Taiwanese EFL learners' English proficiency, intercultural competence, and willingness to communicate

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Abstract

Although issues on intercultural competence and willingness to communicate have been largely studied, most studies focused on learners' personality traits, motivation, or communication apprehension as affected factors. The significant relationship between intercultural competence, willingness to communicate, and learners' English proficiency was less addressed. This study hereby examined the relationship of these three. It drew on quantitative research by employing a questionnaire to 409 Taiwanese college freshmen studying at one Taiwanese university (216 high- & 193 low-English-proficiency). A printed questionnaire of fifty-two items with the use of the five-point Likert-scale was adopted. The result showed significant differences between high- and low-proficiency students' intercultural competence and willingness to communicate. Students of high English proficiency showed more intercultural competence and willingness to communicate. They demonstrated sophistication in operating their skills of intercultural competence and were more confident in communicating with people of different cultures in English. This study also found that learners' growth of intercultural competence and willingness to communicate were interconnected per se; this interconnectedness was evident on both high- and low-proficiency groups. This study adds new threads to relevant studies and suggests that language teachers seek ways to enhance their students' intercultural competence and willingness to communicate.

Keywords: intercultural communication skills; intercultural competence; Taiwanese EFL learners; willingness to communicate

Introduction

With the accelerated pace of globalization, the number of people choosing to study, work, or live abroad has increased. Meanwhile, the chance of communicating/interacting with people of different cultural & linguistic backgrounds is also arising. To meet the increasing need of intercultural communication, related issues have aroused researchers' interest. Many researchers have been paying close attention to topics revolving around EFL/ESL learners' intercultural awareness (henceforth IC) and their willingness to communicate (henceforth WTC) since these two are directly related to effective intercultural communication (Atay et al., 2009; Yashima et al., 2004).

According to Bennett et al. (2003), IC refers to one's attempts to properly behave in varied cultural settings, to appreciate other cultures, and to overcome conflicts caused by ethnocentrism. It is often treated as an instructional objective (Sercu, 2010, p. 17) because it not only shows one's ability to communicate across cultural borders (Byram, 1997, p. 7) but also it is existent in each cultural context (Deardorff, 2006). Deardorff (2006) developed an IC model, within which four key dimensions were proposed (i.e., "attitudes," "knowledge and skills," "internal outcomes," and "external outcomes"). This model has been widely applied to different cultural and classroom contexts (Dervin, 2010; Holmes, 2012; Moloney, 2009; Morley & Cerdin., 2010; Sinicrope et al., 2007; Perry & Southwell, 2011).

Hismanoglu (2011) concluded the essential role of English language proficiency in EFL/ESL learners' IC development by claiming that students of higher English proficiency, compared with lower ones, possessed higher IC and could respond more properly in intercultural communication. Atay et al. (2009) further suggested that (1) effective mechanisms should be developed for assessing EFL/ESL students' IC; (2) enhancing students' IC should be included in the curriculum & instruction.

With respect to WTC, it means one's readiness to generate conversations with others if the chance is given (MacIntyre et al., 1998). WTC has been widely used to assess students' linguistic performance or learning motivation. Learners' WTC is often believed to be associated with their personality traits; many prior studies thus highlighted learners' personality traits, learning motivation, and language proficiency as WTC's affected factors (Baker & MacIntyre, 2000; Ghonsooly et al., 2012; MacIntyre & Charos, 1996; MacIntyre et al., 1998; Mahdi, 2014; McCrae & Costa, 2004; Oz, 2014; Rostami et al., 2016; Takac & Pozega, 2011; Tan & Phairot, 2018). For example, Costa and McCrae (1992) identified five WTC-related personality traits (i.e., "extraversion," "agreeableness," "conscientiousness," "neuroticism," and "openness to experience"). MacIntyre and Charos (1996), drawing on Costa and McCrae's personality traits model, proposed that there exists a significant relationship between learners' personality traits and WTC. Some researchers even went further by incorporating learners' WTC, personality traits, and English proficiency into investigation and also found a significant relationship among the three (Khudobina et al., 2019).

Nevertheless, opposite to the significant relationship found on WTC and personality traits, those examining the relationship between second language learners' WTC and learning motivation showed a contrast (Mutlouglu, 2016). For example, Peng (2007) found that college level second language learners' integrative motivation played a minor role in their WTC. Similarly, Yashima et al. (2004) also stated that second language learners' integrative motivation was not a strong predictor variable of their WTC if there was a lack of communication opportunities in daily life settings.

As for studies on the relationship between EFL/ESL learners' WTC and English language proficiency, the majority concluded a significant relationship. For example, Rostami et al. (2016) found that students of high English proficiency showed more WTC. This finding is in accordance with Tan and Phairot's (2018) study that learners' target language proficiency as an affected factor far outweighs their age influence in terms of WTC. Nevertheless, some studies highlighting certain culturally-specific contexts still had varied results. For instance, Alemi's et al. (2011) examination of the impact of language anxiety and English language proficiency on Iranian college students' WTC in English found that students of higher English proficiency showed less WTC outside the classroom setting. Bashosh's et al. study (2013) on Iranian students learning English also had similar finding. This has paved the way for the need of further investigation. More specifically, exploring how English language learners' IC,

WTC, and English language proficiency affect each other in different physical and cultural settings is important.

As previously stated, prior IC/WTC studies tended to focus on the identification of affected factors (e.g., ranging from learners' motivation, aptitude, strategies, personality, to working memory) (Mahdi, 2004; Oz et al., 2015; Yashima et al., 2004), less research focus is placed on the relationship of IC, WTC, and English language proficiency. This study considers it significant to investigate how these variables are situated in varied culturally-specific settings. Of particular note is the need of knowing (a) the significant relationship between IC and WTC; (b) the influence of EFL/ESL learners' English language proficiency on these variables. In light of this, the present study investigated the relationship underlying EFL college freshmen's IC, WTC, and English language proficiency. The study was shaped by the following research questions:

(1) What are the students' self-rated degrees of intercultural competence and willingness to communicate?
(2) Is there significant difference between high- and low-English-proficiency students' intercultural competence and willingness to communicate?
(3) Is there a significant relationship between the students' intercultural competence and willingness to communicate? If so, does such relationship vary with their English proficiency levels?

Method

Research design

The present study drew on a quantitative research. It adopted the questionnaire that featured the use of printed questionnaires as the instrument. The use of questionnaires has several advantages. It is a convenient, efficient, and straightforward way to maximize the understanding of the subject matter. According to Taherdoost (2016), using questionnaires is "a reliable means of gathering feedback" (p. 38), for questionnaires can generate "effective and accurate data" (p. 38). The questionnaire consisted of two sets (i.e., IC and WTC) and was distributed to college freshmen at one comprehensive private university in Taiwan. Additionally, expert review on the questionnaires was applied. Two professor-level experts specializing in TEFL were invited to review the questionnaires. There were totally fifty-two items in the questionnaire, including thirty-four IC-related items and eighteen WTC-related items.

A pilot study was also conducted to gain reliability and validity of the questionnaire. The data were analyzed by SPSS version 15.0; the result showed high reliability with alpha .927 for IC and .962 for WTC.

Participants

The research participants were 409 (N=409) college freshmen taking their Freshmen English courses at a private university in central Taiwan. Upon entering this school for study, all the freshmen students were required to take the Freshman English Placement Test (FEPT) administered by the school's English language center. Those whose scores were higher than 80 points were categorized as high-English-proficiency and would be arranged into advanced-level English classes; those whose scores were lower than 60 points were considered low-English-proficiency and would attend basic-level classes. There were three levels of Freshmen English classes, including the advanced, the intermediate, and the basic level. The participants were recruited from sixteen classes: eight advanced-level classes and eight basic-level classes. Intermediate-level classes were excluded since this study highlighted the comparison between high- and low-proficiency groups. These sixteen classes were randomly selected and students of these classes agreed to participate voluntarily in this study. Table 1 shows the participants' demographic information.

Table 1. Participants' demographic information

Item	Categories	Frequencies (%)
Level of proficiency	High level	52.8
	Low level	47.2
Experience of living abroad	Never	95.6
	Above 1 year	4.
	1-3 years	.2
	Above 3 years	.0
Time to start learning English	Before entering elementary school	40.6
	After entering elementary school	58.7
	After entering junior high school	.7

Measurement and variables

In line with the research questions, this study measured the high- and low English-proficiency participants' IC and WTC. An independent variable – the participants' English proficiency level – was used to examine the significant differences of their IC and WTC. Their IC was used for predicting their WTC, through which this study examined the significance between the two. To provide readers with a better understanding of the variables and the proportionate measurement of the research questions, figures are used. Figure 1 shows the variables of research questions 1 and 2 and Figure 2 shows the variables of research question 3.
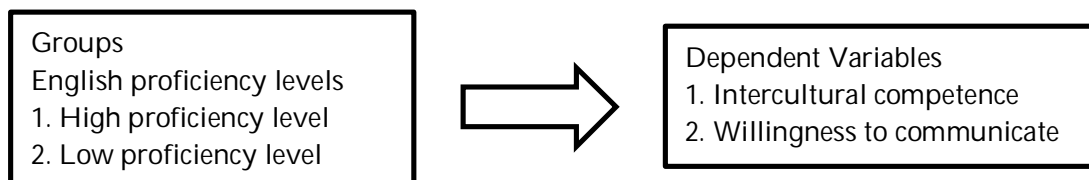
Groups		Dependent Variables
English proficiency levels	⟹	1. Intercultural competence
1. High proficiency level		2. Willingness to communicate
2. Low proficiency level		

Figure 1. Variables in research question 1 & 2

| Predictor Variable | | Dependent Variable |
| Intercultural competence | ⟹ | Willingness to communicate |

⟰

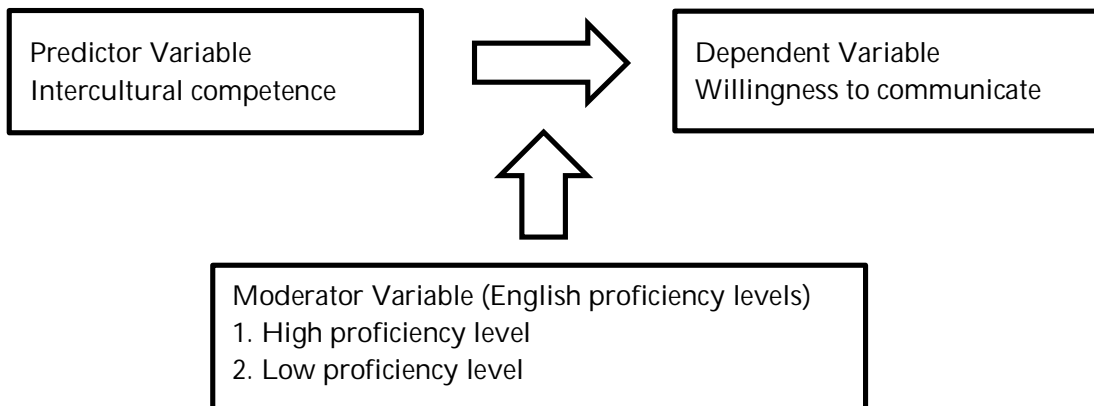| Moderator Variable (English proficiency levels) |
| 1. High proficiency level |
| 2. Low proficiency level |

Figure 2. Variables in research question 3

Research instrument

The questionnaires served as the research instrument in this study and was validated via expert judgement. As previously stated, the questionnaire was divided into two sets (i.e., IC questionnaire and WTC questionnaire). The IC questionnaire, inspired by Deardorff's (2006) and Fantini's (2009) studies, consisted of eleven items revolving around the participants' knowledge of

cultural differences (Deardorff, 2006; Fantini, 2009), thirteen items around their attitudes towards cultural differences such as respect, openness, and curiosity (Deardorff, 2006; Fantini, 2009), and ten items around their skills in identifying/interpreting cultural differences (Deardorff, 2006; Fantini, 2009). These three IC subscales are explained further.

First, the "knowledge" (see Table 2 items 1-11) in this study refers to the deep understanding of other cultures, including the contexts, the influence, and the world view. This study held that one's knowledge of foreign cultures is important. In terms of the research context (i.e., Taiwan), it is generally understood as a friendly place to foreigners. Therefore, this variable in the IC questionnaire was aimed for seeing the participants' interest in knowing foreign cultures.

Second, the "attitudes" (see Table 2 items 12-24) in this study refers to (1) one's readiness to value other cultures, (2) one's curiosity to know/learn foreign cultures, and (3) one's openness toward foreign cultures. This variable is aimed for knowing the extent to which the participants were ready to value foreign cultures or to tolerate the ambiguity in intercultural communication.

Third, the "skills" (see Table 2 items 25-34) in this study refers to one's ability to listen, observe, evaluate, and interpret the differences between his/her home culture and foreign culture(s). This variable is aimed for knowing the participants' adaptability when they face cultural shock.

The WTC questionnaire followed Mahmoodi's (2014) two subscales of WTC and contained eighteen items, ten of which addressed the situation inside the classrooms and another eight outside the classrooms. The two sub-scales of WTC in English refer to the following.

First, inside classrooms (see Table 5): this variable measured the participants' WTC in English in the classrooms, including their WTC with their teachers, classmates, or guest speakers.

Second, outside classrooms (see Table 6): this variable measured the participants' WTC in English outside classrooms, mainly their encounters with foreigners at various public places.

Data collection

A 5-point Likert scale format was used in both the IC and WTC questionnaire. The printed questionnaires were distributed to the participants in the spring semester of 2020 during their class time. Prior to answering the questionnaire, the researcher explained the purpose of this study and the general concept of

the questionnaires. To ensure that the participants answered the questionnaires fully, the researcher reminded them of a final check. The research participants took averagely 15 minutes to complete the questionnaires.

Table 2. Frequencies of intercultural competence knowledge items

No	Item Description	1	2	3	4	5	$\bar{x}$	SD
1	I know there are different cultures in this world.	.2	.5	2.9	16.1	80.2	4.76	.550
6	I know people from other cultures may have different diets or eating habits.	.2	.2	2.0	24.9	72.6	4.69	.544
5	I know people from other cultures may have different ways of greetings.	.5	.5	4.9	28.4	65.8	4.58	.656
4	I know people from different cultures may have different communication styles (e.g., direct versus indirect styles).	.5	0	6.8	33.5	59.2	4.51	.668
8.	I know the meaning of body language and their meanings may vary across cultures.	.2	.5	6.8	32.8	59.7	4.51	.668
2	I know the customs and the tradition practiced in other cultures (e.g., food, etiquette, festivals, etc.)	.5	.2	12.2	30.1	57.0	4.43	.751
3	I know the similarities and differences between other cultures and my home culture.	.2	.2	11.2	40.1	48.2	4.36	.707
11*	I do NOT know the similarities and differences between other cultures and my own culture.	50.4	39.9	6.6	2.0	1.2	4.36	.793
10	I know to say/do things properly in different cultural settings.	1.0	1.2	23.2	33.0	41.6	4.13	.877
7	I know different religious or cultural beliefs (e.g., the Ten Commandments in Christianity and the Five Pillars of Islam for Moslems).	1.2	4.4	23.5	30.6	40.3	4.04	.962
9	I know how to properly socialize with people of different cultures.	1.5	3.2	29.3	30.8	35.2	3.95	.951
	Mean						4.39	

Note: a. 1 = not very true of me at all; 2 = not true of me at all; 3 = somewhat true of me; 4 = true of me; 5 = very true of me. b. percentage rounded to the nearest whole number.
* Negative statements

Data analysis procedures

Multiple statistical tests were administered via the SPSS version 15.0. To interpret the research participants' self-rated degrees of IC and WTC, frequencies and descriptive analysis were applied. To see the significance between high- and low-English-proficiency group's IC and WTC, an independent sample t-test was applied. To see the significant difference between IC, WTC, and English language proficiency, the simple regression was employed, including the Levene's test for equality of variance (sig .076 & .372). The normality test was not applied in the present study because according to D'Agostino, Belanger, & D'Agostino (1986), the t-test is strong enough to validate the result. The participants' answers were arranged in a descending order of the average ($\overline{x}$)

Findings

Self-rated intercultural competence

In terms of the participants' self-rated IC, the data showed that a large percentage of the participants were culturally conscious. They were aware of the importance of communicating & socializing with people of other cultures if the opportunity was given. The overall mean showed a high degree of self-rated intercultural competence. Their knowledge subscale showed their cultural awareness and open attitudes towards the internal and external outcomes of other cultures.

Table 2 presents the participants' response to the "knowledge items." The mean of the knowledge-related items is 4.39. Amid these items, item 1 shows the highest average ($\overline{x}$ = 4.76). 99.2% of the participants were culturally conscious, and only .8% of the participants were unaware of cultural differences.

Table 3 presents the frequencies of the participants' responses to attitude-related IC items. Item 18 has the highest mean ($\overline{x}$ = 4.25), with the lowest SD (SD=.668). Generally speaking, the participants considered it important to learn to socialize with people of other cultures.

Table 4 presents the frequencies of the participants' IC skills. Item number 27 showed the highest mean ($\overline{x}$ = 3.81), with the lowest SD (SD= .804) among all. 95.8% of the participants were aware of developing strategies to interact with people of different cultural backgrounds. In contrast to item 27, item 25 shows the lowest means ($\overline{x}$= 2.87) with SD = 1.03.

Table 3. Frequencies of intercultural competence attitude items

No	Item description	1	2	3	4	5	$\bar{x}$	SD
18	I think it is important to learn to socialize with people of other cultures.	.5	.5	5.4	34.2	59.4	4.52	.668
17	I think it is important to know the differences between other cultures and my own culture.	.5	.5	6.6	37.4	55.0	4.46	.685
21	I am interested in experiencing foreign cultures (e.g., food, lifestyles, festivals, etc.).	.2	.5	11.5	30.3	57.5	4.44	.732
15	I can accept the differences between other cultures and my home culture.	.7	.2	8.6	37.7	52.8	4.42	.720
19	I am positive that I can benefit from learning about other cultures (e.g., religious beliefs, social norms, family values, etc.).	.5	.7	9.0	38.4	51.3	4.39	.724
24*	I do NOT like to be around or talk to people of other cultures.	48.4	42.8	6.1	2.4	.2	4.37	.729
23*	I am NOT interested in learning about other cultures (e.g., customs, traditions, religions, etc.).	48.7	40.3	7.6	1.7	1.7	4.33	.825
20	I am interested in making friends with people of different cultural backgrounds.	.5	1.5	14.7	32.5	50.9	4.32	.811
16	I agree with the saying that "when in Rome, do as Romans do."	1.2	.7	11.7	39.1	47.2	4.30	.799
13	I am open-minded toward other cultures (e.g., customs, traditions, religions, etc.).	.5	1.2	12.5	42.5	43.3	4.27	.761
22	I am interested in attending cultural or social events or other group meetings with people from other cultures.	.5	2.4	15.4	34.0	47.7	4.26	.841
14	I am open-minded toward opinions given by people from other cultures.	1.7	1.5	13.0	43.8	40.1	4.19	.842
12	I am interested in learning about other cultures (e.g., customs, traditions, religions, etc.).	1.0	2.9	19.1	39.1	37.9	4.10	.876

Mean	4.34

Note: a. 1 = not very true of me at all, 2 = not true of me at all, 3 = somewhat true of me, 4 = true of me, 5 = very true of me. b. percentage rounded to nearest whole number. * Negative statements

Self-rated willingness to communicate

In terms of the participants' WTC, as shown in Table 5, the mean of all items related to the participants' WTC in the classroom settings is 3.40. Among these items, item 44 shows the highest average ($\bar{x}$= 3.92). 90.5% of participants stated that they were willing to communicate in English with their teachers or peers; only 9.5% were not willing to communicate in English. 71.6% of them were willing to communicate with guest speakers in English.

Table 6 presents the participants' responses to WTC outside classroom settings in percentage, X-bar, and standard deviation (SD). The mean is 3.3. Item 52 shows the highest average ($\bar{x}$= 3.97), with the standard deviation (SD= 1.02). 84.3% of the participants were willing to talk or socialize with foreigners on campus, on the street, in the pub or other places. 54.4% of them (shown in item 45) were willing to take initiative to communicate in English when necessary. Moreover, item 49 shows the highest standard deviation (SD= 1.14), implying that 70.9% of the participants were willing to interview foreigners in English on the street if an interview opportunity was given.

High versus low English proficiency learners

To examine the difference between high- and low-English-proficiency group's IC & WTC in both the in-class and outside-class settings, an independent sample t-test was conducted. It is found that students of high English proficiency, compared with low proficiency ones, demonstrated more skills in operating their IC and WTC.

As shown in Table 7, the t-value of overall IC is 3.21 (p< .01), the knowledge t-value is 2.17 (p> .01), the attitudes t-value is 1.19 (p> .01), and the skills t-value is 6.18 (p< .01). The total score of all items shows the significance between the two groups, meaning that the variation exists between high and low proficiency students' IC. The total score of the skills shows the significance that students of higher English proficiency were more sophisticated in operating their IC skills than the ones whose English proficiency was low.

Table 4. Frequencies of intercultural competence skill items

No	Item description	1	2	3	4	5	x̄	SD
27	I would make adjustments in order to interact with people of different cultural backgrounds.	.2	3.9	30.1	45.7	20.0	3.81	.804
28	I know how to use words properly and behave properly in different cultural settings.	.7	3.9	33.0	43.8	18.6	3.76	.825
33	I use body language to help me communicate with people of other cultures.	.2	5.9	35.2	41.8	16.9	3.69	.827
34*	I do NOT know how to meet or socialize with people from other cultures.	20.8	40.1	28.4	8.8	2.0	3.69	.962
26	I demonstrate flexibility when interacting with people of different cultural backgrounds (e.g., dressing style or eating habits).	1.2	10.8	38.6	33.7	15.6	3.51	.926
29	I can appropriately greet people of other cultures in English.	7.3	17.8	41.8	22.7	10.3	3.11	1.05[b]
30	I can appropriately socialize with people of other cultures in English.	7.6	22.7	40.3	18.8	10.5	3.02	1.07[b]
31	When being around with people of other cultures, I can keep interacting with them without communication failure.	5.4	24.2	43.0	19.3	8.1	3.00	.988
32	I can introduce my own culture in English to people of other cultures.	10.5	26.7	33.3	21.0	8.6	2.90	1.11[b]
25	I can appropriately interact in English with people of different cultural backgrounds.	9.5	24.7	41.8	16.9	7.1	2.87	1.03
	Mean						3.34	

Note: a. 1 = not very true of me at all, 2 = not true of me at all, 3 = somewhat true of me, 4 = true of me, 5 = very true of me. b. percentage rounded to nearest whole number. * Negative statements

Table 5. Frequencies of willingness to communicate in the class

No	Item Description	1	2	3	4	5	$\bar{x}$	SD
44*	I am NOT willing to talk/communicate with my teacher or classmates in English.	29.6	45.0	15.9	6.8	2.7	3.92	.983
35	I am willing to talk/communicate with my teacher in English	2.0	8.1	32.5	36.2	21.3	3.67	.964
38	I am willing to answer my teacher's questions in English (e.g., expressing my opinions, sharing my personal experience, etc.).	2.0	14.4	35.9	30.1	17.6	3.47	1.01[b]
36	I am willing to discuss class materials or other related issues with my teacher in English.	2.4	15.4	36.2	29.3	16.6	3.42	1.02[b]
43	I am willing to practice conversations or other speaking activities with my classmates in English.	3.9	13.4	36.7	30.1	15.9	3.41	1.03[b]
37	I am willing to ask my teacher questions in English for instruction or clarification when I am confused at the classroom activity or the assignment.	2.7	19.6	37.4	24.7	15.6	3.31	1.04
40	I am willing to talk/communicate with my classmates in English.	4.2	18.3	36.2	25.7	15.6	3.30	1.07[b]
41	I am willing to discuss class materials or other related issues with my classmates in English.	5.6	19.6	37.2	24.9	12.7	3.20	1.07[b]
42	I am willing to discuss the course assignments, tests, or other classwork with my classmates in English.	6.1	20.8	36.9	24.4	11.7	3.15	1.07[b]
39	If a guest speaker is invited for English speech, I am willing to talk/communicate with the guest speaker in English.	5.6	22.7	36.9	22.5	12.2	3.13	1.07[b]
	Mean						3.40	

Note: a. 1 = not very true of me at all; 2 = not true of me at all; 3 = somewhat true of me; 4 = true of me; 5 = very true of me. b. percentage rounded to nearest whole number. * Negative statements

Table 6. Frequencies of willingness to communicate outside classroom settings

No	Item Description	1	2	3	4	5	$\bar{x}$	SD
52*	If coming across foreigners on campus, in the street, in the pub or other places, I am <u>NOT</u> willing to talk or socialize with them in English.	17.8	29.1	37.4	12.0	3.7	3.97	1.02[b]
48	If foreign strangers ask me directions, I am willing to help them in English.	2.7	5.6	35.5	30.6	25.7	3.71	.998
50	If I am given opportunity to participate in international activities, I am willing to greet foreign participants in English.	3.7	12.2	35.0	31.3	17.8	3.47	1.04[b]
51	If I am given opportunity to participate in international activities, I am willing to introduce my home culture in English to people from other cultures.	3.7	12.0	37.4	29.1	17.8	3.45	1.03[b]
47	If coming across foreigners on campus, in the street, in the pub or other places, I am willing to talk or socialize with them in English.	5.6	19.1	38.4	22.2	14.7	3.21	1.09[b]
49	If I am given opportunity to interview foreigners in English on the street, I am willing to do it.	7.6	21.5	34.5	22.2	14.2	3.14	1.14[b]
46	After class, I take the initiative to practice English speaking activities assigned by my English teacher such as dialogues, role-play, play, etc.	9.3	35.2	33.7	15.2	6.6	2.75	1.04[b]
45	After class, I take the initiative to speak English with others or practice English oral ability on my own.	9.5	36.2	35.5	12.5	6.4	2.7	1.02[b]
	Mean						3.3	

Note: a. 1 = not very true of me at all; 2 = not true of me at all; 3 = somewhat true of me; 4 = true of me; 5 = very true of me. b. percentage rounded to the nearest whole number.
* Negative statements

In terms of the means on the knowledge and the attitudes sections, there is slight difference between the high and low proficiency group (.01 and .07). The means of the skills section shows high-proficiency group's higher means. This implies high-English-proficiency learners' possession of stronger IC skills. Additionally, the standard deviations between the two groups also show that the total score of the high-proficiency group is more centralized than that of the low-proficiency group.

Table 7. t-test results of intercultural competence

Variable	Proficiency level	N	M	SD	t
Overall intercultural competence items	High proficiency	216	4.13	15.260	3.21**
	Low proficiency	193	3.97	17.421	
Knowledge	High proficiency	216	4.39	5.363	2.17
	Low proficiency	193	4.38	6.302	
Attitudes	High proficiency	216	4.36	6.148	1.19
	Low proficiency	193	4.29	7.581	
Skills	High proficiency	216	3.53	6.920	6.18**
	Low proficiency	193	3.11	6.973	

**Significant at $p < .0$

Table 8 shows the t-value of overall WTC, which is 9.103 ($p < 0.1$), in which the in-class t-value is 10.317 ($p < .01$) and the outside-class t-value is 6.612 ($p < .01$). The total score of all items shows the significance between participants of these two levels, meaning that there is significant difference in their WTC.

As shown in Table 8, the means of in-class and outside-class WTC of the two groups shows a distinct difference, which indicates that students of higher English proficiency were more eager to communicate in English regardless of which settings they were situated. The standard deviations between the two groups also show that the total score of high-proficiency group's WTC is more centralized than that of the low-proficiency group. High-proficiency learners, compared with lower-proficiency ones, demonstrate more willingness to communicate. This implies the vital role of one's target language proficiency in his/her willingness to communicate.

IC versus WTC versus English language proficiency

In response to the third research question, this study found a significant relationship between students' IC and WTC. This significant relationship is evident regardless of the students' English proficiency being high or low. In

other words, for both high- and low-English-proficiency students, their IC development led to their WTC development.

Table 8. t-test results of willingness to communicate

Variable	Proficiency level	N	M	SD	t
Overall willingness to communicate items	High proficiency	216	3.66	13.331	9.103**
	Low proficiency	193	2.99	13.418	
In-class items	High proficiency	216	3.76	7.652	10.317**
	Low proficiency	193	2.98	7.739	
Outside-class items	High proficiency	216	3.54	6.427	6.612**
	Low proficiency	193	3.02	6.407	

**Significant at p<.01

The following simple regression analysis includes the overall group (i.e., an inclusion of both groups), the high-proficiency group, and the low-proficiency group. The total score of IC was treated as the predictor in the analysis; meanwhile the total score of WTC was treated as the dependent variable. Table 9 shows the significant results of the two groups' IC and WTC. The constant of the overall group is -11.4; the high-proficiency group is -19.26; the low-proficiency group is 5.23.

The coefficient of the overall (including B and β) is significant (sig. <.01). Regardless of their English proficiency being high or low, the participants' WTC developed with their development of IC. This shows the interconnectedness between the two. In the overall group, the IC accounts 34.2% of the variance, meaning that 65.8% are not covered in the study. The IC accounts 48.3% in the high-proficiency group and 21.5% in the low-proficiency group. IC is therefore a predicative variable in predicting the participants' WTC.

Table 9. Regression model of intercultural competence and willingness to communicate

Group	Constant	Coefficient (B/β)	Adjusted R^2
Overall (N= 409)	-11.44	.520/.586**	.342
High-proficiency (N= 216)	-19.26	.607/.695**	.483
Low-proficiency (N= 193)	5.23	.360/.468**	.215

**Significant at p<.01

To sum up, the result showed significant differences between high- and low-proficiency students' IC and WTC. Students of high English proficiency showed more IC and WTC. Compared with low-English-proficiency students, high-proficiency ones showed more sophistication in operating their IC skills

and more confidence in communicating with people of varied cultural backgrounds in English. Additionally, this study also found that learners' growth of IC and WTC were interconnected per se; this interconnectedness was evident on both high- and low-proficiency groups. When one's IC got developed, his/her WTC also got developed.

Discussion

As stated earlier, a large percentage of the participants revealed their intercultural consciousness via self-rated IC. Their cultural awareness and open attitudes towards the internal and external outcomes of other cultures, in Deardorff's (2006) words, showed their "adaptability," "flexibility," "empathy," and "ethno-relative views." In line with the acceleration of the pace of globalization, one's development in IC and WTC seems to implicate his/her gains of access to success (e.g., career success, academic success) (Grubbs et al., 2009; Oranje & Smith 2017). Wallis and Steptoe's (2006) assertion that one's ability to well communicate with people of different cultures & languages is a key to career success implied the importance of IC/WTC development.

Next, students of high English proficiency, compared with low proficiency ones, demonstrated more skills in operating their IC and WTC. Their WTC in English was evident no matter they were in the classroom or not. This finding accords with prior studies (Guncavdi & Polat, 2016; Rostami et al., 2016; Alemi et al., 2013; Liu & Jackson, 2009) shows that one's target language proficiency plays a vital role in his/her communication attempts.

These findings shed light on some pedagogical issues. First, establishing opportunities for students to communicate/interact with people of different cultural backgrounds and directing them to appropriate ways of intercultural communication are an integral part in English language teaching. As shown that students of lower English proficiency seem to encounter more difficulties in communicating/interacting with people of different cultural backgrounds, this study hereby suggests language teachers seek ways to enhance their students' intercultural communication skills. This is important not only for students who are placed in basic-level English classes due to low English proficiency but also for large size classes where high-proficiency and low-proficiency students are mixed together. Classroom activities highlighting students' acquisition of intercultural communication skills may motivate both high- and low-proficiency students' willingness to communicate in English. Second, including students' outside-classroom-intercultural-experience as a

part of instruction paves the way for new trends in English language teaching, for such experience enhances their continuous development of IC, WTC, and English proficiency.

In conclusion, this study adds a new thread to WTC/IC studies by demonstrating a significant relationship between IC and WTC. One's IC development affects his/her WTC development regardless of his/her English language proficiency being high or low. The interconnectivity is evident. Moloney's (2009) assertion may well explain the occurrence of this: when one feels comfortable to face the culture of the target language, he/she is more likely to use the target language for communication.

Conclusion

The aim of the present study was to better understand high- and low-English proficiency Taiwanese college freshmen's IC, WTC, and the relationship of these variables. The findings showed that there exists a significant relationship between IC and WTC regardless of one's English proficiency being high or low. These findings indicate the significance of incorporating IC-related elements into ESL/EFL teaching for students' WTC enhancement. Some practical implications were highlighted in this study, including (1) the call for more intercultural communication opportunities in language classrooms; (2) the need of including students' outside-classroom-intercultural-experience in EFL/ESL curriculum & instruction.

This study has some limitations: First, this study was conducted in only one university; therefore, the findings are not generalizable to represent students of other schools. A wider selection of research subjects from different linguistic, academic, and cultural settings is suggested for future research. Second, there is a lack of an in-depth understanding of how the participants' IC and WTC were situated in daily life activities since the data were based on printed questionnaires only. It is worth mentioning that future researchers include other forms of qualitative data to see how IC and WTC are situated contextually. Of particular note is that this study emphasized only the significant relationship between variables. This study suggests that future researchers incorporate other quantitative methods (e.g., the Pearson correlation coefficient) for the investigation of the predictive relationship between these variables.

Disclosure statement

No potential conflict of interest was reported by the authors.

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