

**Identifying and Training Adaptive Cross-Cultural Management Skills:
The Crucial Role of Cultural Metacognition**

Shira Mor ^a

Michael Morris ^b

Johann Joh ^c

Under Review, Academy of Management Education and Learning

Note: This is the first chapter of my dissertation.

^a Columbia University, Columbia Business School, 7A Uris Hall 3022 Broadway, New York, NY10027-6902. Tel: 917.386.4023 Fax: 212-316-9355. Email:sm2355@columbia.edu.

^b Michael Morris. Columbia University, Columbia Business School, 718 Uris Hall 3022 Broadway, New York, NY10027-6902. Tel: 212-854-2296 Fax: 212-316-9355. Email:mwm82@columbia.edu.

^c Johann Joh, London Business School, Regent's Park, London, NW1 4SA. United Kingdom. Email: jjoh.phd2012@london.edu.

Acknowledgements: We are grateful to Adam Galinsky and Modupe Akinola, for offering their help with data collection for Study 3B. We are grateful to Daniel Ames, Tory Higgins, Roy Chua, Krishna Savani, and Aaron Wallen for offering their comments on earlier drafts of this manuscript.

ABSTRACT

In this article we focus on identifying and habituating a cognitive habit found amongst managers highly effective at intercultural collaboration: managers high on cultural metacognitive habits (Chua, Morris, & Mor, 2012). We propose that one metacognitive tendency, namely—cultural perspective taking—facilitates intercultural coordination and cooperation, an important skill for the global manager’s toolkit. Moreover, we examine whether an intervention aimed at heightening managers’ cultural perspective taking promotes intercultural cooperation and is especially useful for individuals chronically low on cultural metacognition tendencies. We examine the above hypotheses in five studies using both quasi-field and experimental approaches and find convergent evidence for our predictions. We discuss the implications of the present findings to ongoing expatriate research, cross-cultural awareness training, as well as cultural intelligence and negotiations research.

Word count: 126

INTRODUCTION

The accelerating globalization of business creates pressure for cooperation and learning across cultures and hence demand for managers adept at cross-cultural communication, interaction and collaboration (Adler & Gundersen, 2008; Boyacigiller & Adler, 1991). A firm's functioning depends on communication and exchange between managers located in different parts of the organization (Barnard, 1968). While expatriate oversea assignments can facilitate the transfer of knowledge across borders, they often result in costly failures; 15–50% of managers assigned to work abroad curtail their assignments because of an inability to manage cultural differences (Bird, Heinbuch, Dunbar, & McNulty, 1993; Copeland & Griggs, 1985; Deshpande & Viswesvaran, 1992; Eschbach, Parker, & Stoeberl, 2001; Tung, 1987). Other mechanisms for coordination and learning in global organizations are multinational teams and international alliances (Adler & Gundersen, 2008; Byrne, 1993; Manz & Sims Jr, 1987). Yet such structures often run aground on the failure of managers from different cultures and countries to work effectively with one another (Earley & Gibson, 2002; Hagel & Brown, 2005).

Firms have long sought to select for and develop cross cultural capabilities. Recently researchers have consolidated ideas about cross-cultural strengths in terms of dimensions of cultural intelligence (Earley & Ang, 2003; Earley & Peterson, 2004; Ng, Van Dyne, & Ang, 2009). At the same time, there has been renewed interest in academia and business in cultural training programs (Black & Mendenhall, 1990; Rehg, Gundlach, & Grigorian, 2012). The present research aims to bridge research and practice by identifying adaptive cross-cultural management skills and examining an intervention for facilitating managers' cross-cultural collaborative skills.

CULTURAL METACOGNITION

In recent years management scholars have formulated a theoretical and practical framework for identifying “the capability (of managers) to function effectively in culturally diverse settings”—(CQ) (Earley & Ang, 2003). Drawing upon Sternberg and Detterman’s (1986) multi-loci theory of intelligence, Ang and Van Dyne (2008) proposed metacognitive, cognitive, motivational, and behavioral dimensions of cultural intelligence. Our focus is on the first of these dimensions, cultural metacognition.

Past researchers have found that intercultural success is correlated with mindfulness or self-awareness about cultural assumptions (Johnson, Cullen, Sakano, & Takenouchi, 1996; LaBahn & Harich, 1997). Ang and colleagues proposed that cultural metacognition is the proclivity to prepare for, adapt to, and learn from intercultural interactions (Earley & Ang, 2003; Earley, Ang, & Tan, 2006; Klafehn, Banerjee, & Chiu, 2008; Thomas, 2006; Van Dyne, Ang, & Koh, 2008). Other theorists of intercultural competence have converged in proposing similar constructs (Klafehn et al., 2008; Thomas, 2006). Inventories assessing these dimensions ask respondents the extent to which they plan for upcoming intercultural activities, check the applicability of and adjust one’s assumptions during a given interaction, and update assumptions after each experience (Ang, Van Dyne, & Tan, 2011; Earley & Ang, 2003). Managers who score higher on such cultural metacognition scales tend to have more success collaborating in their cross-cultural (but not same-culture) relationships and the critical mediating mechanism is a higher level of affect-based trust or rapport (Chua et al., 2012).

In this article, we develop an intervention based upon one of the key characteristics of managers *highly effective at intercultural collaboration: the ability to take the others’ perspective*. One way in which cultural metacognition develops is through reflective observation

during international assignments; thinking about one's international experiences and reflecting critically on one's cultural assumptions and beliefs (Ng et al., 2009). Reflection helps people to describe the situation objectively and develop an understanding of why things happen (Kolb & Kolb, 2005). One such metacognitive strategy is considering how another person's cultural upbringing may affect the way they think about a problem. This strategy, which we will term "cultural perspective taking", brings managers to more accurate guesses about their counterparts' intentions and behaviors, which would facilitate intercultural collaboration. Of course, this strategy could be ineffective or even counterproductive in cases where a counterpart's actual intentions are not well aligned with culturally prototypical preference. However, no research to date has directly examined this basic strategy of cultural metacognition. The current research seeks to explore whether a cultural metacognition intervention can improve managerial skill in collaborating and working with individuals from different cultures, critical to organizational success. We further investigated whether this intervention may be particularly helpful for managers assessed as low in habitual cultural metacognition.

CULTURAL PERSPECTIVE TAKING

Cultural Perspective Taking: Increasing Self-Other Overlap

Perspective taking is the process of imagining the world from another's perspective or putting yourself in another's shoes (Galinsky, Ku, & Wang, 2005). Some of the positive effects of perspective taking include a decrease in the confirmation bias and stereotyping (Galinsky, 2002; Galinsky & Moskowitz, 2000). Such effects seem to occur because perspective taking creates a mental overlap between oneself and the other party (Davis, Conklin, Smith, & Luce, 1996). Thus, people who chronically engage in perspective taking see more of themselves in the other party, which decreases prejudice and stereotyping (Galinsky et al., 2005; Galinsky &

Moskowitz, 2000). At the same time, perspective taking can lead to mimicry (Chartrand & Bargh, 1999), which can be explained by perspective takers also including more of the other party in their own self-concept (Galinsky et al., 2005). Taken together, past research suggests that perspective taking can help form social bonds and facilitate social coordination through a bidirectional self-other overlap (Galinsky et al., 2005). In line with past research and the propositions we put forth above, we propose the following:

Hypothesis 1a: Higher cultural metacognition proclivity will be positively associated with intercultural cooperation.

Hypothesis 1b: The relationship between cultural metacognition proclivity and intercultural cooperation will be mediated by cultural perspective taking.

According to Ng, Van Dyne and Ang (2009), individuals with high metacognitive cultural intelligence are consciously mindful of cultural preferences and norms—before and during interactions. We suggest that this tendency to focus on cultural values and beliefs would affect expectations about a counterpart’s behavior, which in turn would affect one’s willingness to cooperate. When one’s counterpart hails from a culture reputed to affiliate to others in a cooperative manner, then cultural metacognition would increase one’s expectation of cooperation and one’s willingness to cooperate. In such cases, managers habitually high on cultural metacognition would be more successful in attaining collaborative win-win outcomes. One such example is when a counterpart is from a collectivistic culture. Cross-cultural research finds that collectivists tend to be more cooperative, whereas individualists are more competitive (Triandis, 1990). For example, individuals with interdependent self-construals, such as the Chinese and Japanese, emphasize norms of maintaining harmony and satisfying others’ needs in

social interactions, whereas individuals with an individualistic self-construal, such as Americans, emphasize one's own needs (Markus & Kitayama, 1991). Scholars contend that culture influences heuristics and beliefs about what is appropriate, what others expect, and what is to be expected from others (Gelfand & Dyer, 2000; Lytle, Brett, Barsness, Tinsley, & Janssens, 1995), and these heuristics are important to understanding cooperation in a mixed motive conflicts. Thus, when individuals reflect about the values and beliefs of a collectivistic counterpart, they may draw on their assumptions about collectivistic individuals' relational orientation goals, and as a result, would be more likely to adopt cooperative behavior. Similarly, prior research on perspective taking finds that when taking the perspective of an outgroup member, individuals subsequently act more consistently with the other group's norms (Ku, Wang, & Galinsky, 2010). In other words, reflecting on counterpart's relational goals may increase intercultural cooperation by promoting self-other overlap; enhancing one's relational goals as well as expectations about counterpart's relational goals. Thus, we propose the following predictions:

Hypothesis 2a: An intervention inducing cultural perspective taking will promote intercultural cooperation with collectivistic counterparts.

Hypothesis 2b: The relationship between cultural perspective taking and intercultural cooperation will be mediated by one's relational goals towards collectivistic counterparts.

Hypothesis 2c: The relationship between cultural perspective taking and intercultural cooperation will be mediated by expectations about the relational goals of collectivistic counterparts.

In line with arguments put forth by cultural intelligence scholars proposing that individuals high on cultural metacognition chronically engage in cultural perspective taking (Ng et al., 2009), we further propose that cultural perspective taking intervention would have a larger positive impact on intercultural cooperation decisions of individuals low on cultural metacognitive tendencies.

Hypothesis 2d: Inducing cultural perspective taking will promote intercultural cooperation for individuals low on cultural metacognition but would have little/no effect for managers on high cultural metacognition (because of their chronically high levels of cultural perspective taking tendencies).

The Present Research

While past research has examined perspective taking broadly, little research has experimentally examined the role of cultural perspective taking in promoting cross-cultural management skills, such as facilitating intercultural collaboration and cooperation in international teams, cross-cultural negotiations (Lee, Adair, & Seo, 2011) or mixed motive tasks. Extending past research on cultural intelligence and cross-cultural training, we contend that one important cognitive tendency that managers with high levels of metacognitive tendencies (high meta CQ) engage in is cultural perspective taking *prior to and during* an intercultural interaction. More importantly, we suggest that cultural perspective taking tendencies can be temporarily heightened and thus can be especially beneficial for managers chronically low on cultural metacognitive tendencies.

OVERVIEW OF STUDIES

We examined our hypotheses in five studies which span from quasi-field settings to controlled laboratory experiments. In the first study, we examine whether cultural metacognition amongst American MBA students was associated with greater levels of intercultural cooperation with different culture peers working with them in international teams and whether this effect is explained by cultural perspective taking habits (H1a and H1b). In our pilot study, we test a cultural perspective taking (CPT) intervention—thinking about a Chinese counterpart’s cultural values and beliefs—prior to making a business decision to cooperate in a mixed-motive business case. We examined whether this intervention heightened individuals’ intercultural cooperation due to heightening intentions to adopt a relational orientation (associated with Chinese cultural values) (H2a and H2b). In study 2 we investigate whether a cultural perspective taking intervention promoted American MBA students intercultural cooperation in the same business case scenario as the pilot study, but we further examined whether this effect could also be explained by expectations about *counterpart’s* relational goals (H2c). In study 3A, we examine whether inducing CPT in American MBAs prior to engaging an intercultural negotiation with a Japanese counterpart heightened MBA students expectations that their Japanese counterpart would be cooperative in an upcoming negotiation. We further examined whether this intervention was more beneficial for MBAs low on cultural metacognition than high on cultural metacognition (H2d). In Study 3B we provide a comprehensive test of hypotheses H2c-H2d in a unified design.

Study 1

Cultural Metacognition and Intercultural Cooperation

The goal of Study 1 is to examine hypotheses H1a and H1b using a sample of American MBA students working in culturally diverse work environment in which intercultural cooperation is needed to complete study related tasks such as papers and class assignments. To do so, we surveyed entering students about their cultural metacognitive tendencies. Two months subsequent to evaluating students' cultural metacognition tendencies, we evaluated students' cultural perspective taking and cooperation levels by ratings made by their international peers who have been working with them in multinational student teams for two months. We hypothesized that MBA students cultural metacognition scores would be positively associated with different culture peers evaluation of their cooperative tendencies and that this effect would be explained by heightened cultural perspective taking tendencies.

Method

Participants and Procedure

200 American MBA students (Males = 58.5%; Mean $_{Age}$ = 27) were recruited to fill out an online survey as a voluntary part of their pre-MBA assignments (73% of incoming students completed the survey). Students were provided a link to an online survey that asked about their past work experiences abroad and their experiences working in multicultural work environments. The cultural intelligence measure was collected as part of this survey. Upon arrival, students were assigned to multinational learning teams of 5-6 students. Teams were created to maximize the cultural diversity of the team and typically comprised of three American students, one European student and two students from other world regions such as Africa, South-America, Middle-East,

East Asia or South Asia. These teams assemble in MBA student orientation and students spend the majority of orientation activities and their first year of classes working in these teams. After two months in their international teams, 305 international student peers (from non-U.S nationalities) representing 45 nationalities evaluated target American students on a host of leadership related measures as part of a 360 leadership assessment. Each student was evaluated by between 1-4 different culture peers working with them. Student peers were asked to *anonymously* appraise their team members' levels of cooperation and perspective taking tendencies working in these teams as part of their class assignment. Let us now describe the measures in the study in more detail.

Measures

Cultural Metacognition. Incoming MBA students reported their cultural metacognition tendencies using a six-item scale developed by Van Dyne and colleagues (2012). The items tap (a) cultural awareness (e.g., "I am aware of how to use my cultural knowledge when interacting with people from different cultures"); (b) adjustment during intercultural interactions ("I adjust my cultural knowledge while interacting with people from a new or an unfamiliar culture"); and (c) planning before intercultural interactions (e.g., "I develop action plans for interacting with people from a different culture"). (Scale reliability: $\alpha = .82$). We averaged students' self-reports on the six items to create a cultural metacognition score for each student.

Cultural Perspective Taking. After two months working in their international teams, participants were evaluated by classmates from other cultures with regard to their perspective taking habits. The items were the following: "S/he is able to empathize and understand someone else's perspective" ; "S/he misjudges people's personality and character" [Reversed]; S/he fails to realize the impact of what s/he says and does on others" [Reversed]; "S/he is good at assessing

other people's strengths and weaknesses”; “S/he is good at sensing what other people are thinking and feeling” (Scale reliability: $\alpha=.83$). We averaged each rater’s evaluation of each target student on these five items to create their cultural perspective taking score for each target student.

Intercultural Cooperation. Peers also evaluated target students on three items that assessed American MBA students’ ability to work effectively in their international teams. The items were the following: “She/he is able to build effective working relationships with others who have different opinions or interests” and “She/he is able to build coalitions to get things done” (Scale reliability: $\alpha=.65$). We averaged each rater’s evaluation of each target student on these two items to create their intercultural cooperation score for the target student.

Control variables

Dimensions of cultural intelligence other than cultural metacognition, namely cognitive, motivational and behavioral CQ, have been found to predict intercultural cooperation tendencies (Imai & Gelfand, 2010). As a result, we included these scales control variables: cognitive CQ ($\alpha=.84$), motivational CQ ($\alpha=.86$), and behavioral CQ ($\alpha=.86$) (Ang et al., 2007).

Additionally, since student peer ratings of target students’ cooperation levels may be influenced by their levels of acquaintance with target students, we included raters’ familiarity with the target student as an additional control (“how well do you know this person?”, 1 = Not at all to 4 = extremely well).

Results and Discussion

Hypothesis H1a predicted that cultural metacognition would be positively associated with intercultural cooperation. To test this hypothesis, we used HLM software to carry out our analyses (Raudenbush, 2004). We ran a linear hierarchical linear model (HLM) treating different

culture student peers as nested within target American students, with student peer ratings as the dependent variable (at level 1) and cultural metacognition and the control variables as level 2 predictors. Table 1 reports the results from the hierarchical linear model analyses. Model 1 contains the control variables whereas model 2 adds the predictor of cultural metacognition. Analyses revealed that cultural metacognition was positively associated with peers' evaluation of target students' levels of cooperation in international teams, $B = .20$, $SE = .09$, $t(195) = 2.22$, $p < .05$. Thus the results supported H1a.

Next, we examined whether cultural perspective taking tendencies mediated the relationship between cultural metacognition and intercultural cooperation. Following Baron and Kenny's (1986) procedure for mediation analyses, we found, first, that cultural metacognition (level 2 predictor) was positively associated with student peers evaluation of target students cultural perspective taking tendencies (level 1 dependent variable), $B = .20$, $SE = .09$, $t(195) = 2.26$, $p < .05$. Second, when cultural metacognition and cultural perspective taking (mediator) were both entered into the HLM model as level 2 predictors (see Model 3), the effect of cultural metacognition turned statistically non-significant, $B = .06$, $SE = .07$, $t = .90$, $p = .37$ whereas the effect of cultural perspective taking on intercultural cooperation remained statistically significant, $B = .67$, $SE = .04$, $t = 15.01$, $p < .001$, suggesting mediation (see Figure 1 for full mediation model). A bootstrapping test with 20000 bootstrap resamples (Selig & Preacher, 2008) confirmed a positive indirect effect of cultural metacognition on intercultural cooperation via cultural perspective taking (95% CI [.02, .25]). These results provide support for hypothesis H1b.

In summary, the results from Study 1 provide evidence supporting our hypotheses that chronically high cultural perspective taking tendencies explain the relationship between cultural metacognition skill and successful intercultural collaboration with different-culture counterparts.

Study 2

Cultural Perspective Taking Intervention

While study 1 provides the first empirical evidence that the relationship between cultural metacognition and intercultural cooperation is explained by cultural perspective taking tendencies, in study 2, we examined one intervention for promoting cultural perspective taking, that is, reflecting how the cultural background of one's counterpart may affect their approach to a mixed-motive conflict. This cognitively oriented intervention is distinct from affectively oriented interventions in past work on intercultural collaboration (Chua et al., 2012). We tested whether this cultural perspective taking intervention would shift participants' decisions, in this case shift them toward a relational, harmonious approach congruent with Chinese norms (H2b).

Pilot Study

Method

Participants and Procedures

For an initial test of the cultural perspective taking intervention, we recruited 107 American participants (81.3% = White/Caucasian; 7.5% = Asian, 6.5% = African American, 3.7% = Hispanic, .9% = Native American; Female = 51%; Mean M_{Age} = 34, 28.1% college students, 70.1% currently working) via Mechanical Turk for a study on problem solving. Participants were randomly assigned to a cultural perspective taking condition or control condition.

Materials

Mixed-Motive Conflict. Participants were asked to read a business case which was a Prisoners' Dilemma task presented as a conflict on an advertising campaign between an American product manager and a Chinese product manager (Ku et al., 2010). Participants were first presented with the following prompt:

“You are Mr./Ms. Graham, the head of a product management group in a consumer products firm based in the U.S, handling the marketing of a new liquid dishwasher detergent. As a manager, you are faced with a recurring decision as to whether or not you should put on an advertising campaign during the next sales period. This campaign would provide consumers with comparative information about your **Chinese competitor's product: Li Hong.** The comparative advertising campaign will describe the destructive impact of your competitor's product on a dishwasher's motor, spots left on the dishes, and/or its high cost.

Your objective is to maximize your profit. This is also the objective of your Chinese competitor, Li Hong. Profitability will also be used as a way of measuring your success as a manager. The profitability of your product depends not only on your decision but also on the **decision of Li Hong.** Specifically, if neither you nor Li put on a derogatory advertising campaign, each company will make \$1 million for the sales period. If one of you puts on a comparative advertising campaign but the competing company does not, then the company that advertises will have a profit of \$2 million for the sales period and the competitor will lose \$2 million. If both companies advertise the deficiencies of their competitor's product, then total sales of liquid dishwasher detergent will fall and both companies will lose \$1 million for the sales period.”

Participants were asked to decide whether to embark on an advertising campaign disparaging a Chinese product manager, Li Hong, who is selling a similar product. Advertising was equivalent to an aggressive, competitive response, whereas not advertising was equivalent to cooperating. Participants' decision not to advertise was used as a measure of intercultural cooperation.

Manipulation. Next, participants in the CPT condition were asked to think about their counterpart's culture before making their decision. Below is the prompt they received:

“Before you go on to make your decision, we would like you to do the following: Please write down a few sentences describing Li's (Chinese manager's) interests and concerns as a person living and working in China...How would Li's cultural values and beliefs guide his behavior and decision in this situation?”

Intercultural Cooperation. Next, participants were asked to make their decision in the case (advertise or not advertise).

Goals. After making their decision, participants indicated in an open-ended response format what guided their decision-making in the case. They were presented with the following prompt:

“Please write down a few sentences explaining what guided your decision to advertise or not advertise in the business case.”

Two research assistants blind to the hypotheses rated participants’ open-ended responses. Raters evaluated participants’ decisions on the following items: “The participant was interested in promoting future business relations with Li”; “The participant was interested in cooperating with Li”; “The participant was interested in achieving the business goal of maximizing profit/minimizing profit loss” (Reversed); (1= strongly disagree, 7= strongly agree; ICC =.80).

The three items were averaged to create a score for each participant ($\alpha=.89$).

Manipulation Check. After making their decision, participants indicated whether they thought about Chinese cultural values while evaluating the case. They rated their thought process on the following three items: “I tried to think what a Chinese manager would do in this case”; “I thought about Chinese business norms when making my decision”; “I thought about Chinese cultural values when making my decision”. Items were averaged (Van Dyne et al., 2012) to create a score for each participant (1= Not at all; 7= Very Much; $\alpha = .87$).

Cultural Intelligence. At the end of the study, participants reported their cultural intelligence (cultural metacognition (Van Dyne et al., 2012): $\alpha = .87$; Cognitive CQ: $\alpha = .80$; Motivational CQ: $\alpha = .82$; Behavioral CQ: $\alpha = .87$ (Ang et al., 2007). As in Study 1, these four cultural intelligence factors were included as control variables in our analyses.

Results and Discussion

Manipulation Check

To test whether the CPT manipulation induced cultural perspective taking in participants, we ran an ANCOVA (between subject factor: experimental condition; covariates: four CQ factors) on the cultural perspective taking scores and found that participants reported thinking more about Chinese cultural values and beliefs in the CPT condition ($M = 4.58$) than the control condition ($M = 3.32$), $F(1, 150) = 18.84, p < .001$.

Hypothesis H2a proposed that cultural perspective taking would promote cooperation with a different culture colleague. To test this, we regressed decision to cooperate with Chinese counterpart (compete=0, cooperate=1) on the experimental condition (0=control, 1=CPT), controlling for the four CQ factors. Analyses revealed a main positive effect of the manipulation on intercultural cooperation, $B = .93, SE = .48, Wald(1) = 3.73, p < .05$. Thus, the results supported hypothesis H2a.

To examine whether the effect of the CPT intervention on decisions runs through goals, we followed Baron and Kenny's (1986) steps for testing mediation. We first examined the relationship between the experimental condition and goals (controlling for cultural intelligence factors) using multiple regression analysis and found them to be positively associated, $B = .90, SE = .26, t(101) = 3.45, p < .01$. Then we conducted binary logistic analysis and entered both the experimental condition and students relational orientation scores as predictors of choice to cooperate, controlling for cultural intelligence factors. Analysis revealed that the effect of the condition turned statistically non-significant, $B = -.58, SE = .78, Wald(1) = .55, p = .46$, whereas the effect of students relational scores remained a significant predictor of choice to cooperate

with Li, $B = 2.13$ $SE = .44$, $Wald(1) = 23.47$, $p < .001$ suggesting mediation (see Figure 2). A bootstrapping test confirmed a positive indirect effect between CPT on students' choice to cooperate via intentions about adopting a relational business orientation (95% CI [.31, 3.27]). Thus, the results above provided support for hypothesis H2b. In sum, our pilot study revealed that a cultural perspective taking intervention increased participants' relational orientation towards a Chinese counterpart and explained their decision to cooperate with him.

Study 2

Cultural Perspective Taking Intervention with MBA Students

In Study 2 we shifted to test our CPT intervention with MBA students. Moreover, we added a measure of participants' expectations about their counterpart's decision. Much past research finds that cooperation in mixed-motive conflicts hinges on expectancies of the counterpart's cooperation (Wong & Hong, 2005). Accordingly, we examined whether the association between cultural perspective taking and cooperation hinges on heightened expectancies of the Chinese counterpart's goal to cooperate (H2a and H2b).

Method

Participants and Procedures

57 (Non-Chinese) MBAs (61.4% American; Males = 65%; Mean $_{Age} = 28$) completed the study as part of an in-class exercise. 70.2 % of students identified as White/Caucasian, 21.1% Asian (Non-Chinese) 3.5% Latin/Hispanic, 1.8% as African-American and 3.5% as other ethnicities. Students were randomly assigned to a cultural perspective taking (CPT) condition or control condition.

Materials

Mixed Motive Conflict. Students were asked to read a business case which was a Prisoner Dilemma task presented as an advertising task. The instructions and task were presented in the same manner as in the pilot study.

Manipulation. Next, participants in the CPT condition were asked to think about their Chinese counterpart's cultural values before making their decision. The prompt presented to MBA students was the same prompt used in the pilot study.

Intercultural Cooperation. Next, participants were asked to make their decision in the case (advertise or not advertise).

Manipulation Check. After making their decision, participants indicated whether they thought about Chinese cultural values while evaluating the case which served as a manipulation check using the following three items: "I tried to think what a Chinese manager would do in this case"; "I thought about Chinese business norms when making my decision"; "I thought about Chinese cultural values when making my decision". Items were averaged to create a score for each participant (1= Not at all; 7= Very Much; $\alpha = .89$).

Expectancies of Counterpart's Cooperativeness. Next, participants rated their confidence that Li would not advertise (i.e. cooperate) using a seven point (1=Not at all; 7=Very Much)(Wong & Hong, 2005).

Control Variables. At the end of the study, participants completed a cultural intelligence assessment (Cultural metacognition (Van Dyne et al., 2012): $\alpha = .73$; Cognitive CQ: $\alpha = .90$; Motivational CQ: $\alpha = .79$; Behavioral CQ: $\alpha = .88$ (Ang et al., 2007)).

Results and Discussion

Manipulation Check

To test whether the CPT manipulation induced cultural perspective taking in MBA students, we ran an ANCOVA (between subject factor: experimental condition; covariates: four CQ factors) on the cultural perspective taking scores and found that students reported more thoughts about counterparts' cultural values and beliefs in the CPT condition ($M = 5.49$) than the control condition ($M = 4.17$), $F(1, 57) = 14.27, p < .001$.

Hypothesis H2a suggested that inducing cultural perspective taking would promote cooperation with a counterpart from a cultural known for cooperative relational norms. To test this prediction we conducted binary logistic regression regressing students' choice to advertise or not advertise (advertise = cooperate = 0; not advertise = cooperate = 1) on the experimental condition (0 = control, 1 = CPT), controlling for cultural intelligence factors. Analyses revealed a positive main positive effect of CPT on intercultural cooperation, $B = 1.43, SE = .63, Wald(1) = 5.23, p < .05$. These results supported hypothesis H2a replicating the results from the pilot study revealing that cultural perspective taking had a direct positive effect on intercultural cooperation.

Hypothesis H2b further suggested that the relationship between CPT and intercultural cooperation would be mediated by expectations about counterpart's cooperativeness in the case. To test this prediction, we first examined the relationship between the experimental condition and expectations about counterpart's cooperativeness (the mediator). Multiple regression analysis revealed that the CPT condition had a positive main effect on expectations that counterpart would cooperate ($B = 1.37, SE = .52, t = 2.62, p < .05$). When both experimental condition and expectations about counterpart's cooperativeness were entered as predictors of cooperation in a logistic regression model, the relationship between the experimental condition

and intercultural cooperation turned statistically non-significant ($B = .95$, $SE = .69$, $Wald(1) = 1.86$, $p = .17$), while expectations about Li's cooperation remained a significant predictor of intercultural cooperation ($B = .47$, $SE = .18$, $Wald(1) = 7.19$, $p < .01$), suggesting mediation (see Figure 3). A bootstrapping test confirmed there was a positive indirect effect between CPT on intercultural cooperation via expectations about Li's cooperativeness (95% CI [.01, 1.84]).

These results reveal that the CPT manipulation increased MBA students' cooperation with a Chinese counterpart and this effect was explained by their heightened expectations that their counterpart—Li Hong-- would cooperate as well. Thus, the results supported hypotheses H2a and H2b and suggest that one intervention for promoting managers cross-cultural working relations is asking them to reflect about their counterpart's values and beliefs prior to meeting them. Moreover, we find that CPT also increases expectations that counterpart holds relational, cooperative goals when making his or her decision.

Study 3A

Perspective Taking and Intercultural Negotiations

While study 2 revealed a causal positive relationship between cultural perspective taking and intercultural cooperation, in Study 3A, we examined this intervention as a preparation for an international negotiation with a Japanese counterpart. We also further explored whether this intervention produced greater benefits (e.g. increased cooperation) for MBA students low on metacognition than high metacognition individuals.

Method

Procedure

76 American MBA students (Males = 56%; Mean $_{Age}$ = 27) participated in a negotiation exercise in their first semester of school as part of an in-class exercise. Upon beginning their MBA program, American MBA students reported their cultural metacognition levels in an orientation survey (using the same method as in Study 1). Two months later (as part of an in-class exercise) American MBA students were asked to complete a pre-negotiation survey prior to a negotiation with a Japanese counterpart over the manufacturing of mini excavators (Patel & Brett, 2007). Since students later carried out the negotiation in teams, we only examined their expectations about their counterpart's cooperation *prior to the negotiation*. Students were randomly assigned to either a cultural perspective taking manipulation or a control condition.

Materials

Cultural Intelligence. Two months prior to the negotiation exercise, students completed the four-factor cultural intelligence assessment described in the previous studies (cultural metacognition: $\alpha = .80$; Cognitive CQ: $\alpha = .80$; Motivational CQ: $\alpha = .85$; Behavioral CQ: $\alpha = .86$ (Ang et al., 2007)). The four CQ factors were included as control variables in all of the following analyses.

Negotiation Exercise. Upon arriving to class, students received their negotiation roles and were asked to read the materials prior to completing their pre-negotiation surveys. The case involved a negotiation between two companies, Abhas and Bussan (represented by Sato-San), over the manufacturing of mini excavators and the case materials included five issues. All American students were assigned to the Abhas role.

Cultural Perspective Taking Manipulation. Prior to the negotiation, students were provided a link to an online survey where they were asked to predict their Japanese counterpart's orientation in the upcoming negotiations. Students in the CPT condition received the following information before making their predictions about their Japanese counterpart (Students in the control received no prompt).

“Before you go on to guess Sato-san's (Japanese counterpart from the Bussan company) priorities and goals in the negotiations, we would like you to do the following: Please take a few moments to think about the perspective of Sato-san negotiating on behalf of a company operating in Japan. Try to imagine what Sato-san would be thinking and what may be her/his interests and concerns based on the fact that she/he is negotiating on behalf of a company operating in Japan. Try your best to put yourself in Sato-san's shoes. Please write down a few sentences describing Sato-san's interests and concerns about the five case issues as a Japanese negotiator.”

Expectancy of Counterpart's Cooperativeness. Next, students were asked to predict the orientation of their Japanese counterpart during the upcoming negotiation using the following categories: (1) Cooperative, (2) Competitive or (3) Don't Know. All other responses (competitive or don't know) were coded as 0.

Results and Discussion

We conducted a logistic regression analysis examining the effects of the experimental condition on MBA students' expectations that their Japanese counterpart would be cooperative in the upcoming negotiation. Analyses revealed no main effect of condition, $B = .27$, $SE = .26$, $Wald(1) = 1.11$, $p = .29$. Next, we examined whether the intervention had a stronger effect for individuals with a low baseline proclivity toward cultural metacognition. To test this prediction,

we used binary logistic regression and tested for an interaction between cultural metacognition and experimental condition on perceptions of cooperativeness. Analyses revealed a significant two way interaction between cultural metacognition and the experimental condition on expectation that Japanese counterpart would cooperate, $B = -0.84$, $SE = .39$, $Wald(1) = 4.71$, $p < .05$. Simple slope analysis following procedures by Aiken and colleagues (1991) revealed that MBAs low on cultural metacognition were more likely to expect their Japanese counterpart would be cooperative when asked to reflect on their Japanese counterpart's values and behaviors (CPT condition) than not (control condition), $B = 1.80$, $SE = .80$, $Wald(1) = 5.10$, $p < .05$ (see Figure 4). At the same time, the CPT for MBAs high on cultural metacognition did not alter their (already moderately high) expectations about their Japanese counterpart's cooperativeness, $B = -0.75$, $SE = .73$, $Wald(1) = 1.07$, $p = .30$ (see Figure 4).

While the manipulation did not have a main effect on expectancies, there was an interaction effect: individuals habitually low in cultural metacognition were prompted by the manipulation to think about their Japanese counterpart's cooperativeness more than they did in the control condition, whereas individuals high in cultural metacognition were not pushed to think more than they did in the control condition (already a considerable amount). Hence this is an intervention that works most for individuals not culturally minded in that it helps them take useful cultural information into account. To help those who are already culturally minded make even more finally calibrated decisions, another kind of manipulation may be needed.

Study 3B

While study 3A revealed that offering a cultural perspective taking intervention to individuals low on cultural metacognition promotes *expectations* that their different culture counterpart would cooperate in an upcoming international negotiation, we did not examine

whether this intervention also directly increased intercultural cooperation *decisions* of MBAs low on cultural metacognition. Thus, the aim of Study 3B was to examine hypotheses H2b-H2c in a unified study design.

Method

Participants and Procedures

76 American participants (100% White/Caucasian, Female = 52%; Mean $_{Age}$ = 34, 26% college students, 62% currently working) were recruited via Mechanical Turk and were asked to complete a survey on decision making. The procedure was the same design as Study 2. Participants were randomly assigned to a cultural perspective taking or control condition.

Materials

Mixed Motive Conflict. Participants were asked to read a business case which was a Prisoner Dilemma task presented as an advertising task. The task presented was the same task presented in Study 2.

Manipulation. Next, participants in the cultural perspective taking condition were asked to think about their Chinese counterpart's cultural values before making their decision in the business case (same task as Study 2).

Intercultural Cooperation. Next, participants were asked to make their decision to in the case (advertise/not advertise).

Manipulation Check. After making their decision, participants indicated whether they thought about Chinese cultural values while evaluating the case which served as a manipulation check using the following three items (as in Study 2): "I tried to think what a Chinese manager would do in this case"; "I thought about Chinese business norms when making my decision"; "I thought

about Chinese cultural values when making my decision”. Items were averaged to create a score for each participant (1= Not at all; 7= Very Much; $\alpha = .83$).

Expectancies. We also evaluated participants’ inferences about Chinese counterpart’s long-term relational goals using the following statements: “I thought Li would care about our long-term relationship”; “I thought Li would be most concerned about making profit” [Reversed]. The two items were averaged to create a score for each participant ($\alpha = .87$).

Cultural Intelligence Measure. At the end of the study, participants completed the usual cultural intelligence assessment (cultural metacognition : $\alpha = .87$; Cognitive CQ: $\alpha = .86$; Motivational CQ: $\alpha = .89$; Behavioral CQ: $\alpha = .91$ (Ang et al., 2007)). As in the previous studies, these four cultural intelligence factors were included as control variables in our analyses.

Results and Discussion

Manipulation Check

To test whether the CPT manipulation induced cultural perspective taking, we ran an ANCOVA (between subject factor: experimental condition; covariates: four CQ factors) on the cultural perspective taking scores and found that participants reported greater levels of cultural perspective taking in the CPT condition ($M = 4.72$) than the control condition ($M = 3.55$), $F(1, 76) = 11.77, p < .01$.

We first tested hypothesis H2a suggesting that cultural perspective taking would promote intercultural cooperation. To do so we conducted binary logistic regression using experimental condition as a predictor variable on participants’ decision to cooperate. Consistent with hypothesis H2a (and results from studies 2A and 2B), the CPT condition had a positive effect on choosing a cooperative strategy with Li, $B = 1.06, SE = .51, Wald(1) = 4.30, p < .05$.

Next, we conducted binary logistic regression analysis to examine whether expectations about Chinese counterpart's strategy explained the relationship between the experimental condition and decision to cooperate. When both experimental condition and expectations about counterpart's cooperation were entered into the binary logistic regression model, the effect of CPT turned statistically non-significant, $B=.74$, $SE=.55$, $Wald(1) = 1.80$, $p = .18$, while expectations about Li's relational goals remained a significant positive predictor of cooperation, indication mediation, $B = .66$, $SE = .21$, $Wald(1) = 9.60$ $p < .01$ (see Figure 5). A bootstrapping test confirmed there was a positive indirect effect between CPT on intercultural cooperation via expectations about counterpart's relational goals (95% CI [.03, 1.59]). The results above provide additional support for hypotheses H2a and H2b by revealing that the CPT manipulation increased the likelihood of choosing a cooperative strategy with a Chinese counterpart by heightening expectations that the Chinese counterpart would choose a cooperative strategy as well.

Next, we examined hypotheses H2d and tested whether inducing CPT had a greater positive effect on decisions to cooperate for individuals low on cultural metacognition. To test this hypothesis, we conducted binary logistic regression analysis and tested for an interaction between the experimental manipulation and cultural metacognition on decision to cooperate. Analyses revealed a significant interaction, $B = -1.47$, $SE=.63$, $Wald(1) = 5.55$, $p < .05$. To probe the interaction, we conducted simple slope analysis (Aiken et al., 1991) examining the effect of the experimental condition in individuals low on cultural metacognition versus high cultural metacognition individuals. Consistent with our predictions, analyses revealed that individuals low on cultural metacognition were significantly more cooperative in the CPT condition than the control condition, $B = 1.39$, $SE=.48$, $Wald(1) = 8.41$, $p < .01$. At the same time, the CPT

manipulation did not enhance cooperation levels for individuals high on cultural metacognition, $B = -.08$, $SE = .35$, $Wald(1) = .05$, $p = .82$.

DISCUSSION

In five studies we provided a comprehensive test of our hypotheses positing that a metacognitive tendency, namely—cultural perspective taking—can promote intercultural cooperation and be especially useful for promoting intercultural cooperation amongst managers low on cultural metacognition. The present research contributes to ongoing research in management education and learning by providing a novel framework utilizing both an individual difference approach and situational priming geared towards identifying and developing managers' cross-cultural management skills.

Theoretical Implications

While much of past research on cultural intelligence (CQ) has focused on identifying the link between cultural intelligence and managerial performance measures (Ang et al., 2007; Chen, Kirkman, Kim, Farh, & Tangirala, 2010; Groves & Feyerherm, 2011; Imai & Gelfand, 2010; Rockstuhl & Ng, 2008; Rockstuhl, Seiler, Ang, Van Dyne, & Annen, 2011), the present research is the first to identify a cognitive based mechanism associated with one of the factors of cultural intelligence. Moreover, we provide the first empirical evidence that a cognitive mechanism—cultural perspective taking—has a direct positive effect on behavioral measures associated with managerial performance in culturally diverse settings, spanning intercultural collaboration in international teams, decision making in mixed motive conflicts and preparation for international negotiations.

Expatriate managers and cross-cultural training

To date, one of the most common formats for conducting cross-cultural training programs includes brief lectures that provide basic information about the history and socio-economic situation of a target or foreign culture (Earley et al., 2006). However, the field has long recognized that knowledge of cultural patterns in itself does not adequately prepare a manager for understanding and mastering novel situations (Triandis, 1972). Similarly, Earley and Peterson (2004) contend that cross-cultural training for international managers should focus on developing metacognitive strategies rather than rigid country-specific prescription that are problematic for a number of reasons. First, such training does not adjust for individual differences in capability across cognitive, metacognitive, motivational, and behavioral domains (Earley & Peterson, 2004). Second, they fail to consider the nature of the target culture and the work to be performed in terms of intensity, duration, and nature (Earley et al., 2006). Third, the knowledge provided to managers in culture specific training programs is not transferable across cultural domains (Earley & Peterson, 2004).

There are a number of reasons why habituating metacognitive tendencies may be more advantageous than the current cross-cultural training framework. For example, past research finds that informational training programs are more effective when combined with experiential exercises that make salient the cognitive and affective states encountered during intercultural contact (Bhawuk, 2001; Brislin, Landis, & Brandt, 1983). Other scholars have shown that training components that increase participants' awareness about culture and its influence on thought and behavior also can add value (Landis, Brislin, & Hulgus, 1985). Extending past research, our findings reveal that developing metacognitive strategies in managers, whether habitual or inducted by an intervention, helps managers make optimal decisions in a variety of

intercultural situations, such as working in international teams, international negotiations and mixed-motive conflicts across organizations.

The intervention we examined provides a strategy for dealing with cultural differences that can be especially useful for managers who are demanded to take on shorter and more frequent international assignment (ERC, 2010). As Earley and Peterson note (2004), career trends have managers working in more countries and spending shorter periods in any single country. Therefore, developing skills that extend beyond country specific knowledge is crucial for managerial and organizational success today. Moreover, metacognitive skills are important even for managers who don't leave their native country but work in internationally diverse teams whose members follow a myriad of country-specific cultural norms (Earley & Mosakowski, 2000). In instances such as these, training managers with country specific knowledge is less practical than equipping global managers with meta-cognitive skills. With regards to developing cultural metacognition, Tan and Chua (2003) acknowledged that while CQ may be partially determined by basic intellectual ability, an individual's CQ can still be improved through training and in fact recent research finds that cross-cultural training enhanced cognitive, and behavioral dimensions of CQ (metacognitive dimension was not examined) (Rehg et al., 2012). In conclusion, the intervention examined in this study is compatible with ongoing structural changes to international assignments and thus is more practical and cost effective than training managers with country specific knowledge.

Cultural Intelligence and Intercultural Relationships

Importantly, our research makes a contribution to the broader literature on cross-cultural organizational behavior by empirically examining intercultural interactions. While much of the organizational behavior literature discusses cross-cultural interactions, very few studies

empirically investigate these interactions (Gelfand, Erez, & Aycan, 2007). Studies that do examine cross-cultural interactions and adaptation tend to take a long-term orientation (Mendenhall & Oddou, 1985), and relatively few examine discrete, individual interactions that cross cultural boundaries (Adair, Okumura, & Brett, 2001; Brett & Okumura, 1998; Molinsky, 2007). By examining an individual's behavior as a function of both their levels of cultural intelligence, as well as the culture of a relevant other, we extend prior work on cross-cultural interactions and provide a framework with which future researchers can further extend the body of knowledge on cross-cultural organizational behavior.

The present set of findings also provide a contribution to the growing body of research on how dimensions of cultural intelligence (CQ) affect people's abilities to manage various forms of interdependence with counterparts from different cultures. Recent research by Chua, Morris and Mor (2012) focused on collaborations within the context of professional networks. They found that executives with a higher proclivity toward cultural metacognition attain more creative collaboration success in their intercultural ties, as they develop more affect based trust in these ties, relative to those lower in cultural metacognition. In the context of intercultural negotiations, Imai and Gelfand (2010) have found that motivational CQ (the motivation and efficacy to engage culturally different others) predicted integrative behaviors, resulting in higher joint gains and that behavioral CQ (behavioral flexibility during intercultural interactions), but not other dimensions of CQ, predicted sequences of cooperative strategies. Our research adds to this stream of research by (1) identifying strategies for using cultural knowledge that are associated with cultural metacognition such as cultural perspective taking and (2) examining whether metacognitive strategies can be induced through an intervention guiding perspective taking.

The present findings also extends past research examining intercultural trust and collaboration (Chua et al., 2012) by examining the role of cognitive based tendencies rather than affective mechanisms leading to intercultural trust and collaboration. Past research finds that trust leads to better rapport, which increases willingness to cooperate with others in mixed-motive conflicts (Drolet & Morris, 2000). Trust can arise via two distinct psychological processes: a cognitive evaluation of the other party's competence and reliability, or an affective experience of liking and rapport (McAllister, 1995). The former is based on expectations of task-related competence and involves an analytic and utilitarian assessment of the other party; the latter is closely linked to empathy and rapport, and arises from emotional closeness. These two types of trust closely resemble two central dimensions of social perception: warmth and competence (Fiske, Cuddy, & Glick, 2007). Affect-based trust is strongly linked to perceived warmth, whereas cognition-based trust to perceived competence.

We argue that cognitive based mechanism leading to intercultural trust and cooperation are important to examine for a number of reasons. First, McAllister (1995) notes that some level of cognition-based trust is necessary for affect-based trust to develop . Second, negotiations scholars have found that differences in cognitive schema impede the building of trust in intercultural negotiations (Brett & Okumura, 1998; Jang & Chua, 2011). When negotiating across cultures, negotiation counterparts do not always share the same implicit scripts, norms, and assumptions. We argue that matching the cognitive schemas of counterparts, for example, by engaging in cultural perspective taking, can facilitate bridging across differences in cognitive schema. At the same time, future research should continue to investigate differential effects of cognitive versus affective based mechanisms in intercultural exchanges (Chua et al., 2012).

Mindfulness in Management

Previous research has argued that mindfulness training may ameliorate the potential for emotions, fears, prejudices or biases to “hijack” thought and action (Langer, 2000). A psychological definition of mindfulness is bringing one’s complete attention to the experiences occurring in the present moment, in a nonjudgmental and accepting manner (Baer, 2003; Brown & Ryan, 2003; Kabat-Zinn, 1982; Linehan, 1993). Differently put, it is the “simple act of drawing novel distinctions” , helping us have a “greater sensitivity to context” and overcome, or not form, mind-sets that may limit our thinking (Langer, 2000). It is also suggested that the techniques for cultivating mindfulness all rely upon slowing down the on-rush of mental activity and trying to focus attention on the world of sensations in itself rather than “jumping on the first interpretation that comes along” (Claxton, 1997). Along the same vein, the present research provides empirical evidence suggesting that being mindful of different culture counterparts thoughts and feelings (by engaging in cultural perspective taking examined in Study 1) as well as being aware of different culture counterparts’ values and beliefs (Studies 2 and 3) can facilitate intercultural cooperation associated with cross-cultural managerial performance. Similarly, scholars have noted that a mindful manager—a manager who adopts a positive nonjudgmental and reflective stance— might be more likely to engender enhanced empathy and positive regard that influences task (e.g., financial) and relational (e.g., long-term business relationship) instrumental outcomes, as well as well-being (Davidson et al., 2003; Kopelman, Avi-Yonah, & Varghese, 2011). Recent review of mindfulness and management research suggests that mindfulness practices can enhance task performance (Dane, 2011). Consistent with these claims, the present research offers an intervention that is associated with engaging in mindfulness about a counterpart’s cultural background has a direct positive effect on relational organizational

outcomes, such as collaboration in international teams (Study 1) and decision making in mixed motive conflicts (studies 2 and 3). Thus, future research should continue developing interventions focused on making managers mindful of cultural cues in organizational contexts and examine their effects on managers' cross-cultural management skills.

Practical Implications

Working Effectively in Global Teams

Developing metacognitive habits in managers are of particularly high importance for the success of multinational teams (Earley & Peterson, 2004). Global teams often face the challenge of getting members from different cultures and countries to work effectively with one another (Earley & Gibson, 2002; Hagel & Brown, 2005). Global teams especially face the challenge of establishing goals and common purpose, roles played by team members, and rules for conduct and interaction because of the additional complexity added due to cultural differences (Earley & Gibson, 2002; Earley & Mosakowski, 2000; Snow, Snell, Davison, & Hambrick, 1996). As a result, a successfully functioning global team requires that members acknowledge their weak overlapping knowledge and focus on the most basic commonality to create a hybrid or synergistic culture (Adler, 1997; Adler & Bartholomew, 1992; Earley & Mosakowski, 2000). One way in which a hybrid culture can develop is by establishing shared cognitive based schemas for carrying out tasks. According to Early and Peterson (2004) metacognition is critical for developing and identifying strategies that might be used to determine the basis for a hybrid culture. Thus, future research should examine whether a cultural perspective taking intervention may enable managers to bridge cultural differences in global teams.

Developing Cross-Cultural Negotiations Skills

It is common knowledge that intercultural negotiations are often less successful than intracultural negotiations (Brett & Okumura, 1998; Graham, 1985). However, little research has offered interventions for improving cross-cultural negotiation skills and outcomes (Adair et al., 2001). A review of negotiation simulations designed to teach cross-cultural negotiations revealed two types of exercises: those that teach cultural preferences and those that teach cultural styles of communication (Adair, 2008). In contrast to these types of interventions, the intervention we propose extend beyond one specific culture and may help managers negotiate globally (Brett, 2007). Our proposed intervention for cross-cultural negotiation training is consistent with Adler's (1997) proposition that cultural adaptation in negotiations (such as matching your counterpart's strategy) may increase the chances of positive negotiation outcomes. Moreover, the argument that CPT may promote intercultural negotiation outcomes is also consistent with past research findings that general perspective taking in negotiation-- the active consideration of the other party's alternatives and interests prior to negotiation-- aids negotiators in both claiming and creating value (Galinsky, Maddux, Gilin, & White, 2008; Kemp & Smith, 1994; Neale & Bazerman, 1982).

Limitations

As with any set of studies, the present research has limitations. First, our measure of cultural metacognition is reported by individuals and thus is subjected to self-report biases (Nisbett & Wilson, 1977). At the same time, past research finds convergent validity between self-reports and observer reports using the cultural metacognition measure (Kim & Van Dyne, 2011; Van Dyne et al., 2008). Another limitation of the study is that we examined a cultural perspective taking intervention with collectivistic but not individualistic counterparts. We

focused on collectivistic counterparts when testing the CPT intervention because of the greater cultural distance between American culture (individualistic) and Chinese and Japanese cultures (Oyserman, Coon, & Kemmelmeier, 2002). At the same time, it is important to note that past research finds that general perspective taking can enhance a competitive orientation in competitive contexts but less so in cooperative situations (Epley, Caruso, & Bazerman, 2006). These findings suggest that cultural perspective taking may facilitate cooperation and joint gains more with collectivistic than individualistic counterparts. Indeed recent research finds that East Asian negotiators taking the perspective of North American negotiators were more self-interested (than other oriented) and claimed more value in the negotiations (Lee et al., 2011). Nonetheless, we claim that cultural perspective taking may provide more realistic expectation about counterparts' goals and behavior which may facilitate social coordination. Consistent with this claim, prior research finding that individualistic individuals display less cooperative behavior in a prisoner dilemma task than collectivistic individuals (Cox, Lobel, & McLeod, 1991).

CONCLUSION

In this article we focus on identifying and habituating a cognitive habit of managers highly effective at intercultural collaboration: managers high on cultural metacognitive habits. Future research should continue examining adaptive cognitive and affective based psychological mechanisms utilized by managers who effectively collaborate with different culture counterparts. Notably, the findings and approach put forth in the present paper can provide management and education scholars with novel insights about developing interventions and tools for global managers who need to successfully master intercultural collaborations across a wide range of cultures.

REFERENCES

- Adair, W. L. 2008. Go-Go Global: Teaching What We Know of Culture and the Negotiation Dance. *Negotiation and Conflict Management Research*, 1(4): 353-370.
- Adair, W. L., Okumura, T., & Brett, J. M. 2001. Negotiation behavior when cultures collide: The United States and Japan. *Journal of Applied Psychology*, 86(3): 371.
- Adler, N. J. 1997. International Dimensions of Organizational Behaviour South. *Western College Publishing: Cincinnati, Ohio*, 164: 101–114.
- Adler, N. J., & Bartholomew, S. 1992. Managing globally competent people. *The Executive*: 52-65.
- Adler, N. J., & Gundersen, A. 2008. *International dimensions of organizational behavior*: South-Western Pub.
- Aiken, L. S., West, S. G., & Reno, R. R. 1991. *Multiple regression: Testing and interpreting interactions*: Sage Publications, Inc.
- Ames, D. R. 2004. Inside the mind reader's tool kit: projection and stereotyping in mental state inference. *Journal of Personality and Social Psychology*, 87(3): 340.
- Ang, S. 2008. *Handbook of cultural intelligence: Theory, measurement, and applications*: ME Sharpe Inc.
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. 2007. Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. *Management and Organization Review*, 3(3): 335-371.
- Ang, S., Van Dyne, L., & Tan, M. L. 2011. Cultural intelligence. In R. J. Sternberg, & S. B. Kaufman (Eds.), *The Cambridge Handbook on Intelligence*: 582-602. New York: Cambridge University Press.
- Baer, R. A. 2003. Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical psychology: Science and practice*, 10(2): 125-143.
- Barnard, C. I. 1968. *The functions of the executive*: Harvard Univ Pr.
- Baron, R. M., & Kenny, D. A. 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173.
- Bhawuk, D. P. S. 2001. Evolution of culture assimilators: toward theory-based assimilators. *International Journal of Intercultural Relations*, 25(2): 141-163.
- Bird, A., Heinbuch, S., Dunbar, R., & McNulty, M. 1993. A conceptual model of the effects of area studies training programs and a preliminary investigation of the model's hypothesized relationships. *International Journal of Intercultural Relations*, 17(4): 415-435.
- Black, J. S., & Mendenhall, M. 1990. Cross-cultural training effectiveness: A review and a theoretical framework for future research. *Academy of Management Review*: 113-136.
- Boyacigiller, N. A., & Adler, N. J. 1991. The parochial dinosaur: Organizational science in a global context. *Academy of Management Review*: 262-290.
- Brett, J. M. 2007. *Negotiating globally: How to negotiate deals, resolve disputes, and make decisions across cultural boundaries*: Jossey-Bass Inc Pub.
- Brett, J. M., & Okumura, T. 1998. Inter-and intracultural negotiation: US and Japanese negotiators. *Academy of Management Journal*: 495-510.

- Brislin, R. W., Landis, D., & Brandt, M. E. 1983. Conceptualizations of intercultural behavior and training. *Handbook of intercultural training*, 1: 1-35.
- Brown, K. W., & Ryan, R. M. 2003. The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4): 822.
- Byrne, J. A. 1993. The horizontal corporation. *Business Week*, 20(1993): 76-81.
- Chartrand, T. L., & Bargh, J. A. 1999. The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, 76(6): 893.
- Chen, G., Kirkman, B. L., Kim, K., Farh, C. I. C., & Tangirala, S. 2010. When does cross-cultural motivation enhance expatriate effectiveness? A multilevel investigation of the moderating roles of subsidiary support and cultural distance. *The Academy of Management Journal (AMJ)*, 53(5): 1110-1130.
- Chua, R. Y. J., Morris, M. W., & Mor, S. 2012. Collaborating across cultures: Cultural metacognition and affect-based trust in creative collaboration. *Organizational Behavior and Human Decision Processes*, 118(2): 116-131.
- Claxton, G. 1997. Hare brain, tortoise mind: How intelligence increases when you think less. New York: HarperCollins.
- Copeland, L., & Griggs, L. 1985. *Going international: How to make friends and deal effectively in the global marketplace*: Random House New York.
- Cox, T. H., Lobel, S. A., & McLeod, P. L. 1991. Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *Academy of Management Journal*: 827-847.
- Dane, E. 2011. Paying attention to mindfulness and its effects on task performance in the workplace. *Journal of Management*, 37(4): 997-1018.
- Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., Urbanowski, F., Harrington, A., Bonus, K., & Sheridan, J. F. 2003. Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic medicine*, 65(4): 564-570.
- Davis, M. H., Conklin, L., Smith, A., & Luce, C. 1996. Effect of perspective taking on the cognitive representation of persons: A merging of self and other. *Journal of Personality and Social Psychology*, 70(4): 713.
- Deshpande, S. P., & Viswesvaran, C. 1992. Is cross-cultural training of expatriate managers effective: A meta analysis. *International Journal of Intercultural Relations*, 16(3): 295-310.
- Drolet, A. L., & Morris, M. W. 2000. Rapport in Conflict Resolution: Accounting for How Face-to-Face Contact Fosters Mutual Cooperation in Mixed-Motive Conflicts. *Journal of Experimental Social Psychology*, 36(1): 26-50.
- Earley, P. C., & Ang, S. 2003. *Cultural intelligence: Individual interactions across cultures*: Stanford Business Books.
- Earley, P. C., Ang, S., & Tan, J. S. 2006. *CQ: Developing cultural intelligence at work*: Stanford University Press.
- Earley, P. C., & Gibson, C. B. 2002. *Multinational work teams: A new perspective*: Lawrence Erlbaum.
- Earley, P. C., & Mosakowski, E. 2000. Creating hybrid team cultures: An empirical test of transnational team functioning. *Academy of Management Journal*: 26-49.

- Earley, P. C., & Peterson, R. S. 2004. The elusive cultural chameleon: Cultural intelligence as a new approach to intercultural training for the global manager. *Academy of Management Learning & Education*: 100-115.
- Epley, N., Caruso, E., & Bazerman, M. H. 2006. When perspective taking increases taking: Reactive egoism in social interaction. *Journal of Personality and Social Psychology*, 91(5): 872.
- ERC, W. 2010. 2010 Global Benchmarking Survey - Short-Term International Assignments.
- Eschbach, D. M., Parker, G. E., & Stoeberl, P. A. 2001. American repatriate employees' retrospective assessments of the effects of cross-cultural training on their adaptation to international assignments. *International Journal of Human Resource Management*, 12(2): 270-287.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. 2007. Universal dimensions of social cognition: Warmth and competence. *Trends in cognitive sciences*, 11(2): 77-83.
- Galinsky, A. D. 2002. Creating and reducing intergroup conflict: The role of perspective-taking in affecting out-group evaluations. In N. M. A. Mannix, E. A. Mannix, & H. Sondak (Eds.), *Toward phenomenology of groups and group membership*, 4: 85-113. Greenwich, CT: JAI.
- Galinsky, A. D., Ku, G., & Wang, C. S. 2005. Perspective-taking and self-other overlap: Fostering social bonds and facilitating social coordination. *Group Processes & Intergroup Relations*, 8(2): 109.
- Galinsky, A. D., Maddux, W. W., Gilin, D., & White, J. B. 2008. Why it pays to get inside the head of your opponent. *Psychological Science*, 19(4): 378.
- Galinsky, A. D., & Moskowitz, G. B. 2000. Perspective-taking: Decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology*, 78(4): 708.
- Gelfand, M., & Dyer, N. 2000. A cultural perspective on negotiation: Progress, pitfalls, and prospects. *Applied psychology*, 49(1): 62-99.
- Gelfand, M. J., Erez, M., & Aycan, Z. 2007. Cross-cultural organizational behavior. *Annu. Rev. Psychol.*, 58: 479-514.
- Graham, J. L. 1985. Cross-cultural marketing negotiations: A laboratory experiment. *Marketing Science*: 130-146.
- Groves, K. S., & Feyerherm, A. E. 2011. Leader Cultural Intelligence in Context. *Group & Organization Management*, 36(5): 535-566.
- Hagel, J., & Brown, J. S. 2005. *The only sustainable edge: Why business strategy depends on productive friction and dynamic specialization*: Harvard Business Press.
- Imai, L., & Gelfand, M. J. 2010. The culturally intelligent negotiator: The impact of cultural intelligence (CQ) on negotiation sequences and outcomes. *Organizational Behavior and Human Decision Processes*, 112(2): 83-98.
- Jang, S., & Chua, R. 2011. Building 16 Intercultural Trust at the Negotiating Table. *Negotiation Excellence: Successful Deal Making*: 299.
- Johnson, J. L., Cullen, J. B., Sakano, T., & Takenouchi, H. 1996. Setting the stage for trust and strategic integration in Japanese-US cooperative alliances. *Journal of International Business Studies*: 981-1004.
- Kabat-Zinn, J. 1982. An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General hospital psychiatry*, 4(1): 33-47.

- Kemp, K. E., & Smith, W. P. 1994. Information exchange, toughness, and integrative bargaining: The roles of explicit cues and perspective-taking. *International Journal of Conflict Management*, 5(1): 5-21.
- Kim, Y. J., & Van Dyne, L. 2011. Cultural intelligence and international leadership potential: The importance of contact for members of the majority. *Applied psychology*, 61(2): 272-294.
- Klafehn, J., Banerjee, P., & Chiu, C. 2008. Navigating cultures: The role of metacognitive cultural intelligence. *Handbook of cultural intelligence: Theory, measurement, and applications*: 318-331.
- Kolb, A. Y., & Kolb, D. A. 2005. Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*: 193-212.
- Kopelman, S., Avi-Yonah, O., & Varghese, A. K. 2011. The mindful negotiator: Strategic emotion management and well-being. In G. M. Spreitzer, & K. S. Cameron (Eds.), *The Oxford Handbook of Positive Organizational Scholarship*: 591-600. New-York: Oxford University Press.
- Ku, G., Wang, C. S., & Galinsky, A. D. 2010. Perception through a perspective-taking lens: Differential effects on judgment and behavior. *Journal of Experimental Social Psychology*, 46(5): 792-798.
- LaBahn, D. W., & Harich, K. R. 1997. Sensitivity to national business culture: effects on US-Mexican channel relationship performance. *Journal of international Marketing*: 29-51.
- Landis, D., Brislin, R. W., & Hulgus, J. F. 1985. Attributional Training Versus Contact in Acculturative Learning: A Laboratory Study1. *Journal of Applied Social Psychology*, 15(7): 466-482.
- Langer, E. J. 2000. Mindful learning. *Current directions in psychological science*, 9(6): 220-223.
- Lee, S., Adair, W. L., & Seo, S. 2011. Cultural Perspective Taking in Cross-Cultural Negotiations. *Group Decision and Negotiation*: 1-17.
- Linehan, M. 1993. *Cognitive-behavioral treatment of borderline personality disorder*: The Guilford Press.
- Lytle, A. L., Brett, J. M., Barsness, Z. I., Tinsley, C. H., & Janssens, M. 1995. A paradigm for confirmatory cross-cultural research in organizational behavior. *Research in organizational behavior*, 17: 167-214.
- Manz, C. C., & Sims Jr, H. P. 1987. Leading workers to lead themselves: The external leadership of self-managing work teams. *Administrative Science Quarterly*: 106-129.
- Markus, H. R., & Kitayama, S. 1991. Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review; Psychological Review*, 98(2): 224.
- McAllister, D. J. 1995. Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*: 24-59.
- Mendenhall, M., & Oddou, G. 1985. The dimensions of expatriate acculturation: A review. *Academy of Management Review*: 39-47.
- Molinsky, A. 2007. Cross-cultural code-switching: The psychological challenges of adapting behavior in foreign cultural interactions. *The Academy of Management Review*, 32(2): 622-640.
- Neale, M. A., & Bazerman, M. H. 1982. Role of Perspective-Taking Ability in Negotiating under Different Forms of Arbitration, The. *Indus. & Lab. Rel. Rev.*, 36: 378.

- Ng, K. Y., Van Dyne, L., & Ang, S. 2009. From experience to experiential learning: Cultural intelligence as a learning capability for global leader development. *The Academy of Management Learning and Education*, 8(4): 511-526.
- Nisbett, R. E., & Wilson, T. D. 1977. Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84(3): 231.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. 2002. Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological bulletin*, 128(1): 3.
- Patel, A., & Brett, J. M. 2007. Abhas-Bussan exercise. Evanston, IL: DRRC, Northwestern University.
- Raudenbush, S. W. 2004. *HLM 6: Hierarchical linear and nonlinear modeling*: Scientific Software International.
- Rehg, M. T., Gundlach, M., & Grigorian, R. A. 2012. Examining the Influence of Cross-Cultural Training on Cultural Intelligence and Specific Self-Efficacy. *Cross Cultural Management: An International Journal*, 19(2): 5-5.
- Rockstuhl, T., & Ng, K. Y. 2008. The effects of cultural intelligence on interpersonal trust in multicultural teams. *Handbook of cultural intelligence: Theory, measurement, and applications*: 206-220.
- Rockstuhl, T., Seiler, S., Ang, S., Van Dyne, L., & Annen, H. 2011. Beyond General Intelligence (IQ) and Emotional Intelligence (EQ): The Role of Cultural Intelligence (CQ) on Cross-Border Leadership Effectiveness in a Globalized World. *Journal of Social Issues*, 67(4): 825-840.
- Selig, J., & Preacher, K. 2008. Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software].
- Snow, C. C., Snell, S. A., Davison, S. C., & Hambrick, D. C. 1996. Use transnational teams to globalize your company. *Organizational dynamics*, 24(4): 50-67.
- Sternberg, R. J., & Detterman, D. K. 1986. *What is Intelligence? Contemporary Viewpoints on its Nature and Definition*. Norwood, NJ: Ablex.
- Tan, J., & Chua, R. 2003. Training and developing cultural intelligence. *Cultural Intelligence: Individual Interactions Across Cultures, Stanford Business Books: Stanford CA*: 258-303.
- Thomas, D. C. 2006. Domain and development of cultural intelligence. *Group & Organization Management*, 31(1): 78-99.
- Triandis, H. C. 1972. *The analysis of subjective culture*. New York: John Wiley and Sons.
- Triandis, H. C. 1990. Cross-cultural studies of individualism and collectivism. In J. Berman (Ed.), *Nebraska symposium on motivation*, 1989: 41-133. Lincoln, NE: University of Nebraska Press.
- Tung, R. L. 1987. Expatriate assignments: Enhancing success and minimizing failure. *The Academy of Management Executive*: 117-125.
- Van Dyne, L., Ang, S., & Koh, C. 2008. Development and Validation of the CQS. *Handbook of cultural intelligence. Theory, measurement and applications, Sharpe, New York*: 16-38.
- Van Dyne, L., Ang, S., Ng, K. Y., Rockstuhl, T., Tan, M. L., & Koh, C. 2012. Sub-Dimensions of the Four Factor Model of Cultural Intelligence: Expanding the Conceptualization and Measurement of Cultural Intelligence. *Social and personality psychology compass*, 6(4): 295-313.

Wong, R. Y., & Hong, Y. 2005. Dynamic influences of culture on cooperation in the prisoner's dilemma. *Psychological science*, 16(6): 429-434.

Table 1: Hierarchical Linear Model Regression on Student Peers Ratings of Intercultural Cooperation (Study 1)

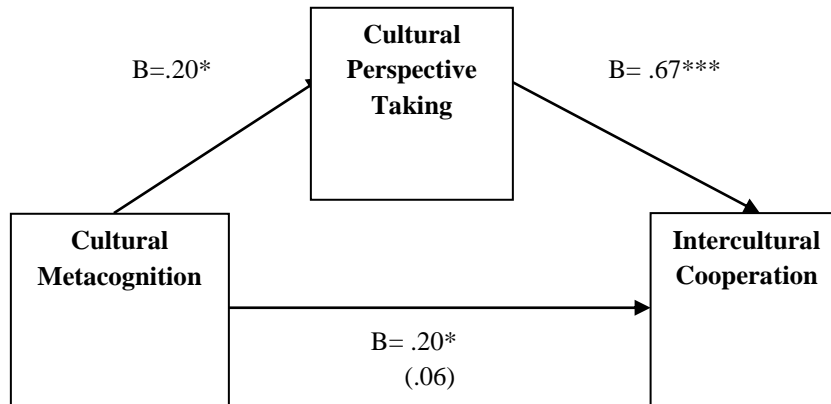
Key Predictors	Intercultural Cooperation		
	Model 1	Model 2	Model 3
Cultural Metacognition	-	0.20* (0.09)	0.06 (0.07)
Cultural Perspective Taking (Mediator)			0.67*** (0.04)
Control Variables			
Cognitive CQ	0.05 (0.07)	-0.01 (0.08)	0.01 (0.06)
Motivational CQ	0.14+ (0.08)	0.09 (0.09)	0.12+ (0.07)
Behavioral CQ	-0.04 (0.07)	-0.07 (0.07)	-0.08 (0.05)
Student Peers Familiarity	0.23** (0.10)	0.26** (0.10)	0.07 (0.08)
Intercept	4.23** (0.46)	3.91** (0.48)	1.10** (0.41)

Notes:

1. Numbers in parenthesis are standard errors

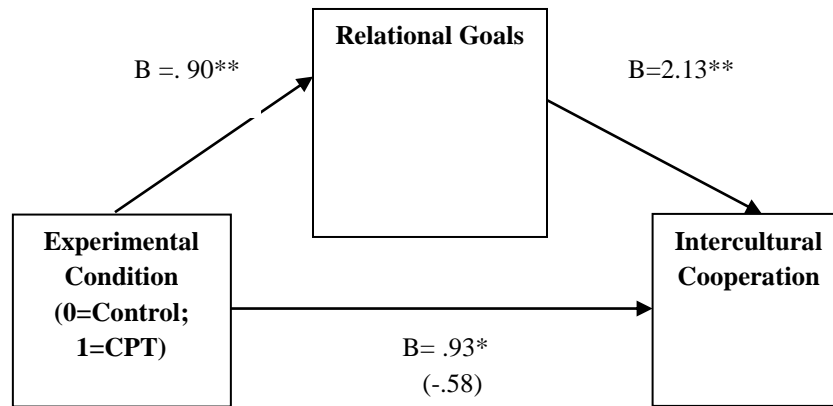
2. + $p < .10$ ** $p < 0.01$ * $p < 0.05$

Figure 1. Mediation model showing cultural perspective taking mediates the relationship between cultural metacognition and intercultural cooperation (evaluated by different culture peers) (Study 1).



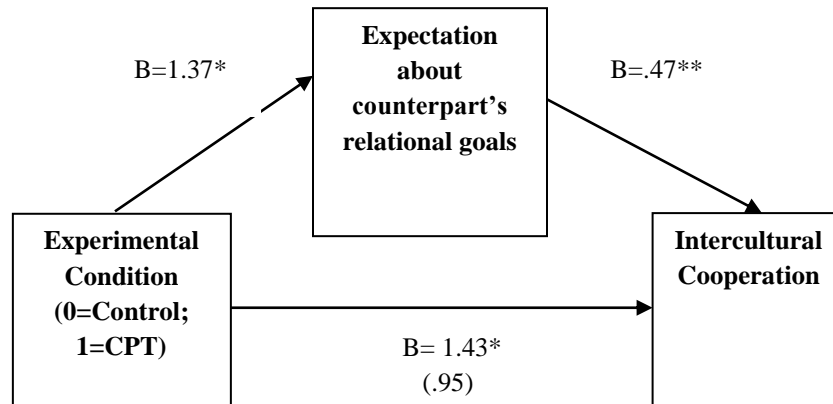
Note. Regression results are reported in unstandardized betas. $*= p < .05$; $^{***}= p < .001$.

Figure 2. Mediation model showing the positive casual effect of cultural perspective taking on intercultural cooperation with a Chinese counterpart is mediated by one's relational goals (Study 2, pilot study).



Note. Regression results are reported in unstandardized betas. $*= p < .05$; $**= p < .01$

Figure 3. Mediation model showing the positive effect of cultural perspective taking condition on intercultural cooperation is mediated by expectations that the Chinese counterpart holds relational goals (Study 2).



Note. Regression results are reported in unstandardized betas. $*= p < .05$; $**= p < .01$

Figure 4. Graph depicting the interaction between experimental condition and cultural metacognition on expectations that Japanese counterpart would be cooperative in an upcoming negotiation (Study 3A).

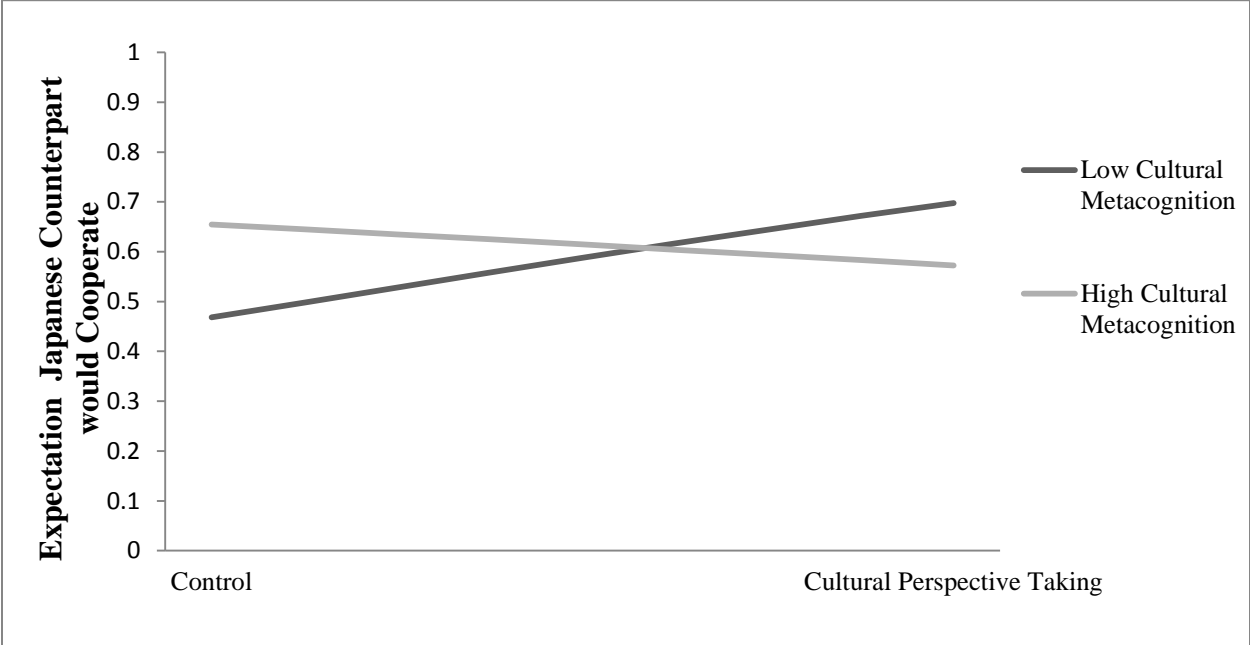
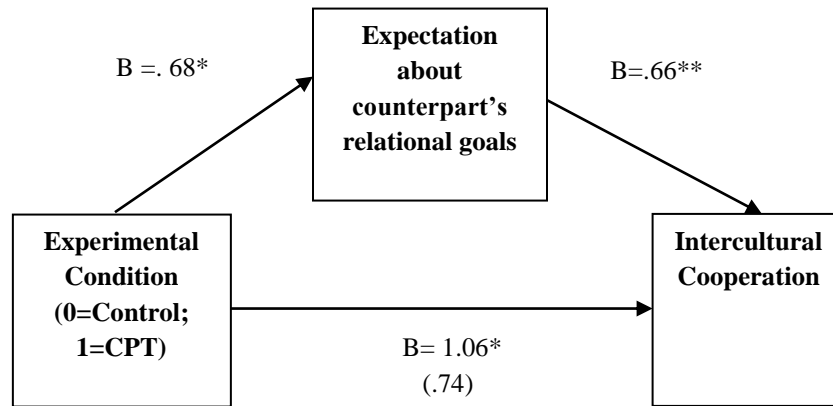


Figure 5. Mediation model showing the positive effect of cultural perspective taking condition on intercultural cooperation is mediated by expectations that the Chinese counterpart holds relational goals (Study 3B).



Note. Regression results are reported in unstandardized betas. $* = p < .05$; $** = p < .01$.

