

Effects of communication styles on acceptance of recommendations in intercultural collaboration

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ABSTRACT

The objective of this study is to investigate the impact of culture and communication style (explicit versus implicit) on people's reactions on recommendations in intercultural collaboration. The experimental results from three intercultural collaboration teams were studied: Chinese-American, Chinese-German, and Chinese-Korean. The results indicate that Chinese participants showed more positive evaluations (i.e., higher trust, higher satisfaction, and more future collaboration intention) on the implicit advisor than American and German participants. Compared with Chinese participants, Korean participants accepted explicit recommendations more often and showed more positive evaluations on the explicit advisor. The results also show that when Chinese express recommendations in an explicit way, their recommendations were accepted more often and were more positively evaluated by cross-cultural partners.

Keywords: communication style, intercultural collaboration, advice taking, implicit recommendation, explicit recommendation

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INTRODUCTION

Most of the important decisions are not made alone. In many important areas such as politics, economics, and technology; as well as in daily life, decisions are often made after consulting with others (Bonaccio & Dalal, 2006). People are interacting with each other, giving and receiving recommendations, in order to make timely and well-considered decisions. In recent years, the increasing globalization makes intercultural collaboration indispensable and ubiquitous in business and workplace. In intercultural collaboration, people from different cultural backgrounds communicate and work together. They often face the situation of requesting opinions and receiving viewpoints from partners of other nationalities.

When giving recommendations to others, an important question is how to express recommendations so that they are more likely to be accepted. Prior studies have found that people from different cultures have different communication styles (Hall, 1989; Kim et al., 1996; Sanchez-Burks et al., 2003). Western people favor more direct forms of communication, whereas Eastern people prefer an indirect style of communication. The recent cross-cultural studies on human-robot interaction (Rau, Li, & Li, 2009; Wang, Rau, Evers, Robinson, & Hinds, 2010; Wang, Rau, Evers, Robinson, & Hinds, 2009) have shown that people from different cultural backgrounds (e.g., Chinese, Germans, and Americans) prefer different communication styles when receiving recommendations from the robot advisor. Chinese prefer an implicit communication style from the robot advisor more than Germans and Americans. It is still unknown how different communication styles will influence people's acceptance of recommendations and their evaluations on the advisor in the context of intercultural collaboration, in which people with different cultural backgrounds work on a task together and have the same goal. In order to make effective recommendations in intercultural collaboration, an in-depth understanding of cultural diversity and how different communication styles influence advice taking are strongly needed.

The present study examines how culture and communication style influence people's acceptance of recommendations and their evaluations on the advisor in intercultural collaboration. Experiments were conducted to study advice taking in Chinese-American, Chinese-German, and Chinese-Korean collaboration teams. The present study is the first to explore cultural differences in preferred communication style for recommendations in intercultural collaboration, and to collect results of both Eastern-Western (i.e., Chinese-American, Chinese-German) and Eastern-Eastern (i.e., Chinese-Korean) collaboration teams. These three intercultural teams were chosen for several reasons. First, Chinese-American and Chinese-German teams are most frequently examined in current intercultural studies. Second, USA, Germany, and Korea play increasingly important roles in the world economy and international trading with China. Third, although China and Korea are geographically close to one another, they have different historical and cultural backgrounds that may affect their behaviors (Bresnahan et al., 2005; Kim & Leung, 2007; Kim, Wang, Kondo, & Kim, 2007; Stowell, 2003; Yi & Park, 2003). The comparison between China and Korea can contribute to the advice taking literature by broadening the understanding of the systematic variation between cultural values.

This paper is organized as follows. First, findings from previous studies are discussed and hypotheses and research questions are developed. Then, the underlying methodology for the experiment is introduced. After that, the results of the experiment are presented. Finally, the results are discussed and guidelines are provided on how to make effective recommendations in intercultural collaboration.

LITERATURE REVIEW

Cultural Differences in Communication Styles

Communication style refers to a “meta-message” reflecting the way individuals convey and interpret a verbal message (Gudykunst, Ting-Toomey, & Chua, 1988). One frequently used dimension of communication style is the explicit versus implicit style, which describes the extent to which speakers reveal their intentions through explicit/direct messages. A person speaks in an explicit style of communication will directly state his/her feelings, desires and intentions, whereas a person uses an implicit communication style will camouflage and conceal his/her true intentions when communicating verbally (Gudykunst et al., 1988).

Communication takes an important role in intercultural collaboration because of the difficulties in conveying meanings between parties from different cultures (Luthans, Hodgetts, & Doh, 2008). Prior studies in cross-cultural psychology and intercultural communication have found that people from different cultural backgrounds have different communication styles. Western people favor more explicit forms of communication, whereas Eastern people prefer an implicit style of communication (Hall, 1989; Kim et al., 1996; Sanchez-Burks et al., 2003). Hall (1989) used the cultural dimension of high- and low-context as a theoretical framework to explain the different preference of communication style across cultures. He defined context as the amount of information packed into a specific instance of communication. People from a low-context culture (e.g., European Americans and Germans) rely more on the explicit message and pay less attention on the surrounded information, whereas people from a high-context culture (e.g., Chinese and Koreans) pay more attention to the contextual information and rely less on the direct information (Hall, 1989).

When high-context and low-context people attempt to communication, misunderstanding often occurs. Sanchez-Burks et al. (2003) found that Americans make more errors in interpreting implicit communications than Koreans and Chinese, particularly in a work environment. In a study of Hong Kong and Japanese participants, researchers found that communication in an implicit style contribute to better understanding of their group members, and feelings of similarity and to self-disclosure among group members (Gudykunst et al., 1992). Therefore, communicate in a culturally appropriate way can help people to understand the intent of the communication, affect their perception of the relationship between the communicators, and enhance people’s responsiveness to the transmitted message (Gudykunst & Kim, 1984).

The Influence of Communication Style on Advice Taking

The recent cross-cultural studies on human-robot interaction have shown significant influence of communication style on decision maker's reactions on recommendations from the robot advisor. Rau et al. (2009) examined the impact of culture (Chinese vs. Germans) and communication styles (explicit vs. implicit) on humans when receiving recommendations from robots. They conducted a decision-making experiment and found that Chinese participants prefer the implicit communication style more and are more likely to accept the implicit recommendations from robots than German participants. They concluded that people prefer the robot to communicate in the interpersonal communication style familiar to them. Another study conducted by Wang et al. (2010) also found cultural differences between Chinese and Americans in preferred communication styles for the robot advisor. They compared Chinese and Americans' attitudes toward the robot advisor and their change of decisions based on recommendations from the robot. They found that Chinese participants change their decisions more often and trust the robot advisor more than American participants when the robot communicates in an implicit way.

HYPOTHESES AND RESEARCH QUESTIONS

This study focuses on the effects of culture and communication style on people's reactions to recommendations from partners in intercultural collaboration. The independent factors considered are the advisor's communication style and the decision maker's nationality. The dependent variables are the level of recommendation acceptance (decision change after receiving recommendations), trust of the advisor, satisfaction with the advisor, and future collaboration intention with the advisor.

According to two previous studies (Hall, 1989; Hall & Hall, 1990), American and German cultures are typical low-context, whereas Chinese is a high-context culture. In low-context culture, people are used to communicating with each other in an explicit way. In contrast, in high-context culture, people are used to communicating in an implicit way. These cultural differences may lead to different levels of acceptance of recommendations and evaluations on the advisor when receiving explicit and implicit recommendations. Chinese decision makers are expected to prefer implicit recommendations more than Americans and Germans, and American and German decision makers will prefer explicit recommendations more than Chinese.

Hypothesis 1.

In Chinese-American collaboration, Chinese as compared with American participants will accept implicit vs. explicit recommendations more often and show more positive evaluations (higher trust, higher satisfaction, more future collaboration intention) on the implicit vs. the explicit advisor.

Hypothesis 2.

In Chinese-German collaboration, Chinese as compared with German participants will accept implicit vs. explicit recommendations more often and show more positive evaluations (higher trust, higher satisfaction, more future collaboration intention) on the implicit vs. the explicit advisor.

Besides the comparison of Chinese and two Western cultures, it is also worthwhile to examine cultural differences within East Asian countries. Past studies have shown that cultural differences exist in close-related East Asian countries, such as traditional Confucian values (Zhang, Lin, Nonaka, & Beom, 2005), self-construal (Bresnahan et al., 2005), and decision-making styles (Chu, Spires, Farn, & Sueyoshi, 2005; Gaenslen, 1986; Mann et al., 1998; Yi & Park, 2003). The impact of modernization makes the communication style of Korea changing rapidly in recent years (Stowell, 2003). In South Korea, after the Second World War, there has been undergoing a process of social and economic transformation. Western values especially American culture is pouring into South Korea. Compared with China, South Korea is since decades under highly Western influences. After a long period of communication with Western people, Koreans are more likely to be used to the Westerner's explicit communication style than Chinese people. Therefore, the hypothesis is proposed that Korean decision makers will prefer explicit recommendations more than Chinese, and Chinese decision makers will prefer implicit recommendations more than Koreans.

Hypothesis 3.

In Chinese-Korean collaboration, Chinese as compared with Korean participants will accept implicit vs. explicit recommendations more often and show more positive evaluations (higher trust, higher satisfaction, more future collaboration intention) on the implicit vs. the explicit advisor.

In addition to examine cultural differences between Chinese and people of other nationalities (Americans, Germans, and Koreans) on reactions on explicit and implicit recommendations, the other interesting question is how to make effective recommendations in intercultural collaboration. Additional two research questions are studied. These questions are not presented as hypotheses because they have not been addressed in previous literature, so they are better served as areas for inquiry:

Research Question 1.

In intercultural collaboration, how cross-cultural decision makers (Germans, Americans, and Koreans) react to explicit vs. implicit recommendations from Chinese advisors?

Research Question 2.

In intercultural collaboration, how Chinese decision makers react to explicit vs. implicit recommendations from cross-cultural advisors (Germans, Americans, and Koreans)?

METHODS

Task

The task employed in the study was the preference decision-making task. The task developed by Wang and her colleagues (Wang et al., 2010; Wang et al., 2009) was used. The results of their study showed that the task was culturally meaningful. In this task, participants were asked to make choices concerning an environmentally friendly, yet productive chicken cooperative as part of a “green initiative” on campus. They were asked to make six decisions (i.e., chicken breed, soil type, plot size, lighting, nesting materials, and number of chickens) first individually and then they received recommendations from a cross-cultural partner and made their final decisions. The detailed task scenario is shown in Appendix 2

Participants

Forty-eight Chinese were recruited (24 women, 24 men, $M_{\text{age}} = 22.92$ years, $SD = 2.09$), sixteen Americans (8 women, 8 men, $M_{\text{age}} = 23.50$ years, $SD = 3.20$), sixteen Germans (8 women, 8 men, $M_{\text{age}} = 23.44$ years, $SD = 2.00$), and sixteen South Koreans (8 women, 8 men, $M_{\text{age}} = 23.00$ years, $SD = 1.46$) to take part in the experiment. All participants were recruited from one university in China. The recruited Americans, Germans, and Koreans were exchange students, and only those who had arrived in China within six months were recruited to avoid the influence of Chinese culture on them. Although the sample was not an accurate reflection of the US, German, and Korean population, this sampling strategy, enabled a cleaner examination of the research questions, particularly those relating to cultural differences. In addition to the selection criteria, measures for cultural identification were included in the pre-task survey. A self-evaluated question “To what extent do you identify with the Chinese/American/German/Korean culture” was asked by a 5-point Likert scale ($1 = \text{not at all}$, $5 = \text{very much}$). All participants rated their cultural identification as three or higher.

Independent Variables

Two independent variables were studied: advisor’s communication style and decision maker’s nationality. The decision maker’s nationality was accomplished by selecting participants from different cultural backgrounds (Chinese, Americans, Germans, and Koreans), so it was not manipulated. Advisor’s communication style (explicit vs. implicit) was manipulated between-subjects in the experiment. In the explicit condition, the recommendation was expressed directly (e.g., I think we should choose..., because...). It unambiguously articulated the viewpoint on the preferred decision. In the implicit condition, in contrast, the recommendation was expressed indirectly (e.g., if we choose..., the problem would be...). It alluded to the recommendation or suggested the basis on which decision should be made, but never gave overt direction about what the final decision should be. The explicit and implicit recommendations used in the experiment are shown in Table 1 (all tables are in the Appendix).

Dependent Variables

Both objective and subjective measurements were collected in the study. Objective measurement was the acceptance of recommendation. Subjective measurements included

self-report measurements of trust, satisfaction, and future collaboration intention with the advisor.

Acceptance of recommendation measured participant's decision change attributed to advisor's opinion. Participant's own decisions and their final decisions were collected, and the number of "hold decisions" and "change decisions" was calculated. The calculation of decision change is as follows: Decision change = the number of changed decisions when participants own decisions are different as the advisor's recommendations / the total number of different decisions.

Trust was measured using a 6-item, 7-point Likert scale (1=strongly disagree, 7=strongly agree). It was adapted from Wang and her colleagues' scale (Wang et al., 2010; Wang et al., 2009). *Satisfaction* was measured by a 2-item, 7-point Likert scale (1=strongly disagree, 7=strongly agree) developed by the authors. *Future collaboration intention* was measured by a 2-item, 7-point Likert scale (1=strongly disagree, 7=strongly agree) developed by the authors. The items used in each scale are shown in Table 2. The internal consistencies for each scale are shown in Table 3.

Design of Experiment

To evaluate the hypotheses and research questions, data was collected from three intercultural collaboration teams: Chinese-American, Chinese-German, and Chinese-Korean. A 2 (advisor's communication style: explicit vs. implicit) × 2 (decision maker's nationality in each intercultural team, for example Chinese vs. Americans in Chinese-American team) between-subjects design was used, and participants were randomly assigned to different conditions.

All participants were assigned the role of decision makers. To simulate the context of intercultural collaboration, one experimenter took the role of the advisor and sent recommendations via computer-mediated text messages to participants. Text messages were used in order to avoid the accent interference on results. The explicit and implicit recommendations were set prior to the experiment to ensure the consistency of communication styles in the experiment, see Table 1 above for detailed contents of the recommendations. Simple sentences were used to reduce the influence of language ability on understanding the recommendations. To better manipulate the effect of communication style, there were no other interactions between participants and advisors (i.e., discuss back and forth about the task) in the experiment.

The profile of the advisor was also set prior to the experiment, which included the name and the gender. Two advisor names were set for each nationality, one for a male advisor and another for a female advisor. In the experiment, the experimenter set the gender of the advisor the same as the participant (e.g., a female American participant was informed to collaborate with a female Chinese advisor at the beginning of the experiment). Additionally, participant's gender was balanced in each cultural group, because prior studies have found that females perceive themselves as being more emotionally related to others than males (Kashima & Hardie, 2000) and females are more likely than males to consider others and to seek advice when making a decision (Kashima et al., 1995).

Survey instruments, written materials, and recommendations were in English for all participants. Participants in the study did not report any problems in understanding the task or the instruments.

Manipulation Check

Although nationality was not manipulated, it was verified that our Chinese, American, German, and Korean samples were culturally distinct. Beliefs about low vs. high context communication were measured by using 7-items, 7-point Likert scale ($1=strongly\ disagree$, $7=strongly\ agree$) from Richardson and Smith (2007). Sample statements were “a listener should understand the intent of the speaker from the way the person talks”, and “people should be able to understand the meaning of a statement by reading between the lines”. A low score indicated a preference for low-context communication and a high score indicated a preference for high-context communication. Results suggested that there was significant difference among four nations, $F(3, 92) = 13.49, p < .001$. Multiple comparisons indicated significant differences between Chinese and Americans ($M = 4.87$ vs. $4.31, p = .028$), between Chinese and Germans ($M = 4.87$ vs. $3.71, p < .001$), and between Chinese and Koreans ($M = 4.87$ vs. $4.25, p = .010$).

In addition, in order to ensure that the explicit and implicit recommendations used in this study differ in the level of directness, a manipulation check was set by using a 4-item, 7-point Likert scale ($1=strongly\ disagree$, $7=strongly\ agree$). The participants were asked to rate four statements after they finish the experiment. The four statements were “my partner made explicit recommendations”, “my partner clearly articulated what he/she thought we should do”, “my partner was vague in expressing his/her recommendations (reverse scored)”, and “my partner had a direct communication style”. The results showed that participants rated the explicit recommendations significantly higher on the level of directness than implicit recommendations ($M = 5.10$ vs. $3.65, t(94) = 9.198, p < .001$).

Procedure

The experiment was conducted in a quiet room. At the beginning of the experiment, participants were told that they will work on a decision making task with a cross-cultural partner. For example, in the Chinese-American team, the Chinese participants were told that they will work with an American partner. Participants were also informed that the cross-cultural partner has relevant expertise on the task and is also a student studying at the same university. Participants were told that they will receive recommendations from the partner via computer-mediated text messages. After a brief introduction of the experiment, participants were asked to fill in a pre-task survey. The pre-task survey included participant's basic information and a low vs. high context communication scale. Then, the participants were asked to read the instructions of the task and to give their own chicken coop plan. After that, participants were told that the cross-cultural partner is online and he/she will provide some recommendations for the planning. Another experimenter who acted as the advisor sent recommendations to participants. When participants received cross-cultural partner's recommendations, they were asked to make a final decision for the chicken coop plan and then fill in a post-task survey. The post-task survey included the manipulation check of explicit and implicit recommendations, and the scales to measurement trust, satisfaction, and future collaboration intention. The total time required was approximately forty-five minutes.

RESULTS

Testing of Hypothesis 1

Hypothesis 1 assumed that Chinese participants prefer implicit recommendations more than American participants, and American participants prefer explicit recommendations more than Chinese participants. For implicit recommendations, as expected, significant differences between Chinese and American participants were found. Compared with American participants, Chinese participants trusted the implicit advisor more ($M = 5.85$ vs. 4.48 , $t(14) = 3.518$, $p = .003$, Cohen's $d = 1.88$), had higher satisfaction with the implicit advisor ($M = 6.25$ vs. 4.06 , $t(14) = 3.473$, $p = .004$, Cohen's $d = 1.86$), and had more future collaboration intention with the implicit advisor ($M = 6.06$ vs. 4.50 , $t(14) = 2.997$, $p = .010$, Cohen's $d = 1.60$). For explicit recommendations, no significant differences between Chinese and American participants were found. The detailed results are shown in Table 4.

Testing of Hypothesis 2

Hypothesis 2 assumed that Chinese participants prefer implicit recommendations more than German participants, and German participants prefer explicit recommendations more than Chinese participants. For implicit recommendations, as expected, significant differences between Chinese and German participants were found on all dependent variables. Compared with German participants, Chinese participants accepted implicit recommendations more often ($M = 0.77$ vs. 0.39 , $t(14) = 2.435$, $p = .029$, Cohen's $d = 1.30$), trusted the implicit advisor more ($M = 5.33$ vs. 4.23 , $t(14) = 2.446$, $p = .028$, Cohen's $d = 1.31$), had higher satisfaction with the implicit advisor ($M = 5.00$ vs. 3.75 , $t(14) = 3.416$, $p = .004$, Cohen's $d = 1.83$), and had more future collaboration intention with the implicit advisor ($M = 4.81$ vs. 3.38 , $t(14) = 3.062$, $p = .008$, Cohen's $d = 1.64$). For explicit recommendations, no significant differences between Chinese and German participants were found. The detailed results are shown in Table 5.

Testing of Hypothesis 3

Hypothesis 3 assumed that Korean participants prefer explicit recommendations more than Chinese participants and Chinese participants prefer implicit recommendations more than Korean participants. As expected, the results showed significant differences between Chinese and Korean participants on all dependent variables for explicit recommendations. Compared with Chinese participants, Korean participants accepted explicit recommendations more often ($M = 0.54$ vs. 0.37 , $t(14) = 2.338$, $p = .035$, Cohen's $d = 1.25$), trusted the explicit advisor more ($M = 5.25$ vs. 4.67 , $t(14) = 3.326$, $p = .005$, Cohen's $d = 1.78$), had higher satisfaction with the explicit advisor ($M = 5.25$ vs. 4.44 , $t(14) = 3.389$, $p = .004$, Cohen's $d = 1.81$), and had more future collaboration intention with the explicit advisor ($M = 5.25$ vs. 4.50 , $t(14) = 2.393$, $p = .031$, Cohen's $d = 1.28$). For implicit recommendations, no significant differences between Chinese and Korean participants were found. The detailed results are shown in Table 6.

Evaluation of Research Question 1

Research question 1 asked if cross-cultural decision makers react differently on explicit and implicit recommendations from Chinese advisors. The results showed that cross-cultural decision makers accepted explicit recommendations from Chinese advisors more than implicit recommendations ($M = 0.50$ vs. 0.30 , $t(46) = 2.855$, $p = .006$, Cohen's $d = 0.84$), trusted the explicit Chinese advisor more than the implicit Chinese advisor ($M = 5.13$ vs. 4.15 , $t(46) = 4.815$, $p < .001$, Cohen's $d = 1.42$), had higher satisfaction with the explicit Chinese advisor than the implicit Chinese advisor ($M = 5.13$ vs. 3.92 , $t(46) = 4.945$, $p < .001$, Cohen's $d = 1.46$), and had more future collaboration intention with the explicit Chinese advisor than the implicit Chinese advisor ($M = 4.77$ vs. 3.83 , $t(46) = 3.075$, $p = .004$, Cohen's $d = 0.91$). The detailed results are shown in Table 7.

Evaluation of Research Question 2

Research question 2 asked if Chinese decision makers react differently on explicit and implicit recommendations from cross-cultural advisors. On average, Chinese participants accepted explicit recommendations from cross-cultural advisors more often than implicit recommendations ($M = 0.53$ vs. 0.47), showed higher trust ($M = 5.16$ vs. 4.85), higher satisfaction ($M = 5.17$ vs. 4.90), and more future collaboration intention ($M = 5.06$ vs. 4.85) with the implicit cross-cultural advisor than the explicit cross-cultural advisor. The differences on all these dependent variables were not significant ($p > .050$); however, they did represent a small to medium sized effect (Cohen's $d > 0.20$). The detailed results are shown in table 8.

DISCUSSION

Despite in recent years researchers started to examine culture and communication style's influence on advice taking, there are several important issues that are yet to be addressed. First, it is still unknown how explicit and implicit communication styles influence advice taking in communication between humans. Second, cross-cultural advice taking research has devoted little attention to examine advice taking in the context of intercultural collaboration. Third, there is lack of research that generally examines the differences in advice taking within East Asian countries. To address these issues, how culture and communication style influence people's reactions on recommendations from cross-cultural partners was examined. Three intercultural collaboration teams were studied: Chinese-American, Chinese-German, and Chinese-Korean. Based on the experimental results, the following main findings were concluded: (a) Chinese participants showed more positive evaluations on the implicit advisor than American and German participants; (b) Korean participants showed more positive evaluations on the explicit advisor than Chinese participants; and (c) cross-cultural decision makers accepted Chinese advisor's explicit recommendations more often than implicit recommendations, and they expressed more positive evaluations on the explicit Chinese advisor than the implicit Chinese advisor. These findings in the following paragraphs will be further discussed

First, the results showed significant differences between Chinese and American participants and between Chinese and German participants when they receive implicit recommendations from cross-cultural partners. Compared with American participants, Chinese participants trusted the implicit advisor more, had higher satisfaction with the implicit advisor, and had more future collaboration intention with the implicit advisor. Compared with German participants, Chinese participants accepted implicit recommendations more often, trusted the implicit advisor more, had higher satisfaction with the implicit advisor, and had more future collaboration intention with the implicit advisor. For explicit communication style, no significant differences were found between Chinese and American participants, and between Chinese and German participants. According to Hall (Hall, 1989; Hall & Hall, 1990), Americans and Germans are classified as low-context cultures, whereas Chinese are classified as high-context culture. People from high-context cultures prefer to use an explicit communication and people from low-context culture prefer to use an implicit communication. The results of the high-/low context pre-task survey also indicated that the Chinese sample had significantly higher preference for high-context communication than American and German samples. In an explicit communication, most of the information is vested in the explicit code, and therefore information can be easily interpreted by people from both low-context and high-context cultures. However, in an implicit communication, most of the information is either in the physical context or internalized in the person, very little is in the coded, explicit, transmitted part of the message. As Sanchez-Burks et al. (2003) found in their study, Americans make more errors in interpreting implicit communications than Koreans and Chinese. People from high-context culture have better understandings for the implicit information than people from low-context culture. In other words, the main difference between people from low-context culture and high-context culture lies in the ability to interpret implicit information in communication, which might explain the observed significant differences between Chinese and Westerns (Americans and Germans) for implicit recommendations whereas no significant differences were found for explicit recommendations.

Second, the results indicated significant differences between Chinese and Korean participants when they receive explicit recommendations. Compared with Chinese participants, Korean participants accepted explicit recommendations more often, trusted the explicit advisor more, had higher satisfaction with the explicit advisor, and had more future collaboration intention with the explicit advisor. No significant differences were found between Chinese and Korean participants when they receive implicit recommendations. Although Chinese and Koreans are both categorized as high-context cultures and the Confucian values and ideology are deeply rooted in Chinese and Koreans' culture, the social structure, economic development, and openness to western world are quite different between these two countries since the 20th century. The strong influence of Western culture especially the American culture on Koreans cannot be ignored. The results of the high-/low context pre-task survey indicated that the Chinese sample had significantly higher preference for high-context communication than the Korean sample. The very different histories of China and Korea in the past fifty years have made the communication of Koreans more explicitly than Chinese, which might explain the significant cultural differences on reactions on explicit recommendations between Chinese and Korean participants.

Third, the results showed that when Chinese express recommendations in an explicit way, their recommendations were accepted more often by cross-cultural decision makers, and the cross-cultural decision makers showed more positive evaluations (i.e., higher trust, higher satisfaction, and more future collaboration intention) on the explicit Chinese advisor than the implicit Chinese advisor. The results indicated that communicating in an explicit way is much more important in the eye of people from other nationalities when collaborating with Chinese. Therefore, it is important for Chinese to express recommendations explicitly to cross-cultural partners.

Based on the results from the experiment, four guidelines are provided on how to make effective recommendations in intercultural collaboration.

Guideline 1. For Chinese people, expressing recommendations explicitly to cross-cultural partners will make recommendations accepted more often and receive more positive evaluations (higher trust, higher satisfaction, and more future collaboration intention).

Guideline 2. In Chinese-American collaboration, special attention should be paid for the cultural differences on the preference of implicit recommendations between Chinese and Americans. Chinese prefer implicit recommendations more than Americans.

Guideline 3. In Chinese-German collaboration, special attention should be paid for the cultural differences on the preference of implicit recommendations between Chinese and Germans. Chinese prefer implicit recommendations more than Germans.

Guideline 4. In Chinese-Korean collaboration, special attention should be paid for the cultural differences on the preference of explicit recommendations between Chinese and Koreans. Koreans prefer explicit recommendations more than Chinese.

LIMITATION AND FUTURE RESEARCH

In order to well manipulate the contents of the explicit and implicit recommendations, there were no interactions between advisor and decision maker in this experiment. Participants received pre-determined recommendations. The present experimental environment differs from the real teams. Thus, one should interpret the study results with caution and should limit implications drawn from the results to real teams. Future researchers might conduct experiments on real interactions between advisor and decision maker (i.e., discussion back and forth about the task) and study how decision makers react to recommendations and make decisions by analyzing language production. Another limitation is the relative small sample size of the study. A preliminary result was presented from Chinese-American, Chinese-German, and Chinese-Korean teams. Although some differences were not significant ($p > .05$), medium to large effect sizes were observed. Future work might be conducted to recruit more participants in the experiment.

CONCLUSION

Studying advice taking in intercultural collaboration is important for organizations. This study discussed the influence of culture and communication style on people's reactions on recommendations from cross-cultural partners in Chinese-American, Chinese-German,

and Chinese-Korean collaborations. The results showed cultural differences in people's reactions on explicit and implicit recommendations. The comparisons between Chinese participants and participants from two Western countries (Americans and Germans) indicated significant differences on the evaluations on implicit cross-cultural advisors, and the comparison between Chinese and Korean participants showed significant differences on the evaluations on explicit cross-cultural advisors. These cultural differences were explained by using Hall's high-/ low-context cultural dimension, and highlighted the importance of studying close-related East Asian countries in future intercultural studies. In addition, the results indicated the importance of expressing recommendations in an explicit manner for Chinese when they give recommendations to people of other nationalities in intercultural collaboration. Based on the experiment results, four guides are provided on how to make effective recommendations in intercultural collaboration.

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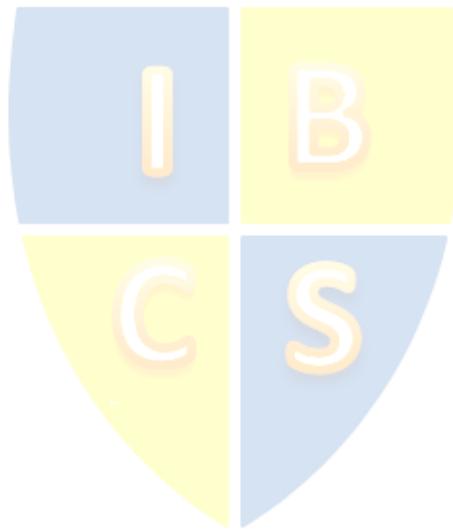
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APPENDIX

Appendix 1: Tables

Table 1
Explicit and implicit recommendations used in the experiment

Topic	Explicit recommendations	Implicit recommendations
Plot size	I think we should choose 7.5 square meters because a bigger free area will make chickens healthier and increases egg production.	A smaller free area may make chickens less healthy and reduce egg production.
Soil	We should choose Terra Poultry’s soil. Their soil has more organic materials, which will help with egg production and overall health of the chickens.	One of the soil contains less organic materials, this may cause problem with egg production and overall health of the chickens.
Breed of chickens	We should choose the Rock Island Red chickens. They have heavier eggs, which are more valuable.	The lighter eggs are less valuable.
Number of chickens	I think we should choose 400 chickens. Having fewer chickens is more environmentally friendly because the demands on the land are reduced and the land is able to recover more quickly.	Having more chickens may be less environmentally friendly because the demands on the land are increased and the land is unable to recover quickly.
Bedding	We should choose Pine shavings. It has higher density which will protect the eggs better.	The lower density bedding may cause problem in protecting the eggs.
Lighting	I think we should choose the artificial light. It will help to maintain egg production.	Natural daylight may not be an option since it cannot maintain egg production.

Table 2
Subjective measurement items

Scale	Items
Trust	My teammate consistently gave his/her best answers and advice. My teammate was open about sharing information he/she had. My teammate had a lot of knowledge about this task. My teammate was very capable of performing this task. I trusted the recommendation of my teammate. My teammate was reliable.
Satisfaction	I was satisfied with the teammate’s contribution in this task. I feel comfortable working with my teammate.
Future collaboration intention	I would be willing to work with my teammate again. I want the teammate to be my coworker in the future.

Table 3
Internal consistency of scales

Scales	Chinese	Americans	Germans	Koreans
Trust	.87	.74	.88	.93
Satisfaction	.89	.88	.78	.94
Future collaboration intention	.86	.84	.76	.91

Table 4
Comparison of Chinese and American decision makers for explicit and implicit recommendations

Dependent variables	Explicit					Implicit				
	M (SD)		t (14)	p	Cohen's d	M (SD)		t (14)	p	Cohen's d
	Chinese	Americans				Chinese	Americans			
Acceptance of recommendation	0.55 (0.34)	0.29 (0.20)	1.901	.078	1.02	0.29 (0.23)	0.20 (0.13)	0.927	.370	0.50
Trust	5.09 (0.91)	4.92 (0.70)	0.415	.685	0.22	5.85 (0.87)	4.48 (0.68)	3.518	.003	1.88
Satisfaction	5.69 (0.59)	5.06 (0.82)	1.745	.103	0.93	6.25 (1.20)	4.06 (1.32)	3.473	.004	1.86
Future collaboration intention	5.50 (1.04)	4.63 (1.43)	1.400	.183	0.75	6.06 (1.08)	4.50 (1.00)	2.997	.010	1.60

Table 5
Comparison of Chinese and German decision makers for explicit and implicit recommendations

Dependent variables	Explicit					Implicit				
	M (SD)		t (14)	p	Cohen's d	M (SD)		t (14)	p	Cohen's d
	Chinese	Germans				Chinese	Germans			
Acceptance of recommendation	0.68 (0.17)	0.68 (0.16)	0.030	.976	0.02	0.77 (0.29)	0.39 (0.33)	2.435	.029	1.30
Trust	4.79 (0.62)	5.21 (0.74)	-1.218	.244	0.65	5.33 (0.80)	4.23 (1.00)	2.446	.028	1.31
Satisfaction	4.56 (0.73)	5.06 (0.86)	-1.252	.231	0.67	5.00 (0.71)	3.75 (0.76)	3.416	.004	1.83
Future collaboration intention	4.56 (0.56)	4.44 (1.08)	0.290	.776	0.16	4.81 (0.84)	3.38 (1.03)	3.062	.008	1.64

Table 6
Comparison of Chinese and Korean decision makers for explicit and implicit recommendations

Dependent variables	Explicit					Implicit				
	M (SD)		t (14)	p	Cohen's d	M (SD)		t (14)	p	Cohen's d
	Chinese	Koreans				Chinese	Koreans			
Acceptance of recommendation	0.37 (0.13)	0.54 (0.17)	-2.338	.035	1.25	0.34 (0.05)	0.32 (0.22)	0.188	.855	0.10
Trust	4.67 (0.38)	5.25 (0.32)	-3.326	.005	1.78	4.29 (0.82)	3.73 (0.52)	1.638	.124	0.88
Satisfaction	4.44 (0.42)	5.25 (0.53)	-3.389	.004	1.81	4.25 (1.28)	3.94 (0.78)	0.590	.565	0.32
Future collaboration intention	4.50 (0.76)	5.25 (0.46)	-2.393	.031	1.28	4.31 (0.88)	3.63 (0.79)	1.640	.123	0.88

Table 7

Evaluating of cross-cultural decision maker's reactions on explicit vs. implicit recommendations from Chinese advisors

Dependent variables	Explicit	Implicit	<i>t</i> (46)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			
Acceptance of recommendation	0.50 (0.23)	0.30 (0.24)	2.855	.006	0.84
Trust	5.13 (0.61)	4.15 (0.79)	4.815	<.001	1.42
Satisfaction	5.13 (0.73)	3.92 (0.95)	4.945	<.001	1.46
Future collaboration intention	4.77 (1.08)	3.83 (1.03)	3.075	.004	0.91

Table 8

Evaluating of Chinese decision maker's reactions on explicit vs. implicit recommendations from cross-cultural advisors

Dependent variables	Explicit	Implicit	<i>t</i> (46)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			
Acceptance of recommendation	0.53 (0.26)	0.47 (0.30)	0.841	.405	0.25
Trust	4.85 (0.67)	5.16 (1.04)	-1.243	.221	0.37
Satisfaction	4.90 (0.81)	5.17 (1.34)	-0.848	.402	0.25
Future collaboration intention	4.85 (0.90)	5.06 (1.17)	-0.689	.494	0.20

Appendix 2

Welcome to the Green Choice Initiative. In this task, you will be asked to plan with a cross-cultural partner for how to accommodate 4-8 free range chickens in an environmentally sensitive way. You will need to evaluate difficult trade-offs between the plot size, the type of soil to purchase, the breed of chickens, the number of chickens on the plot, the bedding materials, and the lighting. Your goal is to develop a plan that offers the most sustainable (least impact on the environment) solution while yielding the largest number of eggs of the highest quality at the lowest cost.

1. The plot size

You will need to choose between:

- A. a free range area of 5.0 sq. meters per chicken of dirt (25%) and grass (75%).
- B. a free range area of 7.5 sq. meters per chicken of lawn (grass for food).

Choice A. You can have more chickens on a plot of land and more is better for the environment because of better land use. In addition, having dirt for a "dirt bath" helps to keep fleas away from the chickens.

Choice B. You have fewer chickens on a plot of land.

2. The soil

You will need to choose a soil that will cover the ground of the chicken coop. Soil can be purchased from one of these two companies.

A. Firma

B. Terra Poultry

Choice A. Firma is less expensive. The soil temperature is 20 degrees Celsius, with less organic materials. It also must be transported from 2 hours away, so there is additional impact on the environment.

Choice B. Terra Poultry is more expensive. The soil temperature is 22 degrees Celsius, with more organic materials.

3. The breed of chickens

You will need to choose between two new breeds of chickens:

A. High egg producing chickens: Flatback Grey chickens.

B. Medium egg producing chickens: Rock Island Red chickens.

Choice A. More egg production (around 300 eggs/year) and a longer life span (live an average of one year longer. The average weight of the egg is 55 grams.

Choice B. Lower egg production (about 200-250 eggs/year) and a shorter life span. The average weight of the egg is 60 grams.

4. The number of chickens on the plot

You will need to choose between:

A. four hundred chickens

B. eight hundred chickens

Choice A. Means less egg production.

Choice B. Means increased competition for resources and could increase chance of nutritional deficiencies when free range which leads to fewer eggs per chicken (can be down to 25% if nutrition is not cared for properly).

5. Bedding

Bedding is an important part of keeping your chickens happy and healthy. On the coop floor the bedding will provide a soft surface for your chickens to walk on and will absorb droppings and odor. In the nest, bedding will give freshly-laid eggs a soft landing so they don't crack.

A. Pine shavings

B. Mixed materials

Choice A. The density is 10 pounds per cubic foot. It has twice as much negative environmental impact as mixed materials.

Choice B. The density is 8 pounds per cubic foot. It has half the negative environmental impact of pine shavings.

6. Lighting

You will need to choose between:

A. natural daylight

B. providing artificial light in coop

Choice A. A more sustainable way of farming because it consumes less energy

Choice B. Will increase cost and is less sustainable.