

# Differences in Interpersonal Communication Efficacy among Chinese and International Students: What are they and why do they matter?

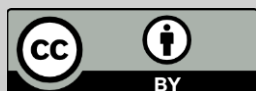
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## Abstract

*Within Chinese societies, as in western ones, interpersonal relationships, which can also be called social relations, are one of the most important needs for human beings. Within universities, Interpersonal Communication Efficacy (ICE) has been regarded as having a direct influence on the psychological health of undergraduate students. Based upon the theory of Bandura's self-efficacy and Xie Jing's ICE, this article compares the extent of ICE between domestic and international students in a Chinese university. The aim is to identify the similarities and differences between the two research groups, and the implications for the stakeholders (students, teachers, policy-makers, and researchers). A case study was conducted using a questionnaire survey. By employing the methods of quantitative analysis, the questionnaires of 390 respondents were analysed by using variance analysis of SPSS software. The findings of the study reveal that Chinese students are more likely to pay attention to interpersonal communication and are more interdependent than other international students. This implies the importance of teaching communication skills, improving interpersonal communication efficacy, and understanding teaching and learning across cultures within the ongoing internationalisation of education.*

**Keywords:** Self-efficacy, interpersonal communication efficacy, higher education, intercultural communication, Chinese universities, wellbeing

## Editor's Note

See **Errata** on p. 85 for corrections to text made October 2020.

## **Introduction**

The ability to establish close relationships with people is ranked as the second most important need for human beings, coming after physical necessities including eating, sleeping, drinking and security (**Boz, 2018**). According to the Research Starter's topic (**2018**), interpersonal relations refer to 'a close relationship between two or more individuals that can be defined by social commitments such as business or familial, as well as other factors'. While, the cultural understandings of 'interpersonal relationship' are different and crucial. The cultural orientation with regard to interpersonal communication within the Western countries is individualism whereas the emphasis on social relationships within Asian Chinese context is originated from the idealism of collectivism (**Yum, 1988**). As Yum explains, within the western context, 'each communicator is perceived to be a separate individual engaging in diverse communicative activities to maximize his/her own self-interest, usually by means of some form of persuasion' (**Yum, 1988: 376**). This paradigm of interpersonal communication in the West is criticized as psychological, goal-oriented, linear rather than social, process-oriented, and cyclical (**Rogers and Kincaid, 1981**). Likewise, individuals rather than groups are more likely to be referred as the unit of analysis. In contrast to the western paradigm, interpersonal communication in the Asian Chinese context is social, collective, and cyclical. Communication habits in the West are more likely to be outcome-oriented, while communication in China tends to be process-oriented (**Lin and Clair, 2007**). This means that in Chinese society, instead of only focusing on achieving a result, the atmosphere of the conversation and an approachable means of conducting communication between people become more important. Because of the importance of interpersonal relationships and communication, Chinese people focus on the social networking and its maintenance to engage with the society and define themselves (**Liden, 2012**). In this sense, interpersonal relationships, as defined by Confucius, refers to Wu-Lun's five principles: honesty between leaders and employers, filial piety between parents and children, alternate responsibilities between siblings, responsibilities between husband and wife, and trust between friends (**Hsieh, 2016**).

Besides information exchange, maintaining mental health is another function of interpersonal relationships (**Wang, 2014**). However, the problem of communication between college students has been pointed out by numerous scholars (e.g. **Sun, 2004; He, 1992**). Sun conducted the research into psychological consultation within colleges and universities in Shanghai, finding that 40.5 percent of the content of psychological consultation is related to interpersonal relationship, which ranks as the top psychological problem of current college students (**Sun, 2004**). A large-scale interpersonal relationship study was carried out within eight

universities in southwest of China and invited 620 college students to complete the SCL-90 scale questionnaire (He, 1992). The study shows that 48.6 percent of the respondents have obstacles in interpersonal communication to some extent. Thus, it is noted that the importance of researching interpersonal relationship efficacy should be addressed with the aim of helping to lessen the problem of mental health and communication obstacles for students. In regard to the field of education, it is worth pondering whether the interpersonal communication efficacy of students is in relation to teaching and learning for both teachers and students. It would be also beneficial for teaching across cultures to identify the differences of the Interpersonal Communication Efficacy (ICE) between domestic students and international students who study within the domestic university.

As an interdisciplinary study of education and psychology, the study is a transcendence of old paradigms, presenting transdisciplinary outcomes, that gives future researchers a suggestion for a new paradigm. The term, “interpersonal communication efficacy” has been defined in Mandarin for a decade (Xie, 2004). Much work remains to be done so as to review both the theoretical and empirical development of this term. The researcher makes a contribution to the global academia, by bringing the term into the English academic vocabulary, and making a connection for western scholars to conduct further research into this new research paradigm.

By crossing the discipline of education and psychology, the purpose of this article is to compare the extent of ICE between domestic and international students in a Chinese university and its influence variables. This has been done by identifying the similarities and differences between the two research groups within the same research context. The research questions addressed here are:

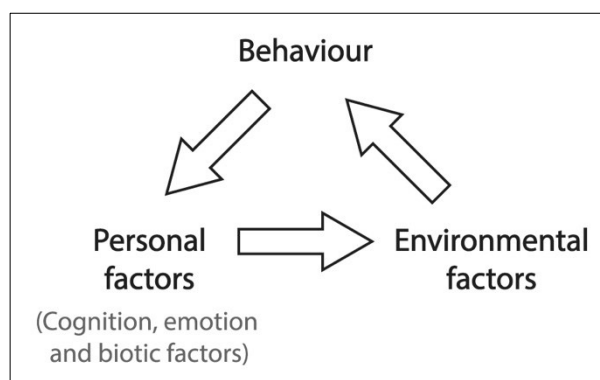
- RQ1: What are the differences in Interpersonal Communication Efficacy between Chinese and international students?
- RQ2: What are the implications for the stakeholders?

## **Literature Review**

### **Self-Efficacy**

The early stages of psychological theory and empirical studies tended to pay attention to either obtaining knowledge or observing reactions, but ignored the influence between each other (Bandura, 1977). However, it is important to consider mental mechanisms in order to combine both aspects and explore the reasons for these behaviours. During this time, Bandura brought the concept of self-efficacy into the field of psychology by presenting the concept of reciprocal determinism (*ibid*). This concept

relates to human behaviour which is decided by the mutual relations between the environment, personal cognition and some other factors (**fig 1**).



**Figure 1** Bandura's reciprocal determinism. Source: (**Bandura, 1986**)

According to Bandura, the three elements (**fig 1**) may influence each other in different sequences, and at different times (**Bandura, 1977**). Nevertheless, human's thoughts and beliefs are the most influential factors. Bandura pointed out this concept of self-efficacy, in particular, and revealed the power of consciousness in personal life - the belief in self-efficacy determines the human's goal, duration of exertion and the recovery capability when facing difficulty.

The benefits of having a high level of efficacy is summarized by Bandura as, 'an affirmative sense of efficacy contributes to psychological well-being as well as to performance accomplishments' (**Bandura, 1995: 12**). He explains that a student with high level of efficacy is more likely to have better school performance, stronger motivation and higher goals. As Wang writes, 'individuals with high levels of efficacy feel that they can control potential environmental threats to desired outcomes and consequently attend to environmental factors to manage them' (**Wang, 2014: 24**). Additionally, the improvement of efficacy can lower the level of anxiety, due to the greater willingness to solve problems and perceive themselves as having high ability (**Bandura, 1995**).

There have been numerous studies about self-efficacy and student learning (**Pajares, 1996; Chemers et al., 2001**). Even though, it should be noted that Bandura's model has been critiqued through many different lenses. The methodological problem of self-efficacy theory is pointed out by Tryon who suggests that the data 'could likely be accounted for by social contingencies operating within his highly structured behavioural approach situation' (**Tryon, 1981: 113**). William points out that the validity of self-efficacy theory might be decreased by the influence of the expected outcomes (**William, 2010**). The problem of its misuse in a wide variety of contexts, including education settings has also been mentioned by

Bandura himself and other scholars (**Bandura, 1986; Pajares, 1996; Feltzet al., 2008**). As Pajares wrote, the self-efficacy research conducted through general self-efficacy assessment seeks to measure the “confidence” through an omnibus instrument (**Pajares, 1996**). The global scores achieved through general self-efficacy assessment decontextualise the correspondence between behaviour and self-efficacy. In that case, researchers are well advised by Bandura to make a context-specific judgement (**Bandura, 1986**). Within the field of education, it is critical to conduct academic self-perception assessment without identifying criterial tasks, although self-efficacy assessment in academic domain has become common (**Pajares, 1996**). These problems mentioned by the scholars helped the researcher to design the questionnaire with the consideration of a task specific and context specific approach.

### **Interpersonal Communication Efficacy**

Interpersonal communication is the process of information exchange and emotion communication of people used by language signals or non-verbal signal in social activities. Its importance lies in the fact that human being cannot survive without society. Individuals live in a social group and establish distinct contact, of which interaction and relationship are built. Interpersonal communication is, thus, not only the bond by which interpersonal relationship are maintained and developed but the very foundation of certain social psychological phenomena such as public opinion, morale and fashion. It is also the requirement of individual's development. It is the behaviour of continual communication, idea dissemination and information absorption that enables human being to achieve individual development.

There are numerous studies of the impact of interpersonal communication on learners (**Al-mehsin, 2017; Eid, 2012; Yousuf, 2013; Yedidia et al., 2003**). The study of Al-mehsin aimed at examining the contribution of social skills and self-efficacy to the process of decision-making confirmed a positive correlation both between self-efficacy and the quality of decision-making and between social skills and the quality of decision-making among students in a Saudi Arabian university (**Al-mehsin, 2017**). A research was conducted in three American medical schools aiming to determine whether the interpersonal communication has an impact on medical students' competency and performance (**Yedidia et al., 2003**). The authors reported that the communication skills of medical students were found to be related to medical students' performance skills and outcomes of care, addressing the necessity of integrating the teaching of communication skills into the school curriculum. Cleland, Foster and Moffat conducted a study of medical students' attitudes towards communication skills learning at the University of Aberdeen in the UK and

confirmed greater differences in communication skills teaching by gender and year of study (Cleland et al., 2005).

The idea of interpersonal communication efficacy was firstly pointed out by Xie in 2004, but only within China (Xie, 2004). Xie as summarised six dimensions of Interpersonal Communication Efficacy which is the foundation of this research, by conducting a large-scale research of 700 college students in five Chinese universities in Taiyuan City (Xie, 2004). According to Xie, the concept of Interpersonal Communication Efficacy can be understood from six principal sources of information:

- Group efficacy refers to the perception on the individual ability when completing a specific collective task (Gibson, 1999);
- Self-image efficacy is defined as the perception on 'self', which may be linked to personal attributes, inclinations, abilities and powers (Harr'e, 1998).
- Altruistic Efficacy enables people to easily gain others trust and make friends;
- Communication Efficacy enables people to be highly confident and sensitive in the process of information exchange;
- 'Self-worth Efficacy refers to the personal judgement of one's self, a subjective evaluation and a sense of self-respect (Sheldon and colleagues cited in Wang, 2014);
- Sentiment-control Efficacy is a socialised feeling, which is 'raised by thought and intercourse out of its merely instinctive state and become properly human. It implies imagination, and the medium in which it chiefly lives is sympathetic contact with the minds of others' (Cooley, 1962: 177).

However, it should be noted that the research generalisation is hindered by the limited scope of the research context; it is only generalisable to certain education settings. Meanwhile, within the study, there is a research bias caused by the imbalanced proportions of the respondents in grades and disciplines. Regardless, the six dimensions mentioned by Xie can be utilised as a reference to conduct research on interpersonal communication efficacy.

Until 2019, there were 39 studies of the ICE in China, even though the term has not been translated into English. Based upon the theory of Xie, Wang conducted a comparative research into interpersonal communication efficacy between Chinese and American students, aiming to identify the differences of interpersonal communication between two research groups (Wang, 2014). 305 undergraduate students in three Chinese universities

in Shanghai and 293 American students in American universities participated the questionnaire survey. The study found that compared with Chinese students, American students are more likely to show self-interest in interpersonal communication. And because the data from the Chinese group was generated from only three Shanghai universities the findings may be skewed, and therefore, the findings are less generalisable to certain contexts. The theoretical definition of Interpersonal Communication Efficacy is given by Wang,

*“Interpersonal Communication Efficacy is a subjective judgement on whether an individual can reach a communication goal or not. It occurs before communication happens, and is an efficacy prediction on whether an individual can accomplish a goal or not” (Wang, 2014: 23).*

According to Wang, a high ICE enables students to have confidence in their ability to communicate interpersonally, and to finish tasks that are both skilled and challenging. On the contrary, low ICE will lead to a lack of confidence; hence, students are more likely to select highly simple tasks so as to make sure they succeed.

## **Methodology**

The university where this research took place is among the top 30 university in the Chinese university ranking system. Located in Shanghai, it is a comprehensive research university which covers the disciplines of art, science, medicine, business, agriculture among other disciplines. The university pays attention to the development of international communication and has established a wide and deep relationship with over 200 universities including in America, Germany, UK and France. It has become international partners with many of those universities, by which students and teachers are able to work on exchange.

The research focused on identifying the differences and similarities in Interpersonal Relationship Efficacy between domestic and foreign students in the research university. A case study was adopted by utilising the questionnaire survey (see **Appendix**). The questionnaire covers 36 questions with six dimensions of ICE including group efficacy, self-image efficacy, altruistic efficacy, communication efficacy, self-worth efficacy and sentiment-control efficacy; each dimension has six questions. The questions were asked in random order, and both positive and negative descriptions were used. For example, the questions of self-image efficacy, Questions No.21, No.24, No.25, questions of sentiment-control efficacy, Questions No.6, No.14, No.27, questions of self-worth efficacy, question No.16, No. 20, No.22, No.23 and question of altruistic efficacy, questions No.2, No.31, were described in a negative way, whereas the rest of the questions were described positively. A Likert-type format was utilised with

six scales for respondents to tick, comprising numbers from one to six. Bigger numbers were more likely to be ticked when the description of the questions match with the perception on the behaviours and abilities of respondents.

Nationality	Male	Female	Respondents in Total	Education
China	96	144	240	Undergraduate
International	68	82	150	Undergraduate

*Table 1 Demographic information of the respondents.*

	Category	Total	Percent
<b>Gender</b>	Male	212	54.4%
	Female	178	45.6%
<b>Discipline</b>	Science	148	37.9%
	Humanities	46	11.8%
	Arts	46	11.8%
	Institute of International Education	150	38.5%
<b>Level</b>	Year 1	102	26.2%
	Year 2	65	16.67%
	Year 3	98	25.1%
	Year 4	125	32.1%
<b>Nationality</b>	Chinese	240	61.5%
	International	150	38.5%
<b>Total</b>		390	100%

*Table 2 Overall sample description.*

By using random sampling, questionnaires were hand out to both Chinese students and international students in May 2014. The respondents were all undergraduate students and mainly came from the disciplines of Science, Humanities and Arts. 240 Chinese students (F=144; M=96) responded to the questionnaires, whereas 150 international respondents (F=82; M=68) coming from the institute of international education completed it (**Table 1 and 2**). The response rates of Chinese and foreign



students were 80 percent and 73.5 percent respectively. Data was analysed using variance analysis of SPSS.

## Findings and Discussion

### No Remarkable Difference of ICE in Gender

Variance analysis was utilised to examine the difference in Interpersonal Communication Efficacy between male and female respondents. According to Table 3, the sig. (standing for significance level) is 0.987, showing that regarding ICE, there was no remarkable difference between male and female respondents. As for the results of ICE of male and female respondents, any differences are negligible. However, this is not aligned with the study of Cleland, Foster and Moffat; as they argue, female students are more likely to consider their communication skills lower than those of male students, while female students have a more positive attitudes towards communication skills teachings (Cleland et al., 2005).

	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	0.014	1.0	0.014	0.000	0.987
<b>Within Groups</b>	3642.306	70.0	0.033		
<b>Total</b>	3642.319	71.0			

*Table 3 Differences of ICE (Gender).*

The descriptive analysis and homogeneity test of variance was used to further identify whether differences exist within the six dimensions of the questionnaire. G.E., AL.E., C.E., W.E., I.E., S.E. within the tables mean Group Efficacy, Altruistic Efficacy, Communication Efficacy, Self-worth Efficacy, Self-image Efficacy, and Sentiment-control Efficacy respectively. As Sheldon and colleagues. wrote, 'Self-worth Efficacy refers to the personal judgement of one's self, a sense of self-respect and a subjective evaluation' (see Wang, 2014). Consistent with the statement of Cleland, Foster and Moffat who argue that, female students are more likely to consider their communication skills lower than those of male students (Cleland et al., 2005), this study indicates that the sig. of W.E. is 0.203, implying that the different results of ICE between male and female respondents can be found within Self-worth Efficacy. The sig. of S.E and sig. of I.E. are 0.874 and 0.834 respectively, implying that there are no remarkable gender differences between male and female respondents regarding Sentiment-control Efficacy and Self-image Efficacy. This is contrasted with the findings of Wang who mentions, 'there is no notable

contract on gender difference on the whole' (Wang, 2014: 48) while there are notable differences in sentiment efficacy.

	N	M.D.	S.D.	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>M</b>	212.00	16.64	5.963	0.994	14.62	18.66
<b>F</b>	178.00	16.67	8.277	1.380	13.87	19.47
<b>Total</b>	450.00	16.65	7.162	0.844	14.97	18.34

*Table 4* Descriptive analysis and homogeneity test of variance on gender.  
*M.D=Mean Value; M=Mean; S.D=Standard deviation*

	Sum of Square	df	Mean Square.	F	Sig.
<b>G.E. Between Groups</b>	7.143	1	7.143	0.888	.365
<b>Within Groups</b>	96.571	12	8.048		
<b>Total</b>	103.714	13			
<b>AL.E. Between Groups</b>	4.900	1	4.900	0.632	.449
<b>Within Groups</b>	62.000	8	7.750		
<b>Total</b>	66.900	9			
<b>C.E. Between Groups</b>	14.083	1	14.083	0.335	0.576
<b>Within Groups</b>	420.833	10	42.083		
<b>Total</b>	434.917	11			
<b>W.E. Between Groups</b>	65.333	1	65.333	1.853	0.203
<b>Within Groups</b>	352.667	10	35.267		
<b>Total</b>	418.000	11			
<b>I.E. Between Groups</b>	2.083	1	2.083	0.046	0.834
<b>Within Groups</b>	452.833	10	45.283		
<b>Total</b>	454.917	11			
<b>S.E. Between Groups</b>	1.333	1	1.333	0.026	0.874
<b>Within Groups</b>	507.667	10	50.767		
<b>Total</b>	509.000	11			

*Table 5* Descriptive Analysis and Homogeneity Test of Variance on Gender (6 Dimensions).

The different extent of ICE in six dimensions may also be found in **Table 6**. The result of Mean indicates that among the six dimensions, Self-worth Efficacy and Self-image Efficacy had the lowest score whereas the Altruistic Efficacy gained the highest score.

	N	M.	M.D.	S.D	95% Confidence Interval		Min.	Max.
					Lower Bound	Upper Bound		
<b>G.E.</b>	390	4.329	0.4912	0.1003	4.122	4.537	3.2	5.3
<b>AL.E</b>	390	4.461	0.3425	0.0647	4.328	4.594	3.9	5.2
<b>C.E.</b>	390	4.460	0.4044	0.0904	4.271	4.649	3.8	5.3
<b>W.E</b>	390	3.225	0.6822	0.1393	2.937	3.513	1.9	4.5
<b>I.E.</b>	390	3.225	0.6822	0.1393	2.937	3.513	1.9	4.5
<b>S.E.</b>	390	3.897	0.6720	0.1372	3.613	4.180	2.6	4.9
<b>Total</b>	390	3.933	0.7702	0.0642	3.806	4.060	1.9	5.3

*Table 6 Descriptive analysis and homogeneity test of variance on level (6 Dimensions).*

### **No Remarkable Difference of ICE in Grade**

The similarity and difference of ICE in grade was also tested, using the variance analysis. The study of shows that there are remarkable differences of Interpersonal Communication Efficacy in grade (**Wang, 2014**). Cleland, Foster and Moffat also claim that, among medical students at the University of Aberdeen in the UK, first year and final year students are more likely to think communication skills important (**Cleland et al., 2005**). However, within this study, the sig. of grade is 0.516, shows that there is no remarkable difference in grade. As mentioned above, the sig. of gender is 0.987; it can be seen from the Table 3 and Table 7 that, the sig. of grade is lower than that of gender. This means that compared with gender, the grade may have a greater influence on ICE.

	Sum of Square	df	Mean Square	F	Sig.
<b>Between Groups</b>	1.366	3	0.455	0.764	0.516
<b>Within groups</b>	83.466	140	0.596		
<b>Total</b>	84.832	143			

*Table 7 Differences of ICE (Level).*

	N	M.	M.D.	S.D.	95% Confidence Interval		Min.	Max.
					Lower Bound	Upper Bound		
<b>Year 1</b>	102	3.823	0.8851	0.1475	3.523	4.122	2.3	5.3
<b>Year 2</b>	65	3.861	0.9840	0.1640	3.528	4.194	1.9	5.2
<b>Year 3</b>	98	3.978	0.5637	0.0940	3.787	4.169	3.1	5.0
<b>Year 4</b>	125	4.069	0.5615	0.0936	3.879	4.259	3.0	5.3
<b>Total</b>	390	3.933	0.7702	0.0642	3.806	4.060	1.9	5.3

**Table 8** Descriptive analysis and homogeneity test of variance on level.

The descriptive analysis and homogeneity test of variance was utilised to compare the results of Chinese and international students regarding the difference of ICE in grade. The tables show that the sig. of Chinese students is higher than that of international students. It reveals that although there is no big difference in grades, the results of the ICE of Chinese students is more likely to vary with grades than those of international students.

	Sum of Square	df	Mean Square	F	Sig.
<b>Between groups</b>	5.314	3	5.105	2.408	0.074
<b>Within groups</b>	54.764	73	0.120		
<b>Total</b>	70.078	76			

**Table 9** Differences in ICE on grade-homogeneity test of variance (Chinese Students).

	Sum of Square	df	Mean Square	F	Sig.
<b>Between groups</b>	22.049	3	7.350	23.595	0.518
<b>Within groups</b>	49.224	73	0.044		
<b>Total</b>	71.273	76			

**Table 10** Differences in ICE on grade-homogeneity test of variance (International Students).

### Remarkable Differences of ICE in Discipline

	Sum of Square	df	Mean Square	F	Sig.
Between groups	0.878	2	0.439	0.952	0.389
Within groups	49.779	108	0.461		
Total	50.657	110			

**Table 11** Differences of ICE (Discipline).

Consistent with the findings of Wang (Wang, 2014), this study shows that there are remarkable differences across disciplines, since the sig. of discipline is 0.389. According to the result of the Descriptive Analysis and Homogeneity Test of Variance, the extent of Interpersonal Communication Efficacy of students in the discipline of Humanities is higher than those of students in the discipline of Science and Arts. **Table 13** further indicates that the extents of Sentiment Control Efficacy and Altruistic Efficacy are the highest, whereas the Self-worth Efficacy is the lowest. This shows that students are found to have the problem of lack of self-confidence in interpersonal communication.

	N	M	M.D.	S.D	95% Confidence Interval		Min.	Max.
					Lower Bound	Upper Bound		
Science	198	4.1100	0.63228	0.10395	3.8992	4.3208	2.47	4.97
Humanities	96	4.2411	0.59425	0.09769	4.0429	4.4392	2.86	5.21
Arts	96	4.0249	0.79364	0.13047	3.7603	4.2895	2.08	5.23
Total	390	4.1253	0.67862	0.06441	3.9977	4.2530	2.08	5.23

**Table 12** Descriptive analysis and homogeneity test of variance on discipline.

	N	M	M.D.	S.D.	95% Confidence Interval		Min.	Max.
					Lower Bound	Upper Bound		
G.E.	390	4.3161	0.44474	0.10483	4.0949	4.5373	3.46	5.04
AL.E.	390	4.4643	0.41330	0.09019	4.2762	4.6524	3.63	5.23
C.E.	390	4.4367	0.37017	0.09558	4.2317	4.6417	3.85	5.21
W.E.	390	3.1339	0.63137	0.14881	2.8199	3.4479	2.08	4.07
I.E.	390	3.8756	0.59491	0.14022	3.5797	4.1714	2.86	4.77
S.E.	390	4.4643	0.41330	0.09019	4.2762	4.6524	3.63	5.23
Total	390	4.1253	0.67862	0.06441	3.9977	4.2530	2.08	5.23

**Table 13** Descriptive analysis and homogeneity test of variance on discipline.

	Sum of Square	df	Mean Square	F	Sig.
Between groups	90.292	2	45.146	74.447	0.000
Within groups	65.493	108	0.606		
Total	155.785	110			

**Table 14** Differences of ICE on discipline-homogeneity test of variance (China).

	Sum of Square	df	Mean Square	F	Sig.
Between groups	5.501	2	0.751	1.228	0.299
Within groups	65.772	274	0.240		
Total	71.273	276			

**Table 15** Differences of ICE on major-homogeneity test of variance (International Students).

## Conclusions

This article has aimed to compare the extent of Interpersonal Communication Efficacy (ICE) between domestic and international students in a Chinese university, and its influence variables. By combining the theory of self-efficacy with interpersonal communication, the researcher compared the ICE in different grades, gender and disciplines. By crossing the discipline of psychology and education, the findings reveal the importance of distributing communication skills lessons, paying different attention to the individuals with various personal backgrounds, and improving students' interpersonal communication ability.

The study has demonstrated that the general ICE of male and female respondents has no remarkable difference. Among the six dimensions of ICE, the Self-worth Efficacy and Self-image Efficacy had the lowest score whereas the Altruistic Efficacy gained the highest score. This addresses to the importance of building students' confidence. There is no remarkable difference between Sentiment-control Efficacy and Self-image Efficacy. However, the different extent of efficacy between male and female students within the Self-worth Efficacy, Group Efficacy, Altruistic Efficacy, and Communication Efficacy can be found in the research. The influence of grade on ICE is bigger than the influence of gender, although in general, the ICE of different grades has no remarkable difference. Also, the results of the ICE of Chinese students is more likely to vary with grades than those of international students.

There are noteworthy differences in disciplines within Chinese or international students; the extent of ICE of students in the discipline of Humanities is higher than those of students in the discipline of Science and Arts. The extents of Sentiment Control Efficacy and Altruistic Efficacy are the highest, whereas the Self-worth Efficacy is the lowest. This study reveals that Chinese students are more likely to pay attention to interpersonal communication and are more interdependent than those of international students, implying the importance of the understanding of cultural difference and addressing different needs of individuals when teaching. As Rogers and Kincaid claim, compared to the interpersonal communication in the West which is psychological, goal-oriented, and linear, interpersonal communication in the Asian Chinese context is social, collective, and cyclical (**Rogers and Kincaid, 1981**). The findings are consistent with the two previous authors (**Yum, 1988; Rogers and Kincaid, 1981**), indicating that the different cultural understandings of 'interpersonal' are crucial. This draws attention to the need for cultural awareness with regard to the ongoing internationalization of education, helping both teachers and students to understand teaching and learning across cultures.

Meanwhile, the importance of improving ICE is addressed. ICE can be considered as an evaluation way to help the students who have interpersonal relationship problem. For example, within this research, the interpersonal communication of students in the discipline of Science and Arts may need to be paid more attention by teachers and parents. This study addresses the importance of communication skills teaching and suggests that teachers should consider the factors of the year of study, gender, cultural backgrounds when teaching students across cultures.

The limitation of the study is that the efficacy test is a process of self-assessment which may cause bias. The results should be combined with the perception of surrounding people. As Wang argues,

*“...frequent reference is made to the characteristics of self but, since most research is conducted through self-assessment, one of the problems regards the extent to which the individual’s self-beliefs coincide with characteristics that are actually possessed.” (Wang, 2014: 25).*

Likewise, the findings of the study are only generalisable to certain research contexts, addressing the importance of context-specific viewpoint of social-science research.

The implication for stakeholders, is that it demonstrates that teachers may need to employ different strategies to communicate with students across cultures. Teaching students with different cultures and backgrounds through various approaches can also be used by teachers as an effective pedagogy. For the policy-makers or school and university leaders, the knowledge of communication skills and the awareness of cultural differences can be designed into the curriculum. There should be designed more teaching lessons on communication skills for students with different backgrounds (years of study, gender, cultural background). With the ongoing internationalization of education, it is hoped that more research and publications should be done by researchers with the aim of identifying the differences of interpersonal communication across cultures. Much work remains to be done so as to review both the theoretical and empirical development of the term, interpersonal communication efficacy. The research findings achieved through self-assessment may cause research bias, and therefore, instead of only doing self-assessment, more research methods and strategies should be used to conduct the research and avoid bias.



## References

- Al-mehsin, S. A., 2017. Self-Efficacy and Its Relationship with Social Skills and the Quality of Decision-Making among the Students of Prince Sattam Bin Abdul-Aziz University. *International Education Studies*, 10 (7), pp. 108-117.
- Bandura, A., 1977. Self-efficacy: Toward a Unifying Theory of Behavioural Change. *Psychological Review*, 84(2), pp. 191-215.
- Bandura, A., 1986. *Social Foundations of Thoughts and Action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A., 1995. Exercise of Personal and Collective Efficacy in Changing Societies. In Bandura, A. ed., *Self-efficacy in changing societies*. New York: Cambridge University Press, pp. 1-45.
- Boz, H., 2018. Social Relationship Network and Communication at Old Age. *Cypriot Journal of Educational Science*, 13 (1), pp. 81-93.
- Chemers, M. M., Hu, L. T. and Garcia, B. F., 2001. Academic Self-efficacy and First Year College Student Performance and Adjustment. *Journal of Educational Psychology*, 93 (1), p. 55.
- Cleland, J., Foster, K. and Moffat, M., 2005. Undergraduate Students' Attitudes to Communication Skills Learning Differ Depending on Year of Study and Gender. *Medical Teacher*, 27 (3), pp. 246-251.
- Cooley, C. H., 1962. *Social Organization*. New York: Scribner.
- Eid, M., 2012. Expectations of Self-efficacy and its Relationship with Self-confidence and Social Skills among university students in Saudi Arabia. *Journal of the Faculty of Education: Mansoura University*, 81.
- Feltz, D. L., Short, S. E. and Sullivan, P. J., 2008. *Self-efficacy in sport*. Champaign, IL: Human Kinetics.
- Gibson, C. B., 1999. Do they do what they believe they can? Group-efficacy and Group Performance across Tasks and Cultures. *Academy of Management Journal*, 42 (2), pp. 138-152.
- Harré, R., 1998. *The Singular Self*. London: Sage.
- He, C., 1992. *Counselling and Treatment of College Students*. Chengdu: Sichuan Education Press.
- Hsieh, I.H., 2016. Confucian Principles: A study of Chinese American's Interpersonal Relationships in Selected Children's Picture books. *Children's Literature in Education*, 49 (2), pp. 216-231.

Liden, R. C., 2012. Leadership Research in Asia: A brief assessment and suggestions for the future. *Asia Pacific Journal of Management*, 29 (2), pp. 205-212.

Lin, C. and Clair, R. P., 2007. Measuring Mao Zedong Thought and Interpreting Organizational Communication in China. *Management Communication Quarterly*, 20 (4), pp. 395-429.

Pajares, F., 1996. Self-efficacy Beliefs in Academic Settings. *Review of Educational Research*. 66 (4), pp. 543-578.

Research Starters. 2018. *Interpersonal relationships: Research Starters Topic*. University of Warwick online resource, available via EbscoHost. [Accessed 2 October 2018].

Rogers, E. M. and Kincaid, D. L., 1981. *Communication Networks: Toward a new paradigm for research*. USA: Macmillan.

Sun, S., 2004. *Social Psychology*. Fudan University, Shanghai, pp. 294-295.

Tryon, W. W., 1981. A Methodological Critique of Bandura's Self-efficacy Theory of Behavior Change. *Journal of Behavior Therapy and Experimental Psychiatry*, 12(2), pp. 113-114.

Wang, D., 2014. *Intercultural Studies on Interpersonal Communication: A survey on Sino-U.S. college students' Interpersonal Communication*. Master's Thesis, East China University of Science and Technology, China. [Unpublished].

Williams, D. M. 2010. Outcome Expectancy and Self-efficacy: Theoretical implications of an unresolved contradiction. *Personality and Social Psychology Review*, 14(4), pp. 417-425.

Xie, J., 2004. *The Design and Analysis of the Scale of College Students' Interpersonal Communication Efficacy*. Taiyuan: Shanxi University.

Yedidia, M. J., Gillespie, C. C., Kachur, E., Schwartz, M. D., Ockene, J., Chepaitis, A. E., Snyder, C.W., Lazare, A., and Lipkin Jr, M., 2003. Effect of Communications Training on Medical Student Performance. *Jama*, 290 (9), pp. 1157-1165.

Yousuf, R., 2013. Social Skills and their Relationship with the Public and Efficient Self-achievement among a Sample of Students in Middle School with a Barrier in the light of a number of Variables. *Journal of the Islamic University for Educational and Psychological Studies*, pp. 21.

Yum, J. O., 1988. The impact of Confucianism on interpersonal relationships and communication patterns in East Asia. *Communications Monographs*, 55 (4), pp. 374-388.

## **Bibliography**

Sheldon, K. M., Elliot, A. J., Kim, Y. and Kasser, T., 2001. What is Satisfying About Satisfying Events? Testing 10 Candidate Psychological Needs. *Journal of Personality and Social Psychology*, 80 (2), pp. 325–339.  
Available at: <http://dx.doi.org/10.1037/0022-3514.80.2.325>.

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## Appendix: Survey Questionnaire

**Directions:** The following questionnaires are designed to examine the intercultural differences and similarities in 'Interpersonal Communication Efficacy' between Chinese and international college students. The data will only be used for research analysis and the confidentiality can be assured. Your time and effort for doing the questionnaire are greatly appreciated.

**Gender:** Male  Female

**Major:** Science  Humanities  Art   
Institute of International Education

**Years:** Year 1  Year 2  Year 3  Year 4

**Strongly disagree = 1, Disagree = 2, Somewhat disagree = 3,  
Somewhat agree = 4, Agree = 5, Strongly agree = 6**

1. You can easily make friends with others in a gathering or a party. 1 2 3 4 5 6
2. You never cheat anybody. 1 2 3 4 5 6
3. You always consider more for others. 1 2 3 4 5 6
4. You do what you have promised to others. 1 2 3 4 5 6
5. When you describe something, other people can understand you well. 1 2 3 4 5 6
6. You mind others not returning your personal items borrowed from you back. 1 2 3 4 5 6
7. When you are invited to a party, you often accept it. 1 2 3 4 5 6
8. You are the one that others can rely on. 1 2 3 4 5 6
9. You keep in touch with your friends for years. 1 2 3 4 5 6
10. When you are in trouble, you will come to your friends for help. 1 2 3 4 5 6
11. You only talk with your friends who share common tastes with you. 1 2 3 4 5 6
12. When someone is unfriendly to you, you know how to tackle the problem. 1 2 3 4 5 6
13. You are active in making friends. 1 2 3 4 5 6
14. When seeing your teachers, you often feel nervous. 1 2 3 4 5 6

15. You are not influenced by others' opinions. 1 2 3 4 5 6
16. You grudge others who are more successful than you. 1 2 3 4 5 6
17. You are obliged to share your friends' trouble. 1 2 3 4 5 6
18. When there are different ideas, you often keep to your own. 1 2 3 4 5 6
19. People often say you are vigorous. 1 2 3 4 5 6
20. When you hate somebody, you are vindictive. 1 2 3 4 5 6
21. You find it difficult to get attention and praise from others. 1 2 3 4 5 6
22. You sometimes regret what you have done. 1 2 3 4 5 6
23. When you are criticized, you will resent him/ her. 1 2 3 4 5 6
24. You are nervous when you talk with somebody and want to leave a good image. 1 2 3 4 5 6
25. When you meet somebody for the first time, you often think they do not like you. 1 2 3 4 5 6
26. You care a lot about your family's opinions on you. 1 2 3 4 5 6
27. Your mood often changes from joy to depression. 1 2 3 4 5 6
28. You often help others solve problems. 1 2 3 4 5 6
29. You are well-learned in your friends' mind. 1 2 3 4 5 6
30. You care about your friends' qualities. 1 2 3 4 5 6
31. You never do harm to anybody. 1 2 3 4 5 6
32. You gain more consideration from others. 1 2 3 4 5 6
33. It is easy for you to get along with your teachers and parents. 1 2 3 4 5 6
34. You often organize class activities. 1 2 3 4 5 6
35. You get along well with people when you do not share the same taste. 1 2 3 4 5 6
36. You get along well with others. 1 2 3 4 5 6

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**Errata**

The title of three tables in this article were amended in the main text above October 2020 at the request of the author to correct minor inaccuracies. These were amended as follows:

Table	Original Text	Amended Text
11	Differences in ICE on grade-homogeneity test of variance (international students)	Differences of ICE (Discipline)
13	Descriptive analysis and homogeneity test of variance on discipline (discipline)	Descriptive analysis and homogeneity test of variance on discipline
14	Differences of ICE (China)	Differences of ICE on discipline-homogeneity test of variance (China)

*Exchanges* apologises for any inadvertent confusion these errors may have caused.