Engagement in intercultural communication*

The study found that the students’ differential degrees of engagement in intercultural communication resulted in uneven gains in the development of intercultural development. Fredrick et al. (2004) propose that students’ engagement in academic settings includes behavioral engagement, emotional engagement and cognitive engagement. This section mainly discusses the students’ behavioral engagement since we found this element especially relevant in intercultural communication contexts.

Behavioral engagement refers to students’ involvement/participation in academic and social or extracurricular activities and is crucial for achieving positive academic outcomes (Fredrick et al., 2004). The students’ active and purposeful participation in intercultural communication means better opportunities to learn and use English because they felt like they were valued and contributive, which was conducive to the development of their intercultural competence. In our study, we found that learners’ personality factors had a significant impact on the development of their intercultural competence. Although they joined in the same program, introverted students always had far fewer opportunities for cross-cultural communication than extroverted students because this personality hindered their attempts to engage in conversations with people who had different values, beliefs, and behaviours, as M3 stated:

“I think I am a little bit introverted, especially when I meet some strangers for the first time, I may not dare to talk to them or whatever, or I will act a little bit reserved.” (M3)

Previous research has shown that personality differences can lead to different levels of progress in intercultural competence. Some personality traits, such as optimism, openness, and extroversion, may be associated with higher levels of intercultural competence (Caligiuri, 2000). The present study found that, unlike extroverted students, introverted students were not proactive in intercultural communication, which resulted in a loss of opportunities to interact with locals, thus affected their development of intercultural competence to some extent.

6. Conclusion

This study examined the impact of a STSA program on the development of intercultural communication competence of Chinese students and found significant improvement in students' intercultural competence before and after the STSA experience. Among the six aspects of ICC the most significant change appeared on the improvement of students' knowledge of the foreign culture. In contrast, students' attitudes to intercultural competence did not show noticeable improvement as expected. In the qualitative examination, the study tried to explore the possible reasons underpinning the development.

Examining how STSA programs affect students' intercultural competence bears significant implications for both students and program designers. For students, the results of the study may help them better understand the benefits of short-term exchange programs in developing intercultural competence and the challenges they might encounter when interacting with people from different countries and cultural backgrounds in the study-abroad context. Besides, the study also examined the typical characteristics of the participants who performed well in intercultural communication. This can provide role models for students to follow when they set out to study in foreign countries. For study-abroad program designers, they could offer students courses about intercultural training before the students embark on the study-abroad journey, aiming at enriching their cultural knowledge, building positive attitudes towards intercultural communication, as well as mastering some essential intercultural communication skills.

Although this study used both questionnaire and interview data to examine the development in Chinese students' intercultural competence in a STSA program, it has a number of limitations. First, further consideration needs to refine the assessment on students' intercultural competence because there are potential defects in the form of self-report in indirect evaluation. Doubt about the ability of individuals to demonstrate valid and accurate self-evaluation is the reason why some researchers question whether the data results of indirect evaluation tools can be trusted (Arasaratnam and Doerfel, 2005). Besides, this research only examined the ICC development of 35 students in one study-abroad program. Larger samples from more programs are necessary to validate the findings of this study.

Conflict of interest

No potential conflict of interest was reported by the authors.

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References

- Allport GW (1954) *The Nature of Prejudice*. Reading, MA: Addison-Wesley.
- Arasaratnam LA and Doerfel ML (2005) Intercultural communication competence: Identifying key components from multicultural perspectives. *International Journal of Intercultural Relations* 29: 137–163.

- Arasaratnam LA (2015) Research in intercultural communication: Reviewing the past decade. *Journal of International & Intercultural Communication* 8(4): 290–310.
- Arasaratnam LA (2016) Intercultural competence. In: Nussbaum J (ed.) *Oxford Research Encyclopedia of Communication*. Oxford: Oxford University Press, pp.1–23.
- Behrnd V and Porzelt S (2012) Intercultural competence and training outcomes of students with experiences abroad. *International Journal of Intercultural Relations* 36(2): 213–223.
- Byram M (1997) *Teaching and Assessing Intercultural Communicative Competence*. Clevedon, UK: Multilingual.
- Caligiuri PM (2000) The big five personality characteristics as predictors of expatriate's desire to terminate the assignment and supervisor-rated performance. *Personnel Psychology* 53(1): 67–88.
- Carrell PL (1984) Inferencing in ESL: Presuppositions and implications of active and implicative predicates. *Language Learning* 34: 1–21.
- Cui D (2013) A study on the changes of English proficiencies acquired by Chinese students' short-term learning experiences in Canada. PhD Thesis, Shanghai International Studies University, China.
- Czerwionka L, Artamonova T, and Barbosa M (2015) Intercultural knowledge development: Evidence from student interviews during short-term study abroad. *International Journal of Intercultural Relations* 49: 80–99.
- Deardorff DK (2004) *The Identification and Assessment of Intercultural Competence as a Student Outcome of International Education at Institutions of Higher Education in the United States*. Raleigh: North Carolina State University.
- Deardorff DK (2006) Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education* 10(3): 241–266.
- Deardorff D (2009) Implementing intercultural competence assessment. In: Deardorff E (ed.) *The SAGE Handbook of Intercultural Competence*. Thousand Oaks: Sage, pp.477–491.
- Dwyer MM (2004) More is better: The impact of study abroad program duration. *Frontiers: The Interdisciplinary Journal of Study Abroad* 10: 151–164.
- Fantini AE (2000) A central concern: Developing intercultural competence. *SIT Occasional Papers Series*, 1: 25–42. Brattleboro: School for International Training.
- Fantini AE (2006) *Assessment Tools of Intercultural Competence* [online]. Brattleboro, VT: School for International Training. Available at: http://www.sit.edu/publications/docs/feil_appendix.pdf (Accessed: 10 June 2019).
- Fredricks JA, Blumenfeld PC, and Paris AH (2004) School engagement: Potential of the concept, state of the evidence. *Review of Educational Research* 74(1): 59–109.
- Gregersen-Herman J (2015) The impact of exposure to diversity in the international university environment and the development of intercultural competence in students. In: *The European Higher Education Area*. Cham: Springer, pp.73–92.
- Hammer MR, Bennett MJ, and Wiseman R (2003) Measuring intercultural sensitivity: The intercultural development inventory. *International Journal of Intercultural Relations* 27(4): 421–443.
- Hismanoglu M (2011) An investigation of ELT students' intercultural communicative competence in relation to linguistic proficiency, overseas experience and formal instruction. *International Journal of Intercultural Relations* 35(6): 805–817.
- Jiang M (2012) *Xichao yu Xinchao [Tides from the West & the Renaissance]*. Beijing: People's Publishing House.
- Kolb DA (1984) *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs: Prentice-Hall.
- Koike DA (1996) Transfer of pragmatic competence and suggestions in Spanish foreign language learning. In: Gass SM and Neu J (eds.) *Speech Acts across Cultures: Challenges to Communication in a Second Language*. New York: Mouton de Gruyter, pp.257–281.
- Liu B (2004) An interface study of intercultural communicative competence and language testing. Unpublished Thesis, Shanghai International Studies University, China.
- Lu X and Li X (2012) Comparison of the intercultural sensitivity of Chinese postgraduates at home and aboard. *Academic Exploration* 9: 105–107.

- Lustig MW and Koester J (2003) *Intercultural Competence: Interpersonal Communication across Cultures* (4th edn.). Boston: Allyn and Bacon.
- Medina-Lopez-Portillo A (2004) Intercultural learning assessment: The link between program duration and the development of intercultural sensitivity. *Frontiers: The Interdisciplinary Journal of Study Abroad* 10: 179–200.
- Olson CL and Kroeger KR (2001) Global competency and intercultural sensitivity. *Journal of Studies in International Education* 5: 116–137.
- Orlandi M (ed.) (1992) *Cultural Competence for Evaluators Working with Ethnic Minority Communities: A Guide for Alcohol and Other Drug Abuse Prevention Practitioners*. Rockville: Office for Substance Abuse Prevention, Cultural Competence Series 1.
- Peng R, Wu W, and Fan W (2015) A comprehensive evaluation of Chinese college students' intercultural competence. *International Journal of Intercultural Relations* 47: 143–157.
- Pusch M (1994) The chameleon capacity. In: Lambert RD (ed.) *Educational Exchange and Global Competence*. New York: Council on International Educational Exchange, pp.205–210.
- Rosen R, Digh P, Singer M, et al. (2000) *Global Literacies: Lessons on Business Leadership and National Cultures*. New York: Simon and Schuster.
- Schuetze U (2008) Exchanging second language messages online: Developing an intercultural communicative competence? *Foreign Language Annals* 41(4): 660–673.
- Spitzberg BH and Changnon G (2009) Conceptualizing intercultural competence. In: Deardorff D (ed.) *The Sage Handbook of Intercultural Competence*. Thousand Oaks: Sage, pp.2–52.
- Wang YA and Kulich SJ (2015) Does context count? Developing and assessing intercultural competence through an interview-and model-based domestic course design in China. *International Journal of Intercultural Relations* 48: 38–57.
- Wang Z (1990) An analysis of data from a socio-cultural test in China. *Foreign Language Teaching and Research* 4: 32–36.
- Watson JR and Wolfel R (2015) The intersection of language and culture in study abroad: Assessment and analysis of study abroad outcomes. *Frontiers: The Interdisciplinary Journal of Study Abroad* 25: 57–72.
- Wiseman RL (2001) *Intercultural Communication Competence* [online]. Available at: <http://commfaculty.cullerton.edu/rwiseman/ICCCpaper.htm>.
- Wiseman RL, Hammer MR, and Nishida H (1989) Predictors of intercultural communication competence. *International Journal of Intercultural Relations* 13: 349–370.
- Wu W (2013) A comprehensive evaluation on Chinese college students' intercultural competence. PhD Thesis, Huazhong University of Science & Technology, China.