The Impact of International Online Debate on Intercultural Sensitivity, Intercultural Awareness, and Perception of Sustainability

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THE IMPACT OF INTERNATIONAL ONLINE DEBATE
ON INTERCULTURAL SENSITIVITY, INTERCULTURAL
AWARENESS, AND PERCEPTION OF SUSTAINABILITY

BY

WEN LEI

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
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OF
WEN LEI

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DEAN OF THE GRADUATE SCHOOL

UNIVERSITY OF RHODE ISLAND
2016
ABSTRACT

This thesis discusses a study in the area of intercultural communication and environmental sustainability. The purpose of this study is to examine if and how an international online debate can influence intercultural sensitivity, intercultural awareness and perception of sustainability. Intercultural informational exchanges took place in an online debate format focusing on a framework of sustainability topics. The study specifically reports the results of international online debate exchanges between students in the United States and China. Both American and Chinese students took pre- and post-tests to measure their intercultural sensitivity and intercultural awareness before and after the debate. By using questionnaire and interview methods, this study presents data pertaining to qualitative and quantitative assessment of research outcomes. The study discusses the findings of the impact of online debates on intercultural skills and students participation in sustainability activities, with an emphasis on the future potential of the international online debate. The results showed that the international online debate encouraged both U.S and Chinese students to understand more about their counterparts’ culture, and has helped them be more sensitive towards cultural differences with their counterparts. Findings also indicate that this debate format is a suitable tool to raise awareness of sustainability issues.
ACKNOWLEDGMENTS

The author would like to express her sincere appreciation to her advisor, Dr. Mundorf, for his guidance and advice throughout this research, and Dr. Chen and Dr. Ye for their guidance on the quantitative data analysis. Appreciation and thanks for their understanding, patience and suggestions during this research are extended to the other member of the author's research committee, Dr. Hedderich, and Dr. Xiao, defense chair.

The author would like to express her deepest gratitude to her parents, relatives and friends for their encouragement, patience and support throughout her study.
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CHAPTER 1

STATEMENT OF THE PROBLEM

Introduction and review of problem

In the late 1980s the University of Rhode Island (URI) started to include electronic mail technology in business and communication studies. Since then, students from URI have had the opportunity to use e-mail to formally debate with peer groups in universities in England, Ireland, Korea, Turkey, Norway, Finland, the Netherlands, India, Germany, Russia, and China (Fritz, Kerner, Kim, & Mundorf, 2001). Debate topics include management, marketing, globalization and, more recently, sustainability and environmental issues. The aims of the debate were to help students establish international contact, understand intercultural differences and improve intercultural sensitivity. Particularly when addressing sustainability topics, the debate may foster mutual understanding of environmental sustainability issues and raise students’ awareness of environmental protection.

While such online debates have been part of the communication and business curriculum at URI for some time, they were introduced to China only recently (Trushnikova, Fritz, Mundorf, & Lu, 2015). The purpose of this study is to examine if and how a global online debate between U.S students and Chinese students can promote intercultural sensitivity, intercultural awareness, and awareness of sustainability issues. Students from China and the U.S. debated sustainability related topics in a format which has been used for a number of years by Dr. Mundorf and his international counterparts. These intercultural information exchanges took place as an online debate within the online learning platform, SAKAI.
The current study assesses and analyzes the impact of an international online debate exchange between students in the United States and China during spring 2016, on student attitudes and perceptions. Both American and Chinese students were asked to respond to standard pre- and post-test questionnaire items to measure their intercultural sensitivity and intercultural awareness. Students responded to items from the Intercultural Awareness Scale (Chen, 1998) and Intercultural Sensitivity Scale (Chen, 1997), as well as selected qualitative interviews. Responses were anonymous.

This thesis presents statistical data pertaining to qualitative and quantitative assessment of research outcomes. The study discusses findings of the impact of online debates on intercultural sensitivity, intercultural awareness and students’ participation in sustainability activities, with an emphasis on the future potential of the online debate. Limitations will be discussed.

**Research questions**

The main research questions for this study are as follows:

RQ1. How do Chinese and U.S. students differ in intercultural sensitivity and intercultural awareness before/after an international online debate?

RQ2. Does an international online debate between U.S. students and Chinese students influence students’ intercultural sensitivity and intercultural awareness?

RQ3. Does an international online debate between U.S. students and Chinese students influence students’ awareness of sustainability?

Since, there is limited research on gender differences in intercultural sensitivity and intercultural awareness, the following question is also explored:
RQ4. How does students’ gender influence their intercultural sensitivity and intercultural awareness?
CHAPTER 2

REVIEW OF LITERATURE

International online debate

The teaching and learning technique analyzed in this study is an updated version of the traditional e-mail debate (Chen, 1998; Chen & Wood, 1994; Kim, 1999; Kim & Wood, 1993). Kim (1999) defines the e-mail debate as a “formal clash of ideas on a topic exchanged between two or three individuals or groups of individuals via e-mail” (p. 9). Chen (1998) indicates that technical competence in the American market is no longer sufficient for students to develop broader communication skills with their counterparts abroad. An e-mail debate may serve as a new way to help students understand the borderless world and communicate effectively across cultures. Kim (1999) describes the process of the traditional e-mail debate as follows: the debate is conducted by exchanging documents, which contain a “constructive argument, refutation argument, or rebuttal argument” (p. 9). Before the debate, students introduce themselves to their peer-country students through a process called a handshake in cyberspace. The respective instructors explain the objectives and rules of the debate and give each debating team a period of two weeks to prepare, organize, and send arguments. After the debate, the students exchange evaluative comments and receive their grades from the instructors.

In recent years, the debate has been adapted to the technological improvements of the Internet, including online teaching and video chat software. E-mail debates are now being realized with the help of Wiki and other functions of the Sakai online platform used at URI (Trushnikova, et al., 2015). SAKAI, a type of learning
management system (LMS), was initiated in 2004 by a consortium of four traditional universities—Massachusetts Institute of Technology, University of Michigan, Michigan, Stanford University, and Indiana University (Berg & Korcuska, 2009). This initial small group has expanded to over 350 educational organizations worldwide, all of which use Sakai (Wright, Lopes, Montgomerie, Reju, & Schmoller, 2014). URI has adopted SAKAI as its primary online learning platform. Sakai provides features to supplement and enhance teaching and learning, while helping to organize communication and collaboration. Learning and teaching tools in Sakai include IMS common cartridge, SCORM, blog tool, shared whiteboard, shared display, multipoint audio, pod-casting, IMS tool interoperability, and others (Town, 2010). The debate tool used in previous debates was the SAKAI Wiki tool. Therefore, the online debate in recent studies was named Wiki debate. Compared with a traditional e-mail debate, an online Wiki debate enables students to collaborate with others in an easier and more convenient ways, as the software enables students to obtain any available updates, which are accessible to everyone. The current study used other tools, in particular SAKAI Forums, which appear more user friendly. In some cases, by using Skype and audio/video tools on Sakai, the debate was personalized through brief video exchanges between the instructors and students in the peer country.

**Intercultural sensitivity and intercultural awareness**

Chen and Starosta’s (1996) model of intercultural communication describes three conceptual dimensions of intercultural communication competence, including intercultural awareness, intercultural sensitivity, and intercultural adroitness. Chen (1997) indicates that intercultural sensitivity, intercultural awareness, and intercultural
competence are closely related but separate concepts: “intercultural awareness (cognitive) is the foundation of intercultural sensitivity (affective) which, in turn, will lead to intercultural competence (behavioral)” (p. 5).

The concept of intercultural sensitivity was first created and developed in the developmental model of intercultural sensitivity (DMIS) by Bennett (1986, 1993, 2004, 2013). Bennett’s model is designed to explain how people experience and engage cultural differences. It includes six stages of intercultural sensitivity. The first three stages are denial, defense, and minimization; they are ethnocentric. The second three stages are acceptance, adaptation, and integration; these stages are called ethnorelativist. Bennett defines ethnocentrism as the worldview that one’s own culture is “central to reality.” In ethnorelativism, by contrast, cultures and behavior can only be understood relative to one another within a cultural context. DMIS assumes that cultural difference can become an active part of a person’s worldview. As people’s experience of cultural difference becomes more complex, their potential competence in intercultural relations increases. DMIS can be used to identify at which stage an individual is in terms of cultural sensitivity, thereby predicting attitudes and behaviors of people of that cognitive stage (Bennett, 1993).

Chen (1997) defines intercultural sensitivity as a dynamic concept: “an individual's ability to develop a positive emotion towards understanding and appreciating cultural differences that promotes an appropriate and effective behavior in intercultural communication” (p. 5). Chen (1997) points out that an interculturally sensitive person must possess six attributes: self-esteem, self-monitoring, open-mindedness, empathy, interaction involvement and suspending judgment. Intercultural
sensitivity has also been defined as “the ability to discriminate and experience relevant cultural differences” (Hammer, Bennett, & Wiseman, 2003, p. 422). Ting-Toomey (1999) points out the importance of intercultural sensitivity of intercultural communication. In his definition of transcultural competence (TCC), (intercultural) sensitivity is one of the two essentials element of effective intercultural interactions.

To measure intercultural sensitivity, Chen and Starosta (2000) developed an instrument comprising 5 factors with 24 items. The components they sought to measure regarding intercultural sensitivity included the following factors: interaction engagement, respect of cultural differences, interaction confidence, and interaction enjoyment (Chen & Starosta, 2000). Fritz, Mollenberg and Chen (2002) tested this instrument and the results of confirmatory factor analysis in their study using a German sample confirmed the validity of the overall structure of this instrument on the measurement of intercultural sensitivity. Similarly, Olson and Kroeger (2001) designed another instrument called Intercultural Sensitivity Index (ISI) to measure the global competencies and intercultural sensitivity. Their research and survey questions on intercultural sensitivity stemmed from Milton Bennett's Development Model of Intercultural Sensitivity (DMIS). ISI is a “three-part survey that asks participants to respond to various statements such as ‘I do not really notice cultural differences’ using a Likert scale” (Bloom & Miranda, 2015). The components of ISI included substantive knowledge (knowledge of cultures, languages, world issues, etc.), perceptual understanding (open-mindedness, flexibility, resistance to stereotyping), and intercultural communication (skills such as adaptability, empathy, and cultural mediation (Olson & Kroeger, 2001).
The concept of *intercultural awareness* was defined by Chen (1998) as a cognitive perspective of intercultural communication. Chen points out that intercultural awareness emphasizes a changing of personal understanding about environment of both our own and other cultures, and particularly the similarities and differences between them. Yassine (2006) identifies intercultural awareness as more than a set of knowledge about various and distinct cultures intercultural awareness, but according to Crawshaw (2004), it is rather “an attribute of personal outlook and behavior”, which aims mainly at increasing international and cross-cultural understanding. Rose (2004, cited in Yassine 2006) defines intercultural awareness as a whole set of attitudes and skills including observing, identifying and recording elements in both the home and target cultures, comparing and contrasting, negotiating meaning, dealing with or tolerating ambiguity, accepting difference, and defending one’s own point of view while acknowledging the legitimacy of others. Baker (2011) points out the importance of intercultural awareness for the dynamic contexts of English use and defines it as “a conscious understanding of the role culturally based forms, practices, and frames of understanding can have in intercultural communication, and an ability to put these conceptions into practice in a flexible and context specific manner in real time communication” (p.5). To properly explain this definition, Baker (2011) suggests that intercultural awareness can be identified into three levels: basic cultural awareness (level 1), advanced cultural awareness (level 2), and intercultural awareness (level 3). In intercultural awareness level, he explains that intercultural awareness as “a capacity to negotiate and mediate between different emergent socio-culturally grounded communication modes and frames of reference based on the above
understanding of culture in intercultural communication” (p.5). Similarly, Chen (1998) points out that the process of intercultural awareness can be integrated into three levels: the first level is the understanding of another culture based on superficial cultural traits; in the second level, differences in cultural traits begin to make sense; and the third level of intercultural awareness comprises the understanding of another culture from an insider’s perspective.

**Gender differences in intercultural communication**

*Gender* is a key factor in most communication behaviors. However, it has not been explored in depth in the area of intercultural communication. Typical gender roles would lead one to expect that concepts such as empathy, which are important in communication across cultures, might influence responses to intercultural communication scenarios. Gender might provide a useful additional dimension to this study.

**The potential relationship between international online debate and intercultural sensitivity and intercultural awareness**

Researchers report that results of the online debate between students from the University of Rhode Island and universities in other countries have been encouraging. Since 1993, at least 430 American students have participated in this international online debate project. Overall, the results of the project indicate that the online e-mail debate can have a positive impact on improving intercultural sensitivity. However, those studies also found that thinking pattern and expression style dictate the way students perceive and utilize the debate. For example, researchers report that during the debate, American, Danish, and German students participating in the project did not
show any difficulty in conducting the e-mail debate, while students in France, Hong Kong, and Turkey were confused by the format. Students who felt confused either chose to not debate or developed their own debating style (Chen, 1998). Chen (1998) suggests that a suitable format for both high- and low-context cultures should be designed. China is a primary example of a high-context culture, while the U.S. as well as Germany and many other European countries tend to be low-context.

Originally, during the 1993/94 winter semester, nine email debates were carried out between students of Prof. Mundorf (Communication Studies, the University of Rhode Island) and Prof. Dr. Wolfgang Fritz (Marketing, Technical University in Braunschweig). Forty-eight German students and 50 American students participated in the debate. The result of this study indicates that the debate encourages students to express their opinion, which helped them to understand cultural differences. In addition, after the debate, German students expressed a great interest in the debate and showed a stronger intercultural orientation. Therefore, it was concluded that the online debate partly improved their intercultural sensitivity (Fritz, et al., 1995).

Recently, an international online debate was conducted between students of St. Petersburg State University of Economics and the University of Rhode Island during the winter semester 2013/14. The results of the debate showed that Russian students generally appreciated the opportunity to engage in an online debate and they liked especially the teamwork and the “team spirit” that had emerged during the debate (Trushnikova et al., 2015).
Perception of sustainability

As the 1999 Human Development Report of the United Nations Development Programme indicates, "Globalization is not new, but the present era has distinctive features. Shrinking space, shrinking time, and disappearing borders are linking people's lives more deeply, more intensely, more immediately than ever before,” (UNDP, p.1). Globalization predicts the needs for schools to develop students who are prepared to compete in a global marketplace (National Center on Education and the Economy, 2007). Jacobs (2010) indicates that it is important for schools to offer a curriculum that reflects current technologies and a global perspective to help students develop global awareness. Particularly, Harvey (2010) points out that since sustainability has become an equally important educational and society priority, it is essential for schools to prepare future leaders of the 21st century to develop and implement the momentous changes that will be required to shift to a sustainable worldview.

The idea of sustainable development was first described by the Brundtland Commission in 1987 as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987). Johnston, Everard, Santillo, and Robert (2007) suggest that it is necessary to define sustainability to be more relevant to the human environment; for example, "of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged" and "of or relating to a lifestyle involving the use of sustainable methods" (pp. 61-62). Murray (2011) defined personal sustainability, with an emphasis on aligning personal values, beliefs, knowledge, and skills with
personal, professional, and social actions. He stated: “Individuals lie at the heart of every organization, from multinational corporations to families and all of these people have a great deal more to contribute than they may realize” (p. 17). Therefore, it is essential for college students to increase their awareness of sustainable development.

Recently researchers have investigated strategies to promote sustainable attitudes and behaviors. For instance, Mundorf (2015) and his co-authors utilized Prochaska’s (2008) Transtheoretical Model of Change to encourage sustainable transportation behaviors. Balderjahn and his colleagues (2013) focus on Sustainable Consumption and factors promoting this behavior. Behavior and attitude change first requires awareness of the issues at hand. Our debate topics and the associated activities expose participants to sustainability issues, which they might not have considered in the past. Consequently, this debate might be a way to prompt awareness of sustainability issues.
CHAPTER 3

METHODOLOGY

Participants

This study sampled 28 students from Peking University HSBC Business School in China and 41 students from the University of Rhode Island in the U.S to investigate the impact of the online debate participation on intercultural sensitivity and global awareness of sustainability through quantitative and qualitative methods. Among US students, 22 were male and 19 were female. Among Chinese students, 20 were male and 8 were female. The average age of U.S. students was 21.7 and the average age of Chinese students was 23.4. Also, in-depth interviews with about 20 volunteer students through both face-to-face interview and email were conducted.

Procedures, Measurement and Data analysis

Procedure. The International Online Debate project took place during the spring semester of 2016. The debate was conducted in English and followed modified rules of formal collegiate debate. Prior to the beginning of the debate, all students were asked to complete both the Intercultural Awareness Scale and Intercultural Sensitivity Scales (Chen & Starosta, 2000). A similar debate took place in the summer semester of 2016; information from this debate will serve as secondary data for the analysis.

Students completed an instrument including Chen’s Intercultural Awareness and Intercultural Sensitivity scales prior to the debate. After the debate, all students were asked to answer the same Intercultural Awareness Scale and Intercultural Sensitivity Scale as a post-test. Descriptive Statistics and Independent Two Sample T-
tests were used to examine the differences between pretest and post-test in terms of intercultural sensitivity and intercultural awareness. One-way ANOVA was performed to examine the influence of gender differences.

Appendix A shows the scales for both pre-test and post-test of the study, in which items 1-24 are for Intercultural Sensitivity, and items 25-43 are for Intercultural Awareness. Interviewing questions are included in the post-test (see Appendix B). The scales were modified so that U.S. participants were asked about their perception of Chinese, and vice versa.

**Interviews.** At the conclusion of the debate, the investigator conducted qualitative interviews to explore some of the intercultural and sustainability issues in depth. Interviews with the U.S. students were conducted on the campus of the University of Rhode Island and interviews with the Chinese students were conducted via email. Participants were informed that to protect their identity, they needed to provide a pseudonym. Appendix B shows questions for the interview.

**Intercultural activity: Online debate.** Before the debate, students were required to learn how to use the online debate using Sakai tools to post and read messages. The respective instructors explained the objectives of and rules of the debate. For example, each debate team was given a period of two weeks to prepare, organize, and post arguments in the Forum tool in Sakai. The length of each of the First Position Paper is up to 2000 words and the Rebuttal Argument is limited to 1000 words; each group was required to post their arguments in Sakai to the opposing group by the due date. And instructors assigned students into debate team of three to five students.
The first stage of debate process is the Electronic Handshake. Teams from both sides introduce themselves and greet each other. The current debate expanded the handshake by including an additional exchange in which students exchange brief interview questions and answers designed to learn more about culture, lifestyle, and educational experiences of their counterparts. Position Paper is the second stage of the debate. Each team sends to the peer team an opening position essay with reasoning and evidence that either supports or opposes the debate resolution. The third stage is the Rebuttal. In response to their peer team’s position essay, each team writes rebuttal arguments to defend, and extend its own position and critique their peers’ arguments. During the last stage of Conclusion and Farewell, each team summarizes the debate experience and thanks the peer team. Again, the Farewell part of the debate was expanded to elicit more detailed reactions and personal comments. It also included questions related to the sustainability aspect of the debate.

Examples of debate resolutions include:

Thesis 1: Most companies put significant resources into a “Green” image, but do little to change towards sustainable operations, products, and packaging

Thesis 2: Social Media is the only effective communication channel for sustainability

Thesis 3: The media have a responsibility to cover climate change related issues adequately to raise awareness and concern among the population

Thesis 4: Greenwashing activities have a negative effect on consumers’ trust towards sustainable activities of firms

The study was approved by the University’s IRB on February, 26th.
CHAPTER 4
RESULTS AND DISCUSSION

Generally, over 90% of U.S. and Chinese student participants report that the international online debate has helped them understand more about their counterparts’ culture and has helped them be more sensitive towards cultural differences with their counterparts. The pre- and post-test results of the study demonstrate that international online debate between U.S. students and Chinese students influence students’ intercultural sensitivity (IS) and intercultural awareness (IA) (see Table 1&2). Both U.S. students and Chinese students responded with a high score (more than 3) to all 43 items in both the pre-test and the posttest. This could be explained by the fact that some students had a variety of previous intercultural experiences because there are a variety of races, ethnicities, and socioeconomic students and faculties that attend University of Rhode Island and Peking University HSBC Business School. It could also be because the two groups of students were Communication and Business majors. Since students have more opportunities to participate in intercultural communication related activities, they might have already been in at least the minimization stage of intercultural sensitivity (Bennett, 1993), as they did not see cultural differences as threatening. In addition, no significant difference was found between both U.S. and Chinese students’ gender and their intercultural sensitivity and intercultural awareness results (see Table 3 & Table 4).
### Table 1

**Pre- and Post-test Intercultural Sensitivity Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
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<td>.41235</td>
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<tr>
<td>US_POST_IS</td>
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### Table 2

**Pre- and Post-test Intercultural Awareness Results**

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### Table 3

**U.S. Students Gender Differences**

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### Table 4

**Chinese Students Gender Differences**

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<td>CHN_POST_IS</td>
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<tr>
<td>CHN_POST_IA</td>
<td>.591</td>
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</table>
Intercultural Sensitivity results discussion

An independent-samples t-test was conducted to compare U.S. students and Chinese students in intercultural sensitivity. Examining the pre-test, as can be seen in Table 5 and Table 6, U.S. students (M=4.29, SD=.41) showed a relatively greater agreement on intercultural sensitivity questions than Chinese students (M=3.90, SD=.36). In addition, there was a significant difference in the pre-test scores for U.S. students (M=4.29, SD=.41) and Chinese students (M=3.90, SD=.36) in intercultural sensitivity; t (67)=3.98, p <.05. Similarly, examining the posttest, as can be seen in Table 7 and Table 8, U.S. students (M=4.40, SD=.38) showed a relatively greater agreement on intercultural sensitivity questions than Chinese students (M=4.10, SD=.32). In addition, there was a significant difference in the posttest scores for U.S. student (M=4.40, SD=.38) and Chinese (M=4.10, SD=.32) in intercultural sensitivity; t (62)=3.23, p <.05. In addition, examining the pre-test, Cronbach’s alphas for U.S. students and Chinese students in intercultural sensitivity were .901 and .747 respectively, which was found to be highly reliable.

Table 5

<table>
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<th>group1</th>
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Table 6
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<td></td>
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<td>.163</td>
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Table 7
*Group Statistics of US_POST IS & CHN_POST IS*

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<th>Std. Deviation</th>
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<td>CHN_POST_IS</td>
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Table 8
*Independent Samples Test of US_POST_IS & CHN_POST_IS*

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<td>IS_POST</td>
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</tr>
<tr>
<td></td>
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<td>58.533</td>
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In other words, compared with Chinese students, U.S. students are relatively more open and curious with other cultures and tend to seek opportunities to learn more about other culture. Language barriers for Chinese students could be the major reason of this intercultural communication difference. This could be also explained by the fact that U.S and Chinese students have different thinking patterns and expression styles. Kaplan (1966) indicates that differences of thinking patterns are reflected in difference language systems. For example, thinking patterns of English speakers are
dominantly linear in the language sequence, and Oriental thinking patterns (especially for Chinese) are marked by the writing approach of “indirection” (Kaplan, 1996). In addition, Chen and Starosta (1990) argued that people from different cultures show differences in expression style. For example, people in low-context culture (United States) are more explicit and tend to use a direct verbal expression and. In contrast, people in high-context cultures tend to use an indirect verbal expression, which carries important information in contextual cues (Hall, 1976). Chen (1998) indicates that “debate” itself is a product of low-context culture that requires a direct expression of one’s argument. This also explains why Chinese students showed a significantly lower agreement on intercultural sensitivity questions.

Within groups from the same country, although there were no significant differences shown in the multiple comparison graph, the mean score pre and post-test show that there is an increase in intercultural sensitivity for both groups of students (see Table 1). Particularly, Chinese students showed relatively greater increase in intercultural sensitivity after the debate. It could be because before the debate, Chinese students had more intercultural hurdles such as language barrier and unfamiliar content of the debate. Since the language of the debate is English, it might be difficult for some Chinese students who have lower levels of language proficiency. The main plausible reason for the lack of significant differences in this interesting effect is that the only hand shaking activity at the beginning of the class may not be sufficient to increase intercultural sensitivity on large scale. In addition, based on the qualitative data results, Chinese students have comparatively poor rates of perception of sustainability issues. Most sustainability topics are new and unfamiliar to Chinese
students. However, as they have got used to the debate style and improved their language and intercultural communication skills, they show greater increase in intercultural sensitivity.

**Intercultural Awareness results discussion**

An independent-samples t-test was conducted to compare U.S. students and Chinese students in intercultural awareness. Examining the pre-test, as can be seen in Table 9 and Table 10, Chinese students (M=3.42, SD=.38) showed a relatively greater agreement on intercultural awareness questions than U.S. students (M= 3.17, SD=.29). In addition, there was a significant difference in the pre-test scores for U.S. student (M= 3.17, SD=.29) and Chinese (M=3.42, SD=.38) in intercultural awareness; t (61) =-2.99, p <.05. Similarly, examining the posttest, as can be seen in Table 11 and Table 12, Chinese students (M=3.77, SD=.27) showed a relatively greater agreement on intercultural awareness questions than U.S. students (M= 3.05, SD=.37). In addition, there was a significant difference in the posttest scores for U.S. student (M= 3.05, SD=.37) and Chinese (M=3.77, SD=.27) in intercultural sensitivity; t (62) =-8.49, p <.05. In addition, for the pre-test, Cronbach's alphas for U.S. students and Chinese students in intercultural awareness were .468 and .611, respectively. The reason for the low reliability in measuring Intercultural Awareness Scale could be because the variation with the testing situation. For example, students’ misunderstanding or misreading about the questionnaire or other distractions can also cause test scores to vary.
Table 9

Group Statistics of US_PRE_IA & CHN_PRE_IA

<table>
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<th>Std. Deviation</th>
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Table 10

Independent Samples Test of US_PRE_IA & CHN_PRE_IA

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<th>Levene's Test for Equality of Variances</th>
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Table 11

Group Statistics of US_POST_IA & CHN_POST_IA

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<th>N</th>
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Table 12

Independent Samples Test of US_POST_IA & CHN_POST_IA

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<th>Levene's Test for Equality of Variances</th>
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<td></td>
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<td>Sig.</td>
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<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-9.022</td>
</tr>
</tbody>
</table>

Since the Chinese students at Peking University HSBC Business School are instructed by an American Professor, this could be explained by the fact that before the debate, Chinese students had some basic understanding of similarities and
differences between American culture and their own culture. In addition, since Chinese students have learned English for years, they have gradually developed an intercultural awareness of their own culture by being made to engage with a culture that is unfamiliar to them (Kourova & Modianos, 2013). However for U.S. students, since they don’t have the experience learning Chinese, their understanding about Chinese students might stay in the first level, which is “understanding of another culture on superficial cultural traits” (Chen, 1998, p. 31)

Within the same nation, for Chinese students, the results indicated that there is a significant increase in intercultural awareness after the debate (see Table 2). In the debate process, Chinese students have developed a clearer understanding and positive attitudes toward American culture. Surprisingly, for U.S students, there was a small decrease in intercultural awareness. The main plausible reason is that the one month time period between the pretest and the posttest may be too short to reveal any significant change in the scores (Chen, 1998). It is difficult to measure participants’ awareness of understanding of similarities and differences between their own culture and counterpart’s culture within such a short period of time for the online debate.

**Perception of sustainability results discussion**

All participants in this study think the international online debate had increased their perception of sustainability. Most of the students think they developed a clearer understanding of the term “sustainability” after the debate. When asked to define toward “sustainability”, one U.S students described how the debate influenced her attitude about the term:” I associated sustainability with being eco-friendly and preserving the environment. After taking part in this debate, I now not only associate
sustainability with preserving the environment but also designate it to relate to solely
go green”. When asked about the frequency of discussing sustainability issues with
their families and friends, about 60% of the U.S. students reported talking about
sustainability issues inside and outside the class, but most of them noted that “I only
talked about recycling occasionally, not as much as I should”. For Chinese students,
only about half of them stated that they sometimes talk about sustainability issues but
rarely participate in sustainability activities on campus.

However, both U.S. and Chinese students expressed that the online debate has
made them more aware of these sustainability issues and opened their eyes to more of
the possibilities there are to becoming “green”. They also expressed that the debate
made them want to take steps to becoming more efficient after hearing everyone’s
opinions on it. For example, a U.S. student mentioned:” I learned about green washing
and how these eco-friendly companies claim to be “green” but really aren’t. I am glad
I am more aware of this tactic so I can prevent others from falling for it.” Another U.S.
student also noted: “as much as I wanted to take action and engage in discussions
about the environment, I didn’t know where to start. Now that I’ve had the ability to
research and engage in discussions involving sustainability, I feel more aware and
even more able to advocate and support my views about the issue.” Similarly, a
Chinese student expressed the debate has changed her attitude toward sustainability
issues:” (after the debate) I’ll teach myself to care about those issues because I think
it’s wise to do that, reflecting high education level and social responsibility.

Several U.S. students also stated that their cultural background may affect their
attitude toward sustainability issues. For example, a U.S student noted:” I do believe
that my cultural background has a little bit of influence on my attitude. Being from Brazil I know that some places lack sustainability, however many places are trying to improve that. The city I was born in has amazing public transportation that cuts down on fuel emissions and is functional for the city. This specific bus was brought up in a class I took freshman year called Renewable Technology. Growing up in East Greenwich, I was able to experience my town building a brand new middle school that revolved around sustainability. Finally coming to URI and seeing the CBLS and Pharmacy building with all their sustainable technology showed me that sustainability is possible and should be taken seriously.” Some students also expressed their attitude that different people within a given culture are likely to develop, the types of environmental behaviors that individuals are likely to adopt, and more generally, beliefs about how to solve environmental problems. For Chinese students, over 90% of them think sustainability issues affect all cultures and should be treated in a serious manner.

Generally, compared with American students, Chinese students have comparatively poor rates of perception of sustainability issues and participation in sustainability activities. It could be explained by the fact that Chinese education traditionally emphasizes indoctrination and test taking (Guo, 2014), and that Chinese students generally perform better when they are simply told what to do and when presented with a clear set of concrete goals. In contrast, the goals of sustainability practices are more abstract, and the links to immediate, tangible outcomes are more tenuous. In addition, according to Geert Hofstede's (1984) five dimensions of culture, China is considered a masculine society, which is success-oriented and driven. To
ensure academic success, many Chinese students prioritize study ahead of social or leisure activities. In addition, Chinese culture reflects a preference for collective opinion rather than individualism. Chinese students tend to acquire a great deal of conceptual knowledge, but less training in individual advancement and personal development, such as leadership and communication skills. Most Chinese students find it difficult to focus on campus sustainability activities that have the potential to challenge university policies and that may require strong communication skills. Chinese students do not always appreciate the influence they can have on university policy. They think of themselves as the recipients of policy—not the shapers of policy.
CHAPTER 5
LIMITATIONS, RECOMMENDATION AND CONCLUSION

This thesis reports the impact of an international online debate on students’ intercultural sensitivity, intercultural awareness and perception of sustainability. By using the online debate tool, students in China and United States debate on timely, relevant topics of sustainability to become aware of how people of different cultures see things differently. The results shows that there was a significant difference in the scores for U.S. student and Chinese in both intercultural sensitivity and intercultural awareness. Within the same nation, both U.S. and Chinese students the students in this particular international online debate did not appear to make dramatic shifts in their intercultural sensitivity and intercultural awareness over the month-long debate. By comparing pre and post-test mean scores, the score of Chinese students showed a relatively greater increase on both scales after the debate. These findings are similar to other research on intercultural sensitivity and intercultural awareness comparing pre and post-test for international online debate. The limitations of the study may include:
a) Sample size. The research was conducted using a small sample of students who are attending class at URI and Peking University HSBC Business School. Therefore, to generalize the results for larger groups, we hope that more participants at different levels will be involved in the future. b) Longitudinal effects. The debate, which lasted for one month, was conducted in two classes in both countries. One month may not be enough for the researcher to measure change or stability of the students. Future research needs to be conducted to see whether these limited results are due to the duration of the program or the design of the program. A longer time frame may be
considered either for the debate, or for follow-up research. In addition, quantitative approaches to researching international online debate would require a control group as well as controlling for other variables of improving intercultural sensitivity and intercultural awareness. Furthermore, future research should consider the effects of interventions designed to support students’ intercultural development during international online debate programs, such as the format and communication tools of the debate as well as the questionnaire. International online debate could prove more effective in promoting the development of students' intercultural sensitivity and intercultural awareness through carefully designed debating format.

The qualitative data results indicate that students from both countries agree that the international online debate has helped them understand more about their counterparts’ culture and has helped them be more sensitive towards cultural differences with their counterparts. The results also showed that all participants in this study think the international online debate had increased their perception of sustainability. Trushnikova, Fritz, Mundorf and Wang (2015) presented that since “sustainability” encompasses by definition environmental, social, and business dimensions, awareness of the challenges of sustainability is paramount for students in business and communication major. In sum, the international debate has encouraged contact between U.S. and Chinese students from different disciplines and introduced "sustainability" as an effective discussion topic to illuminate cultural perspectives.

The debate has helped students to be more sensitive towards cultural differences with their counterparts and affected their attitude toward sustainability issues. It also challenges students to explain appropriately to an audience by using new
technology in a different cultural setting. While face-to-face contact still has the greatest impact on promoting intercultural communication, using an online setting can do so at much lower time and cost expenditure. It might also be a suitable way to prepare students who are planning to go overseas.
APPENDICES

Appendix A: Pre-test and Post-test

Intercultural Communication Scale

Below is a series of statements concerning intercultural communication. There are no right or wrong answers. Please work quickly and record your first impression by indicating the degree to which you agree or disagree with the statement. Thank you for your cooperation.

| 5 = strongly agree | Please put the number corresponding to your answer in the blank before the statement |
| 4 = agree |
| 3 = uncertain |
| 2 = disagree |
| 1 = strongly disagree |

1. I enjoy interacting with people from different cultures.
2. I think people from other cultures are narrow-minded.
3. I am pretty sure of myself in interacting with people from different cultures.
4. I find it very hard to talk in front of people from different cultures.
5. I always know what to say when interacting with people from different cultures.
6. I can be as sociable as I want to be when interacting with people from different cultures.
7. I don’t like to be with people from different cultures.
8. I respect the values of people from different cultures.
9. I get upset easily when interacting with people from different cultures.
10. I feel confident when interacting with people from different cultures.
11. I tend to wait before forming an impression of culturally-distinct counterparts.
12. I often get discouraged when I am with people from different cultures.
13. I am open-minded to people from different cultures.
14. I am very observant when interacting with people from different cultures.
15. I often feel useless when interacting with people from different cultures.
16. I respect the ways people from different cultures behave.
17. I try to obtain as much information as I can when interacting with people from different cultures.
18. I would not accept the opinions of people from different cultures.
19. I am sensitive to my culturally-distinct counterpart’s subtle meanings during our interaction.
20. I think my culture is better than other cultures.
21. I often give positive responses to my culturally different counterpart during our interaction.
22. I avoid those situations where I will have to deal with culturally-distinct persons.
23. I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues.
24. I have a feeling of enjoyment towards differences between my culturally-distinct counterpart and me.
25. Americans/Chinese are individualists.
27. Americans/Chinese believe that life is basically sad.
28. Americans/Chinese are high in family mobility.
30. Americans/Chinese are high in family mobility.
31. Americans/Chinese are less formal in social interaction.
32. Americans/Chinese seldom express their opinions openly.
33. Americans/Chinese emphasize social rank.
34. Americans/Chinese often refer to each other by first name.
35. Americans/Chinese are not action-oriented
36. Americans/Chinese believe that they are in control over their environment.
37. Americans/Chinese express their opinions directly.
38. Americans/Chinese are less democratic in the family role behavior.
39. Americans/Chinese emphasize change more than tradition.
40. Americans/Chinese do not emphasize status.
41. Americans/Chinese emphasize the future more than the past.
42. Americans/Chinese believe that human nature is unchangeable.
43. Americans/Chinese believe that people are controlled by the supernatural.

Finally, please answer the following questions as accurate as you can:

45. Age: _____
46. Gender: Male _____ Female _____

Thank You Very Much for Your Cooperation!
Appendix B: Interview Questions

1. Do you think this online debate helps you understand more about your counterparts’ culture?
2. Do you think this online debate helps you be more sensitive towards cultural differences with your counterparts?
3. Are you satisfied with the content of this online debate (By using 1-5 scale, with 5 representing very satisfied and 1 representing very unsatisfied)? Please explain.
4. Are you satisfied with the structure of this online debate? (By using 1-5 scale, with 5 representing very satisfied and 1 representing very unsatisfied). Please explain.
5. Overall, how satisfied you are with participating in this online debate? (By using 1-5 scale, with 5 representing very satisfied and 1 representing very unsatisfied). Please explain.
6. Have you heard about the term “sustainability” before participating in this online debate class?
7. What do you think when you hear the term “sustainability”?
8. Do you talk with your friends/classmates about sustainability issues (e.g. recycling, sustainable transport, pollution and waste, social justice and equality)?
9. Do you feel this online debate class has changed your attitude about sustainability issues? Please explain.
10. Do you think your cultural background may affect your attitude about sustainability issues? If yes, how do you deal with that?
11. Is there anything else you would like to say about this online debate?
BIBLIOGRAPHY


