

Epistemic Motives and Cultural Conformity: Need for Closure, Culture, and Context as Determinants of Conflict Judgments

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Three studies support the proposal that need for closure (NFC) involves a desire for consensual validation that leads to cultural conformity. Individual differences in NFC interact with cultural group variables to determine East Asian versus Western differences in conflict style and procedural preferences (Study 1), information gathering in disputes (Study 2), and fairness judgment in reward allocations (Study 3). Results from experimental tests indicate that the relevance of NFC to cultural conformity reflects consensus motives rather than effort minimization (Study 2) or political conservatism (Study 3). Implications for research on conflict resolution and motivated cultural cognition are discussed.

Keywords: culture, need for closure, conflict resolution, reward allocation

Researchers have asked with increasing frequency not Does culture matter? but When does culture matter? The dynamic constructivist approach to cultural psychology seeks to understand why the influence of culture is dramatic in some cases but negligible in others (Morris, Menon, & Ames, 2001). One tenet of this approach is that adherence to cultural norms depends on the individual's motivation, in particular, his or her motives for epistemic closure (Chiu, Morris, Hong, & Menon, 2000). Measuring individual differences with the Need For Closure (NFC) scale (Kruglanski, Webster, & Klem, 1993), Chiu et al. (2000) found that individuals high in NFC are more likely to exhibit the attribution biases characteristic of the culture (i.e., attribution to personal dispositions in American culture, attribution to group dispositions in Chinese culture). This role of motivation has important implications for culture theory. It suggests that individuals are not the passive pawns of their cultural programming; rather, individuals actively decide to conform to cultural norms when doing so serves their epistemic motives. In short, cultural conformity is motivated.

Another tenet of the dynamic constructivist approach is that the influence of cultural norms depends on the context in which people make their judgment. Experiments have found that processing constraints such as multitasking (Knowles, Morris, Chiu, & Hong, 2001) or providing reasons (Briley, Morris, & Simonson, 2000) accentuate the influence of cultural norms. Other experiments have used culturally related images, languages, or audiences to prime culture-based responses (Briley, Morris, & Simonson, 2005; Hong, Morris, Chiu, & Benet-Martinez, 2000). Overall, dynamic constructivist research, primarily in the attribution area, has used motivation and context variables to clarify when and how culture counts.

The current research brings the dynamic constructivist approach to the conflict resolution literature. Cross-cultural findings with several measures of judgment and behavior converge on the general theme that Chinese, compared with Americans, have a greater preference for relationship-preserving modes of conflict resolution (Leung, 1987, 1995; Morris et al., 1998). Similar relational styles of conflict resolution have been reported in samples from other East Asian Confucian cultures (Leung & Fan, 1997) as well as in samples of ethnically identified Asian Americans (Cox, Lobel, & McLeod, 1991; Doo, 1973). However, cultural group differences in conflict style have not always replicated across studies; high within-group variance often swamps between-group variance (for a review, see Smith & Bond, 1999). Our goal was to clarify the evidence for differences between American and Chinese cultural norms by introducing a moderating variable that distinguishes the signal (high-NFC participants who adhere to cultural norms) from the noise (low-NFC participants who process the task in other ways).

In addition to gaining a clearer picture of how culture affects conflict resolution behavior, the current research also sought to distinguish the specific epistemic closure motive that fosters cultural conformity. We propose that individuals conform to

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cultural norms because norms provide answers accepted and shared by one's ingroup. Put differently, cultural conformity is driven by the desire for consensual validation. Just as consensus is an important criterion for philosophers of epistemology, laypeople likewise feel their judgments are valid to the extent that they are shared by salient reference groups (e.g., Festinger, 1950; Hardin & Higgins, 1996; Sherif, 1936). The literature on NFC increasingly emphasizes that people high in overall need for closure are particularly eager to reach judgments in line with the consensus of ingroups (Kruglanski, Pierro, Mannetti, & De Grada, 2006). Though Chiu et al. (2000) found that high NFC individuals are more likely to exemplify the attribution biases of their culture, this prior research did not isolate which aspect of NFC was at work.

The NFC scale incorporates several subscales, and it correlates with some other individual differences that are important in social cognition. Although not crucial to the current argument, the distinction between specific and nonspecific closure, which are captured by different subscales, bears mention as it figures prominently in the literature (Neuberg, Judice, & West, 1997). The former is the desire for a judgment with a simple or familiar content, whereas the latter is the desire for a quick, decisive judgment regardless of content. These two closure motives jointly contribute to the high-NFC individual's wish to reach judgments that concur with cultural norms. Conforming to cultural norms yields judgments that are simple and familiar as well as quick and decisive. Hence, our thesis focuses on NFC overall not its subfactors.

Nonetheless, to prove that the link between NFC and cultural conformity hinges on the desire for consensual support, we have to rule out alternative accounts. Research has linked the NFC scale to several psychological tendencies that might plausibly explain the NFC \times Cultural Group effects in past research. First, NFC has been linked to effort-minimizing strategies, such as the use of judgment heuristics (de Dreu, Koole, & Oldersma, 1999; Webster & Kruglanski, 1994). Consider a key finding of Chiu et al. (2000) that, among Americans, high- (vs. low-) NFC individuals show greater attributional bias toward personal dispositions. Rather than adherence to American cultural norms, this might merely reflect that high-NFC individuals rely more on heuristics, such as availability, that give rise to this attribution bias (Ross, 1977). Second, NFC has been linked to political conservatism, an attitude complex that endorses self-reliance and economic inequality (Jost, Glaser, Kruglanski, & Sulloway, 2003). Hence, the same Chiu et al. finding could be interpreted, alternatively, in terms of high-NFC individuals' conservative intolerance for situational excuses (Tetlock, 2000). In the current research, we aimed to distinguish the consensus account from these alternative accounts of NFC effects. Consistent with the dynamic constructivist approach, our primary strategy for identifying the closure motive that accounts for the interplay of NFC and cultural group in determining responses is experimental manipulation of contextual factors, such as response constraints and cultural primes.

Before describing the current studies, we review the literatures relevant to our two research goals of (a) clarifying the evidence for cultural influence on conflict resolution, and (b) identifying the closure-related motive that fosters cultural conformity.

Clarifying Cultural Patterns

Studies with a variety of methods have found that people in Chinese and other East Asian Confucian cultures favor

relationship-preserving conflict resolution styles more than do matched samples of Americans. Rahim's (1983) conflict style instrument measures reliance on competing tactics in which one tries to get one's way without concern for the other person. Some studies have found that Chinese engage in competing tactics less than do Americans (Morris et al., 1998; Ting-Toomey et al., 1991), but the difference is not found in other studies (Tang & Kirkbride, 1986; Trubisky, Ting-Toomey, & Lin, 1991). Adding to the confusion, studies with other methods have identified contexts in which Chinese people compete aggressively in conflicts (Bond & Wang, 1983; Pye, 1982).

Another line of research examines preference among third-party dispute resolution procedures. A number of studies support the thesis that Chinese favor procedures in which the third-party intermediary seeks conciliation between the two disputing parties, whereas Americans favor procedures in which the third party arbitrates or adjudicates to determine which party is right and which party wrong (e.g., Leung, 1987; Leung & Fan, 1997). Yet the precise contours of the cultural differences remain unclear. Some studies claim that East Asians differ primarily in that they favor third parties who are connected to the disputants through prior relationships rather than mere dispassionate, disconnected third parties (LeResche, 1992). Others have argued that the critical difference is that collectivist cultures prefer informal to formal dispute resolution procedures (Bierbrauer, 1994).

Still another stream of research examines cultural differences in conflicts over reward allocation. When sharing rewards with ingroup members, Chinese are more inclined than are Americans to favor the equality rule (Leung & Bond, 1984). Yet the pattern does not always replicate (Leung, 1995). Nor are the results from other East Asian cultures perfectly consistent. A study of ingroup allocations by Leung and Iwawaki (1988) found no differences among Japanese, Korean, and American students.

Given that cultural group effects on conflict resolution behaviors are inconsistent, researchers have sought to clarify the pattern by identifying individual difference variables. The chief strategy has been searching for measures of cultural values that mediate cultural group effects. The bulk of this work focuses on the value dimension of individualism–collectivism (Triandis et al., 1986). Though popular, this approach has not fared well empirically. East Asian samples often do not differ from American ones in terms of collectivism (Oyserman, Coon, & Kimmelmeier, 2002; Takano & Osaka, 1999). Even when levels of value endorsement differ across cultural groups as expected, the difference generally fails to mediate the group effects on conflict behaviors (e.g., Chiu & Kosinski, 1994; Fischer & Smith, 2003; Leung, 1987; Morris, Leung, & Iyengar, 2004; Weldon & Jehn, 1995). In studies in which partial mediation has been observed, it is possible that common-method variance is at work (Morris et al., 1998; Trubisky, Ting-Toomey, & Lin, 1991). Even the original proponents of the cultural-value approach have conceded that the data do not support it (Leung, Bond, & Schwartz, 1995).

In the current research, we take a different approach to clarifying the evidence concerning cultural norms of conflict resolution. Instead of searching for individual differences that mediate cultural group effects, we introduce an individual difference variable that moderates the cultural group effect. We expected that adherence to cultural norms will be reflected in the behavior of high-NFC individuals but not of low-NFC individuals. Hence, cultural patterns can be observed more clearly in the interaction effect than

in the main effects of cultural group. In summary, we use the moderating variable of NFC to clarify the differences between American and Chinese conflict norms just as Chiu et al. (2000) used NFC to clarify cultural differences in attributional biases.

Distinguishing Which Closure Motive is Relevant to Cultural Norms

In addition to clarifying the evidence about cultural norms and conflict resolution, another goal of the current research is distinguishing the closure motive that leads to cultural conformity. An important source of epistemic closure is consensus; people feel epistemically secure when their beliefs are shared by reference groups (Festinger, 1950; Kruglanski et al., 2006). We hypothesize that this seeking of epistemic security through consensus underlies the tendency of high-NFC individuals to conform to cultural norms. Further, we expect that when the context prohibits following cultural norms, high-NFC individuals will take other measures to bring about consensus. As Festinger (1950) put it, people can attain consensus through both “change self” and “change other” strategies.

Previous researchers (Neuberg et al., 1997) have argued that NFC is not unidimensional. Subfactors of the scale correspond to two submotives: (a) specific closure, which consists of the Preference for Order, Predictability, and Fear of Ambiguity subscales of NFC and (b) nonspecific closure, which is equivalent to the Decisiveness subscale of NFC. Our position is that the consensus-seeking tendency arises from the conjunction of these motives. Group norms provide a basis for simple and clear settlements in interpersonal conflicts and also settlements that can be reached quickly and are unlikely to be overturned.

The consensus-seeking tendency is evident in some classic findings with the NFC Scale, such as that high- (vs. low-) NFC individuals in a jury simulation expressed more desire to reach agreement with their dyadic partners (Kruglanski et al., 1993). However, this tendency has been brought to light in recent research linking NFC to group dynamics. High-NFC individuals are more disturbed by violations of social norms, which threaten the sense of social consensus (Pierro, de Grada, Mannetti, Livi, & Kruglanski, 2004). Kruglanski, Shah, Pierro, and Mannetti (2002) found that ingroup favoritism depends on the perception of group opinion homogeneity for high- (but not for low-) NFC individuals, suggesting that they particularly like groups that can provide the security of consensus. Other signs of consensus craving have been observed in the dynamics of high-NFC groups. A study of managerial decision making (de Grada, Kruglanski, Mannetti, & Pierro, 1999, Study 1) observed more pressure toward opinion uniformity in high than in low-NFC groups. Likewise, problem-solving groups composed of high-NFC individuals had a greater tendency to silence dissenters (Chirumbolo, Livi, Manetti, Pierro, & Kruglanski, 2004). In summary, there is ample evidence that a motive for consensus is tapped by the NFC Scale.

At the same time, we acknowledge that consensus-seeking tendency is a more socially oriented motive than that emphasized in early research on NFC. Early descriptions of NFC emphasized self-oriented attention to one's own information processing—desire for judgments consistent with one's prior beliefs or desire for judgments that enable a quick end to deliberation (Kruglanski & Webster, 1996).

Let us now consider alternative ways to account for the interaction of NFC with cultural group variables. As noted above, two other mechanisms that might explain the relevance of NFC are effort minimization and political conservatism. In the following sections, we describe how the consensus motive account can be tested against the alternative accounts.

Consensus Motive Versus Effort Minimization

The first alternative account is premised on the link between NFC and effort-minimizing strategies of judgment. This link is often posited in the lay epistemic literature and is based on several kinds of evidence. NFC correlates negatively with the individual difference dimension of Need for Cognition, both in American samples (Webster & Kruglanski, 1994) and in Chinese samples (Chiu et al., 2000). Moreover, NFC is associated with some judgment patterns indicative of heuristic processing, such as primacy effects in impression formation (Webster & Kruglanski, 1994, Study 4). Likewise, in studies of negotiation, high-NFC individuals rely more on stereotypes (de Dreu et al., 1999). To the extent that NFC is associated with an effort-minimizing cognitive style, the link between NFC and cultural conformity may simply result from high-NFC individuals' reliance on widely used heuristics and not from their desire for consensus.

Fortunately, past research on NFC suggests a way to empirically separate the effort-minimization and consensus motive accounts. Kruglanski, Webster, and Klem (1993) had participants role play members of two-person juries in which one “juror” was actually a confederate. A key manipulation was whether the participant was familiarized with legal arguments for the stance that they would take about the appropriate verdict. The confederate always took the opposite stance. In both conditions, high- (vs. low-) NFC participants expressed more desire to reach agreement with their fellow jurors, yet their means for attaining consensus varied by condition. In the condition in which participants' stance was supported by legal advice, high-NFC participants were more likely to stick to their initial stance. Whereas, in the condition in which participants lacked familiarity with the reasons for their stance, high-NFC participants were more likely to consider arguments from a different position and to shift their position toward that of the confederate. This finding is incompatible with the effort-minimization account, which predicts that high-NFC individuals would always be less likely to shift positions.

Similarly, in a study of attitude change in response to persuasive appeals, Webster and Kruglanski (1994, Study 6) manipulated whether participants were familiar with the arguments for the initial attitudinal stance to which they were assigned. Again, in the condition in which participants were secure in their stance, higher NFC was associated with a lesser degree of attitude change. In the insecure condition, higher NFC was associated with greater attitude change. Although behavior of high-NFC individuals in the epistemically secure condition of these studies can be accounted for in terms of effort minimization, their behavior in the insecure condition cannot; they engaged in more rather than less information processing. In summary, conditions in which high-NFC individuals engage in more rather than less information processing can be used to distinguish the consensus-seeking and effort-minimization mechanisms.

Epistemically insecure conditions are not at all uncommon in workplace conflicts, which is, in part, because of cultural differ-

ences. Managers are often assigned by higher-ups to handle important conflicts (such as between a client and an employee) in particular ways—ways with which they might not be familiar. They might be requested to take an investigative stance to determine who is telling the truth or to take a conciliative stance in order to fix a strained relationship. As we have noted, styles of third-party dispute resolution vary across cultures. Investigative styles of third-party dispute resolution are normative in Western European and American culture, whereas conciliative styles are more preferred in Chinese and other East Asian cultures (Leung, 1987; Leung & Fan, 1997). Hence, managers from different cultural backgrounds will find different conflict resolution stances familiar or less familiar.

Assigning people to culturally familiar versus culturally less familiar conflict styles was the crux of Study 2. Participants were assigned to take a familiar or less familiar stance in resolving a conflict and then were given an opportunity to gather information about a number of aspects of the case. We hypothesized that in the less familiar stance conditions, high- (vs. low-) NFC individuals would gather more information in order to be able to forge a consensus. The effort-minimization account predicts a different pattern, which indicates that high-NFC individuals would gather less information regardless of the condition.

Consensus Motive Versus Political Conservatism

A second alternative account is premised on the link between NFC and political conservatism. Political conservatism has been conceptualized as comprising two components—embracing tradition and accepting economic inequality (Jost et al., 2003). Jost and colleagues (2003) have reviewed a number of studies in which NFC correlates with political conservatism. Given that political conservatism affects attributional judgments (Tetlock, 2000), the links between NFC and cultural conformity in past research might run through conservatism.

To consider how political conservatism can be distinguished from the consensus motive, let us consider its two components in turn. The first component, embracing tradition, is difficult to separate from our dependent variable of cultural conformity, so it does not work as an account of cultural conformity. However, the second component—acceptance of economic inequality—is distinct from the dependent variable and can provide an account of cultural conformity in conflict behavior that can be tested against our proposed account. Acceptance of inequality can be measured in the reward allocations that people endorse; those higher in conservatism should be more inclined to favor the equity rule (rewards proportional to contributions) and less inclined to favor the equality rule. Hence, if the influence of NFC on conflict judgments runs through political conservatism, higher NFC should be associated with endorsing equity over equality.

The consensus account, by contrast, predicts that effects of NFC on reward allocation should depend on the cultural setting. Past research has linked American culture to the equity rule and Chinese culture to the equality rule (Leung, 1995). Hence, in the context of American culture, higher NFC should be associated with greater preference for equity over equality, whereas, in the context of Chinese culture, it should be associated with lesser preference for equity over equality. Hence, the two accounts (political conservatism vs. consensus seeking) yield different predictions. In the current Study 3, we tested these by examining

reward allocation judgments in the context of American and Chinese cultural priming.

Overview of Current Research

We conducted a series of studies investigating American and Chinese cultural conflict resolution styles. Study 1 examined preferred ways of managing workplace conflicts in samples from the United States and Hong Kong. We tested the central hypothesis that high (vs. low) NFC was associated with greater conformity to cultural norms. We also tested that this cultural conformity in conflict style preference was driven by expectancies of consensus.

Study 2 investigated the NFC \times Culture moderation hypothesis with a measure of information gathering in conflicts. Also, Study 2 included a manipulation designed to rule out the alternative account of effort minimization. In some conditions participants were assigned to a culturally less familiar stance, and we expected that high-NFC individuals would be more likely to respond to this condition with increased information seeking than would low-NFC individuals. This prediction distinguishes the consensus motive account from the effort-minimization account.

Study 3 was designed to test against the political conservatism account. We investigated the NFC \times Culture moderation hypothesis in reward allocation judgments and manipulated the cultural context by priming. Our prediction was that the tendency to endorse equity-based over equality-based allocation would increase with NFC in the American prime condition and would decrease with NFC in the Chinese prime condition. This prediction distinguishes the consensus motive account from the political conservatism account.

Study 1—Preferred Conflict Styles

Our first goal was to investigate whether NFC moderates cultural differences in conflict resolution preferences. A pilot study presented the NFC Scale (Webster & Kruglanski, 1994) along with a standard measure of preferred style in managing conflicts with coworkers (Rahim, 1983). The NFC Scale consists of 42 items. Two sample items are “I don’t like situations that are uncertain” and “I think it is fun to change my plans at the last moment” (reverse coded). The conflict management scale measured five conflict management styles, namely, competing, avoiding, accommodating, compromising, and collaborating. Our focus was the competing style, which involves aggressive pushing for one’s way. Cross-cultural studies have found that Americans tend to score higher than do Chinese on this style (Morris et al., 1998). We surveyed a sample of 175 (75 men, 100 women) Hong Kong students (all ethnically Chinese; number of years in Hong Kong: $M = 19.79$, $SD = 3.09$) and 160 (60 men, 100 women) American students in the United States (95 Caucasian, 38 Asian, 9 African, 11 Hispanic, 7 other ethnicities; number of years in US: $M = 17.04$, $SD = 5.09$). Results from an NFC \times Culture generalized linear model (GLM) on competing ($\alpha = .89$ and $.83$ for United States and Hong Kong, respectively) showed that the main effect of culture, $F(1, 331) = 95.34$, $p < .001$, $\eta_p^2 = .22$, and that of NFC, $F(1, 331) = 4.10$, $p < .05$, $\eta_p^2 = .01$, were reliable. American participants ($M = 3.62$, $SD = 0.75$) reported more preference for the competing style than did Chinese participants ($M = 2.91$, $SD = 0.59$). Furthermore, consistent with our moderation hypothesis, the NFC \times Culture interaction was significant, $F(1, 331) =$

3.76, $p = .05$, $\eta_p^2 = .01$. NFC correlated with preference for competing style in the American sample ($r = .24$, $p < .05$), but not in the Chinese sample ($r = .00$, ns).¹

Of course, surveys of everyday behavior are always vulnerable to the criticism that the difference may lie not in people's preferences but in the kinds of conflicts they encounter. Hence, our main study tests the NFC moderation hypothesis by assessing conflict resolution preferences in a hypothetical dispute, adapting a paradigm used in procedural justice research (Leung, 1987). Participants read about a dispute between two employees that required third-party intervention. They were assigned the role of one of the disputants and rated their preference among four managers who could serve as the third-party intermediary. These managers varied in whether they were relationally connected to the disputants and in whether their third-party role would be formal or informal. These factors probed whether the difference between Chinese and Western preferences centers on whether the third party is relationally connected to the disputants (LeResche, 1992) or on whether the third party's role is informal (Bierbrauer, 1994). We expected that connectedness would be the pivotal factor, and hence we hypothesized an NFC \times Culture \times Connectedness effect. Specifically, American participants' preference for an unconnected third party should be more pronounced in high-NFC individuals than in low-NFC individuals, whereas Chinese participants' preference for a connected third party should be more pronounced in high-NFC individuals than in low-NFC individuals.

In addition to testing the NFC moderation hypothesis, we also looked for evidence of the consensus-seeking mechanism. One test of the consensus motive account is to examine what expectancies mediate the Culture \times NFC effect on third-party preference. Classical theories explained that people prefer the dispute resolution procedures that they believe will promote fairness (Thibaut & Walker, 1978). However, research on American versus Chinese differences has found that the differences hinge less on differing expectations of which procedures promote fairness than on differing expectations of which procedures promote consensus or understanding among the parties (Leung, 1987). Hence, we adapted the measures of fairness expectancy and consensus expectancy from this literature and expected the consensus expectancy to be a significant mediator of the Culture \times NFC effect.²

Method

Design. This was a 2 (culture: American or Chinese) \times 2 (connectedness: connected or unconnected) \times 2 (formality: formal or informal) design, with connectedness and formality as within-subjects variables.

Participants. Participants were 58 (30 men, 28 women) Chinese undergraduates from an elite Hong Kong university and 57 (20 men, 37 women) American undergraduates from an elite U.S. university. The average age was 20.02 ($SD = 1.02$) for the Chinese sample and 19.38 ($SD = 1.01$) for the American sample. All Hong Kong participants were ethnically Chinese. Among the American participants, 26 reported their ethnic background as Caucasian, 4 as African, 6 as Hispanic, 20 as Asian, and 1 did not indicate an ethnicity.³ On average, the American participants had lived in the United States for 17.47 ($SD = 4.11$) years. Participants were paid approximately US\$5 for their participation.

Materials, measures, and procedures. After the participants had consented to participate in the study, they reported some

demographic data, and completed the NFC Scale. Next, they read a vignette about a dispute between two associate managers in the marketing division of a firm. They disagreed about who deserved credit for an idea, and they needed the help of a third party to work out a resolution—see Appendix A for full details.

Participants then read the following descriptions of four managers who were possible candidates to be their third-party mediator:

Manager A is a Manager in Marketing with whom each has worked in the past, and had a close friendship, and who has given both of them valuable advice in the past.

Manager B is a Manager in Marketing who neither of them knows or has interacted with in the past, but who is known to be willing to give advice.

Manager C is a Manager in Human Resources who is officially an Ombudsperson – that is, someone who is available to intervene and give advice in conflicts between employees anywhere in the organi-

¹ A GLM was fitted to the five styles with NFC as a continuous variable and culture as a between-subjects variable. The main effect of style, $F(4, 328) = 101.91$, $p < .001$, $\eta_p^2 = .55$, main effect of culture, $F(4, 328) = 50.02$, $p < .001$, $\eta_p^2 = .13$, the Style \times Culture interaction, $F(4, 328) = 10.99$, $p < .001$, $\eta_p^2 = .12$, and the Style \times NFC \times Culture interaction, $F(4, 328) = 5.31$, $p < .001$, $\eta_p^2 = .06$, were significant. The NFC \times Culture interaction on Competing was reported in the text. For Avoiding and Accommodating, no culture or NFC effects were significant. For Compromising, the main effect of culture was significant, $F(1, 331) = 7.00$, $p < .05$, $\eta_p^2 = .02$; Americans ($M = 3.86$, $SD = .61$) preferred the compromising style more than did the Hong Kong Chinese ($M = 3.71$, $SD = .41$). For Collaborating, the main effect of culture was significant, $F(1, 331) = 8.46$, $p < .005$, $\eta_p^2 = .03$, and so was the NFC \times Culture interaction, $F(1, 331) = 6.88$, $p < .01$, $\eta_p^2 = .02$. Higher NFC was associated with lower preference for the collaborating style for European Americans ($r = -.20$, $p < .05$) but not for Hong Kong Chinese ($r = .10$, ns).

In all studies (including pilot studies) reported in this article, no theoretically interesting gender effects were found when gender was included in the analysis. Accordingly, gender was not considered in the subsequent analyses. To ensure that cultural effects are not confounded with gender effects, we ran parallel analyses replacing Culture with Gender. Gender effects were found only in the pilot study of Study 1 and Study 2. In the pilot study, we obtained a Gender \times NFC effect. Only female participants were less likely to use the accommodating style as NFC increased. In Study 2, we obtained a Gender \times NFC \times Info Type interaction. Only female participants were more likely to seek relational information as NFC increased. No gender difference in diagnostic information seeking was found. The Gender \times NFC \times Assigned Stance interaction was not significant. Given that significant gender differences were few and did not resemble culture effects, we conclude that the culture effects reported in this current were not confounded with gender.

² This dimension has been labeled, variously, as *animosity reduction*, *harmony*, and *relational expectancy* in past research (Friedman, Chi, & Liu, 2005; Leung, 1987; Morris, Leung, & Iyengar, 2004).

³ In Study 1, to test whether participants with Asian backgrounds differed from those with European backgrounds participants on the dependent measures, we ran a 2 (Asian or Caucasian) \times 2 (connected vs. unconnected) \times 2 (formal vs. informal) \times NFC GLM on third-party choice. The only significant effect was the main effect of formality, $F(1, 42) = 11.30$, $p < .005$, $\eta_p^2 = .21$. Both groups preferred the formal third-party option ($M = 4.37$, $SD = .80$) to the informal one ($M = 3.59$, $SD = 1.01$). The absence of any ethnic background effects indicates that the participants with Asian background were highly Americanized; they had lived in the United States for an average of 17.30 years ($SD = 4.01$, compared with $M = 17.47$, $SD = 4.11$ for the whole sample).

zation. Manager C is also someone who both Amy and Linda know well; they all served on a committee to plan the company Holiday Party.

Manager D is also a Manager in Human Resources who is officially an Ombudsperson – that is, someone who is available to intervene and give advice in conflicts between employees anywhere in the organization. Manager D is someone who neither Amy nor Linda knows at all.

The participants indicated on a Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*) the extent to which they agreed to invite each of the four managers to be the third party. This provided a measure of their preference for the four styles that come from the cross of connected/unconnected with formal/informal.

In addition, to obtain the expectancies measures, we had the participants use the same scale to indicate their expectations that the given manager would (a) be fair, (b) be able to help each party understand the other, and (c) be able to restore a good relationship between the disputants. The first is the standard single-item measure of fairness expectancy. The latter two were averaged to measure consensus expectancy.

Finally, we included a check for the connectedness manipulation. Without referring back to the scenario, participants rated on a 6-point scale ranging from 1 (*not close at all*) to 6 (*very close*) how close each mediator was to the two disputants at the end of the questionnaire. To ensure the two cultural groups understood the research materials in the same way, all materials were presented in English to both the Chinese and the American participants. This did not present a problem to the Hong Kong sample because proficiency in English is an admission requirement in these participants' university. In addition, in this university, instruction occurs in English.

Results

Data reduction and manipulation check. The reliability of the NFC Scale was satisfactory (Cronbach's $\alpha = .80$ for the American sample and $.72$ for the Chinese sample). Summary scores for NFC were constructed by averaging scores for all the items, after standardizing them relative to the cultural group mean (Van de Vijver & Leung, 2000).

A repeated-measure analysis of variance (ANOVA) was performed on the connectedness manipulation check. Participants perceived the connected managers to be closer ($M = 4.69$, $SD = 0.77$) than the unconnected managers ($M = 1.98$, $SD = 0.95$), $F(1, 113) = 544.17$, $p < .001$, $\eta_p^2 = .83$. Hence, the connectedness manipulation was successful.

Testing the NFC moderation hypothesis. To test the NFC moderation hypothesis, a 2 Culture (American or Chinese) \times 2 Connectedness (unconnected or connected) \times 2 Formality (formal or informal) \times NFC (mean-centered continuous) GLM was fitted to the third-party preference data, with Culture as a between-subjects factor and Formality and Connectedness as within-subjects factors.

Only three effects were significant. There was a main effect of formality, $F(1, 111) = 26.15$, $p < .001$, $\eta_p^2 = .19$, the Formality \times Connectedness \times Culture interaction, $F(1, 111) = 4.67$, $p < .05$, $\eta_p^2 = .04$, and the NFC \times Culture \times Connectedness interaction effect, $F(1, 111) = 4.13$, $p < .05$, $\eta_p^2 = .04$. We explored these

Table 1
Predicted Values of Third-Party Preference as a Function of Culture and NFC (Study 1)

Preference and culture	NFC		
	Low ^a	Average ^b	High ^c
Unconnected			
Hong Kong	3.96	3.75	3.53
United States	3.52	4.08	4.64
Difference	0.44	-0.33	-1.11
Connected			
Hong Kong	2.28	3.51	4.74
United States	3.45	3.84	4.24
Difference	-1.17	-0.33	0.50

Note. NFC = need for closure.

^a Estimated values when NFC was two standard deviations below the mean. ^b Estimated values when NFC was equal to its means. ^c Estimated values when NFC was two standard deviations above the mean.

effects one by one, starting from our focal predicted NFC \times Culture \times Connectedness interaction.

As NFC is a continuous variable, the moderation effect was tested by using simple slope analysis. Table 1 shows the predicted value for the two dependent measures across cultures when NFC was high (centered at two standard deviation units above the mean) and low (centered at two standard deviation units below the mean). Consistent with our hypothesis, the Culture \times Connectedness interaction was significant when NFC was high, $F(1, 111) = 5.93$, $p < .05$. Specifically, when NFC was high, preference for the connected managers was greater among Chinese than among Americans. Also as predicted, the Culture \times Connectedness interaction was not significant when NFC was low, $F(1, 111) = 1.47$, *ns*. That is, when NFC was low, the two cultural samples did not differ in the relative preference for the connected and unconnected managers. Although the differences were not reliable, at low levels of NFC, participants tended to display counternormative responses. Overall, the higher the NFC, the more likely it was that cultural conformist responses would be displayed.

Table 1 also shows the difference between preference for the connected and unconnected managers. As the level of NFC increased, the greater preference among Americans (vs. Chinese) for the unconnected manager also increased. Similarly, an increase in the level of NFC was accompanied by the greater preference among Chinese (vs. Americans) for the connected manager.

Current results provided no support for the view that the American–Chinese difference in preference depends on the third party's formality. Neither the Culture \times Formality effect, $F(1, 111) = 3.52$, *ns*, nor the NFC \times Culture \times Formality effect, $F(1, 111) = 0.04$, *ns*, was significant. As shown earlier, there was only a main effect of formality. Participants preferred to work with managers in the formal ombudsperson role ($M = 4.24$, $SD = 0.83$) as opposed to those who would serve informally ($M = 3.61$, $SD = 0.87$). However, this main effect was qualified by the significant Formality \times Connectedness \times Culture interaction effect. American participants' preference for unconnected rather than connected managers was stronger when the manager had a formal status as an ombudsperson (unconnected: $M = 4.65$, $SD = 1.46$; connected: $M = 4.12$, $SD = 1.38$) than when the manager did not (unconnected: $M = 3.53$, $SD = 1.65$; connected: $M = 3.53$, $SD = 1.64$).

Chinese participants' preference for connected rather than unconnected managers was stronger when the manager had a formal status (connected: $M = 4.29$, $SD = 1.30$; unconnected: $M = 3.90$, $SD = 1.41$) than when the manager did not (connected: $M = 3.79$, $SD = 1.17$; unconnected: $M = 3.60$, $SD = 1.44$).

Mediation analyses. Next, we tested whether consensus expectancy mediated the effect on preference. To test for statistical mediation against the four criteria established by Baron and Kenny (1986), we first followed the standard practice in the procedural preference literature (e.g. Leung, 1987) of transforming our dataset to treat each participant's response to each third-party option as a separate case, with the formality and connectedness conditions encoded by dummy variables.⁴ We also aggregated the scores from the relationship restoration and understanding expectancy items ($r = .73$, $p < .001$) to form the interpersonal consensus expectancy measure. Results from the Culture \times NFC \times Connectedness \times Formality GLM showed that the Culture \times Connectedness interaction, $t(444) = 2.37$, $p < .05$, and the NFC \times Culture \times Connectedness interaction, $t(444) = 1.94$, $p = .05$, on procedural preference were significant. Thus, the first criterion was met.

Next, the same GLM was fitted to the two potential mediators: consensus expectancy and fairness expectancy, respectively. The connectedness main effect, $t(444) = -5.04$, $p < .001$, and the NFC \times Culture \times Connectedness interaction, $t(444) = 2.22$, $p < .05$, on consensus expectancy were significant. Hence, consensus expectancy met the second criterion. For fairness expectancy (on which two cases had missing data), we only found a significant formality main effect, $t(442) = -2.43$, $p < .05$, a significant connectedness main effect, $t(442) = 2.71$, $p < .01$, and a significant Culture \times Connectedness interaction, $t(442) = 2.15$, $p < .05$. The predicted NFC \times Culture \times Connectedness interaction was not significant, $t(442) = 0.60$, *ns*. Therefore, only consensus expectancy, not fairness expectancy, survives the second criterion.

When the full four-factor model and consensus expectancy were entered simultaneously into the regression, consensus expectancy remained a significant predictor of procedural preference, $t(443) = 8.81$, $p < .001$, and the NFC \times Culture \times Connectedness interaction was reduced to insignificance, $t(443) = 1.16$, *ns*. In summary, all four criteria for statistical mediation were satisfied for consensus expectancy. Figure 1 shows the unstandardized regression coefficients in the mediation model. Finally, the Sobel test (Sobel, 1982; see also MacKinnon, Warsi, & Dwyer, 1995) showed that the NFC moderation effect on preference was mediated by this expectancy, $t(443) = 2.15$, $p < .05$. Hence, results are consistent with the interpretation that the culturally conformist preferences of high-NFC individuals are driven by their beliefs that the conventional third-party procedures in their respective cultures provide a basis for forging consensus.

Discussion

Study 1 clarifies the picture of American versus Chinese conflict styles in several ways. First, it tested two proposals regarding the dimensions of third-party procedures that distinguish American and Chinese preferences—connectedness versus formality. Our findings suggest that it is primarily connectedness and not formality that matters. Formality might have been confounded with connectedness or other factors when it appeared to have an effect in past studies (e.g., Bierbrauer, 1994). In the current study, in which connectedness and formality were independently manipu-

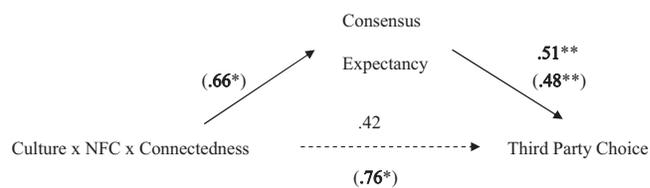


Figure 1. Results of mediation analysis of the moderation effect of NFC on cultural differences in third-party preference (Study 1). The numbers in the diagram are unstandardized coefficients in the simultaneous regression equation. Coefficients in parentheses are obtained from simple regression analyses. * $p < .05$. ** $p < .01$.

lated, only connectedness distinguished American and Chinese responses. This cultural difference was more pronounced when the mediator had a formal status. Our results call for more research to examine these factors that moderate cultural preferences for third-party roles.

Second, NFC moderates cultural differences in conflict resolution. In the pilot study on conflict styles and the main study on third-party choices, NFC interacted with country in determining conflict resolution preferences. The hypothesized cultural normative preference pattern was observed in high-NFC individuals but not in low-NFC individuals. We have a clearer picture of cultural influences on behavior because this moderating variable separates the signal (high-NFC individuals who adhere to cultural conventions) from the noise (low-NFC individuals who do not).

In addition to clarifying cultural patterns, results from Study 1 contribute toward the second goal of elucidating why higher NFC produces cultural conformity. The mediation analyses suggest that high-NFC conventionality is driven by expectancies of consensus among the parties not expectancies of fair outcomes. This result is consistent with the idea that the desire for consensus and agreement mediates the link between NFC and cultural conformity. That said, Study 1 is only an initial step toward understanding why NFC fosters cultural conformity. Better understanding requires evidence that distinguishes the consensus motive account from alternative accounts. This was the purpose of the next two studies.

Study 2—Information-Seeking as a Third Party

Study 2 was an experiment designed to test the distinctive predictions of the consensus-seeking account against the effort-minimization account. Participants took the role of managers intervening as third parties in a conflict and we measured their information-seeking behavior. In three between-subject conditions, participants were respectively assigned to a culturally familiar style, assigned to a culturally less familiar style, and not assigned to a particular style. The assigned styles were an investigative stance (to find the truth) or a conciliative stance (to find a settlement acceptable to both disputants). The investigative stance is culturally familiar to European American participants, yet it is less familiar to Asian American participants; whereas the conciliative stance is culturally familiar to Asian Americans, yet it is less familiar to European Americans. Participants were given a list of

⁴ A critique of this procedure is that it increases the degrees of freedom. We checked the significance of the effects with the original degree of freedom and confirmed that the results remained the same.

topics relevant to the dispute and were asked to indicate the importance of each topic in information gathering. These topics fell into two information types—diagnostic and relational—that are primarily relevant to, respectively, the investigative and conciliative styles.

This design enables testing two hypotheses drawn from our analysis of epistemic motives and cultural styles. First, the moderation effect of NFC was again tested. The bias toward gathering relational information in the Asian American group and the bias toward gathering diagnostic information in the European American group should be primarily exhibited by the high-NFC members of each group. Second, by looking at overall amount of information sought, we can test the diverging predictions of the effort-minimization account (that higher NFC is always associated with less information seeking) and our account (that it is associated with greater information seeking when participants are assigned to an unfamiliar stance).

Besides using experimental conditions designed to test the effort-minimization account, we also used the strategy of measuring individual difference dimensions related to the alternative mechanisms. We used the Need for Cognition Scale by Cacioppo and Petty (1982) to measure tendency to minimize cognitive effort during decision making and judgment and the Political Conservatism Scale by Kerlinger (1984) to measure respondents' level of political conservatism. By examining whether these instruments can be substituted for the NFC Scale and show the same interactions as it does with cultural group, we probed whether the effects of NFC are byproducts of the effects driven by these dimensions. We expected that these scales would not produce the same interactions as the NFC scale.

Method

Participants. Sixty-nine undergraduates (age: $M = 18.9$, $SD = 1.36$) at a large Midwestern university participated in this study for course credit. Participants were recruited from a psychology department database in which they had previously listed their demographic information. In order to sample two distinct cultural groups, participation in the study was offered only to students who had listed an Asian or European cultural background. Thirty-six participants were Asian Americans (gender: 13 women, 24 men; age: $M = 19.38$, $SD = 1.59$) and 32 were European Americans (gender: 15 women, 17 men; age: $M = 18.28$, $SD = 0.68$).⁵

Materials, measures, procedures. The participants first gave their informed consent and then filled out a series of individual differences instruments: the NFC Scale, the Need for Cognition Scale, and the Political Conservatism Scale. Two sample items for the Need for Cognition Scale were “I tend to set goals that can be accomplished only by expending considerable mental effort” and “I don’t like to have the responsibility of handling a situation that requires a lot of thinking” (reverse coding). Participants were asked to rate on a Likert-type scale ranging from 1 (*very strong disagreement*) to 9 (*very strong agreement*). The Political Conservatism Scale asked people to consider a list of topics such as “economic reform” and “social stability” and to indicate their attitude on a Likert-type scale ranging from 1 (*highly positive*) to 6 (*highly negative*).

Next, the participants proceeded to read two vignettes, the pharmacy scenario and the university scenario, which were constructed to test the hypotheses. The order of the scenarios was

counterbalanced. The pharmacy scenario reads as follows (see Appendix B for the university scenario):

Donna is a pharmacist in a drug chain store. One day, Sue, the manager of the store receives a phone call from Chris, who bought a bottle of cough syrup a few days ago from the store. According to Chris, Donna was the pharmacist who sold him the cough syrup. When Donna gave him the medicine, Chris noticed that the package of the cough syrup was torn, but Donna assured him that the medicine was good. She also told him that was the only bottle they had in the store. Chris bought the medicine. When he went home, he found that the quality seal of the bottle was broken. Nonetheless, he took the medicine after dinner and got a severe stomach upset in the evening. He calls Sue, the store manager, to file a complaint, and he demands that Donna be removed from her job. When Sue asks Donna for an explanation, Donna insists that although the package was a bit torn, the medicine was in good condition when it was sold. According to Donna, Chris checked the quality seal of the bottle before he paid for it, and she suspected that Chris might have broken the quality seal himself when he checked the medicine. Donna has worked in the store for 5 years and has recently been recommended for promotion to Senior Pharmacist. Donna is also a regional advocate in a pharmacist organization, which is an active labor organization in the country.

After reading the scenario, participants were randomly assigned to one of the following conditions: (a) the control condition in which no stance was assigned, (b) the investigative condition, and (c) the conciliative condition. The control condition instructions simply instructed the participants to imagine that they were Sue, the manager who had to handle this conflict. In the other two conditions, they were given instructions about a specific stance. In the investigative condition, the stances were as follows:

When the regional manager of the chain store receives the complaint, she demands a formal investigation of the incident to determine whether the company is responsible for Chris’s illness. You are expected to find out the truth and to submit a report to the regional manager in the next few days.

In the conciliative condition, the stances were as follows:

When the regional manager of the chain store receives the complaint, she sees the possibility of a direct confrontation between Chris and the labor organization Donna belongs to. The confrontation could seriously hurt the company’s reputation and business. The regional manager asks you to mediate the conflict between Chris and Donna and to recommend a solution that is acceptable to both parties.

Participants then read a list of information topics and were asked to rate the importance of seeking information related to each topic on a Likert-type scale ranging from 1 (*not at all important*) to 6 (*very important*). The topics fell into two types. Diagnostic topics were more relevant to the investigative goal of sorting out the truth, and relational topics were more relevant to the conciliative goal of repairing strained relationships.

⁵ Unlike the Asian descent group in Study 1 who had grown up almost entirely in the United States (years of residence in the United States, $M = 17.30$, $SD = 4.01$), the Asian group in Study 2 were individuals who had grown up primarily in Asian cultures and had moved to the United States more recently (years of residence in the United States, $M = 5.78$, $SD = 6.04$), the difference between the two groups was significant $t(29.11) = 6.85$, $p < .001$.

To illustrate, the topics in the case of the pharmacy story were as follows:

- (1) Does Donna have a record of being careless at work?
- (2) What does Donna want?
- (3) How much responsibility Donna is willing to accept?
- (4) How would people in the company feel if Donna gets removed?
- (5) Is Chris telling the truth?
- (6) How much concession is Chris willing to make?
- (7) How would Chris feel if Donna is not removed from her job?
- (8) Is Donna telling the truth?
- (9) How would employees feel if Donna gets removed?
- (10) Has Chris blamed others for his own mistakes before?
- (11) What does Chris want?
- (12) Is there another witness who can help to determine who is telling the truth?
- (13) How would Donna feel if she is removed from the job?

Items 1, 5, 8, 10, and 12 were designed to be the diagnostic items, and Items 2, 3, 4, 6, 7, 9, 11, and 13 were designed to be relational items. The materials and measures were presented in English to both Asian and European American participants.

Results

Constructing summary variables. Cronbach’s alphas for the NFC, Need for Cognition, and Political Conservatism Scales were .84, .87 and .74, respectively. We then created summary variables for each scale accordingly. As in past research, NFC showed a negative correlation with Need for Cognition ($r = -.29, p < .05$). It showed a positive though nonsignificant association with Political Conservatism ($r = .20, ns$). NFC scores did not differ between European Americans ($M = 3.80, SD = 0.50$) and Asian Americans ($M = 3.70, SD = 0.45$), $t(67) = 0.86, ns$. Yet there were differences on the other measures. European Americans ($M = 5.53, SD = 0.71$) were lower in Need for Cognition than were Asian

Americans ($M = 5.89, SD = 0.72$), $t(67) = -2.07, p < .05$. Also European Americans were higher on Political Conservatism ($M = 3.54, SD = 0.32$) than were Asian Americans ($M = 3.39, SD = 0.28$), $t(67) = 2.12, p < .05$. All individual difference measures were then centered according to the cultural group means for further analysis.

Next, we examined the information-seeking measures. We checked whether the information seeking topics were subjectively perceived as falling into the two a priori types. Cluster analysis was performed on the topics. As expected, the information seeking topics fell into two main groups. For the drug scenario, topics that fell into the first group were all diagnostic topics, whereas the rest that fell into the other group were all relational topics. The groupings were the same for the university scenario. Given this corroborative evidence, we computed three summary variables by taking the mean of the pertinent items: diagnostic information seeking, relational information seeking, and overall information seeking.

Table 2 shows the correlations among the individual difference dimensions and the information-seeking scores. Notice that NFC correlates positively with the overall information-seeking measure ($r = .31, p < .05$). This immediately weighs against the interpretation that NFC primarily taps an effort-minimizing tendency.

Information seeking. To test the effects of the manipulated factors, we submitted the data to a 2 (cultural group: Asian or European American) \times 3 (assigned style: control, investigative or conciliative) \times 2 (type of information: diagnostic or relational) \times continuous NFC GLM. Type of Information was a repeated measure variable. We collapsed the data across the two scenarios after checking that there were no effects of the scenario factor.

Results showed two main effects and three significant interactions. A main effect of NFC, $F(1, 57) = 6.23, p < .05, \eta_p^2 = .10$, reflected that higher NFC was associated with greater information seeking ($r = .31, p < .05$). A strong main effect of information type, $F(1, 57) = 446.51, p < .01, \eta_p^2 = .89$, reflected that participants generally sought diagnostic information ($M = 5.38, SD = 0.08$) more than relational information ($M = 3.48, SD = 0.10$)—not surprising given that diagnostic information is central to the dispute. Yet, despite this general bias toward diagnostic information, the stance assignment manipulation did shift the content of information sought; there was an Assigned Style \times Type of Information interaction, $F(2, 57) = 4.36, p < .05, \eta_p^2 = .13$. As shown in Table 3, the tendency to prioritize diagnostic information over relational information was highest in the investigative style condition, $F(1, 22) = 237.01, p < .001, \eta_p^2 = .92$, lowest in the conciliative style condition, $F(1, 22) = 138.61, p < .001, \eta_p^2 = .86$, and in between in the control condition, $F(1, 22) = 145.21, p < .001, \eta_p^2 = .87$.

Table 2
Correlations Among Motivational Variables and Information Seeking (Study 2)

Variable	1	2	3	4	5	6
1. Need for closure	—					
2. Need for cognition	-.29*	—				
3. Political conservatism	.20	-.17	—			
4. Diagnostic information seeking	.26*	.12	.05	—		
5. Relational information seeking	.27*	-.19	.04	.54**	—	
6. Overall information seeking	.31*	-.06	.05	.83**	.92**	—

* $p < .05$. ** $p < .01$.

Table 3
Means and Standard Deviations of Information Seeking by
Information Type and Assigned Style (Study 2)

Assignment condition	Diagnostic		Relational	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Investigative style	5.51	0.12	3.36	0.17
Control	5.38	0.12	3.38	0.18
Conciliative style	5.26	0.12	3.72	0.17

The remaining two interactions supported the two key hypotheses. To review, we hypothesized that high NFC would generally increase participants' tendency to conform to the norms of their culture. Put differently, European Americans should be more likely to seek diagnostic information and Asian Americans should be more likely to seek relational information when they are higher rather than lower in NFC. We obtained a marginally significant Culture \times NFC \times Type of Information interaction, $F(1, 57) = 3.82, p = .06, \eta_p^2 = .06$, suggesting a trend in the direction of our hypothesis. Simple slope analysis showed that the Culture \times Type of Information interaction was marginally significant at the .06 level when NFC was high (centered at two standard deviation units above the mean), $F(1, 57) = 3.71, \eta_p^2 = .06$, but not significant when NFC was low (centered at two standard deviation units below the mean), $F(1, 57) = 2.77, p = .10, \eta_p^2 = .05$. Table 4 shows the estimated values of the two types of information sought by the two ethnic groups for low, average, and high levels of NFC. For European Americans, the preference of diagnostic information over relational information increased with NFC. Although Asian Americans also preferred diagnostic information to relational information, the gap narrowed as NFC increased. In short, greater conformity to normative cultural patterns was found as NFC increased. As the results of the simple slope analysis indicate, the cultural difference was significant when NFC was high but not when it was low. Indeed, as in Study 1, low-NFC participants respond in ways that run counter to the cultural norm.

The final effect supported our prediction about responses to the situation of being assigned to a stance that is culturally less familiar. Our account predicts high-NFC individuals assigned to a culturally less familiar stance should gather information in order to secure their stance by forging consensus. This was supported by the significant Culture \times Assigned Style \times NFC interaction, $F(2, 57) = 4.17, p < .05, \eta_p^2 = .13$. Figure 2 shows that overall information seeking increased as a function of NFC in the conditions in which participants were assigned to less familiar styles. That is, there is a positive slope for Asian Americans who were assigned to the (culturally less familiar) investigative stance, $B = .89, p < .01$, but not for those who were assigned to the conciliative stance, $B = .13, ns$, or to the control condition, $B = .43, ns$. Likewise, there is a positive slope for European Americans who were assigned to the (culturally less familiar) conciliative stance, $B = 1.18, p = .06$, but not for those who were assigned to the investigative stance, $B = -.22, ns$, or to the control condition, $B = .26, ns$.

In addition to the GLM testing of our hypotheses with the NFC variable, we also ran parallel models replacing it with the Need for Cognition and Political Conservatism variables to test the two

alternative accounts. We substituted these measures for NFC to determine whether they would produce analogous effects. Neither replicated the crucial interaction effects in the NFC model. When Need for Cognition was used, there was no effect of Type of Information \times Culture \times Need for Cognition interaction, $F(1, 57) = 0.56, ns$, nor of Culture \times Assigned Style \times Need for Cognition, $F(2, 57) = 1.40, ns$. When Political Conservatism was used, the Type of Information \times Culture \times Political Conservatism interaction was not significant, $F(1, 57) = 0.18, ns$, although the Culture \times Assigned Style \times Political Conservatism interaction was significant, $F(2, 57) = 3.78, p < .05, \eta_p^2 = .12$. Exploring this interaction, we found that Political Conservatism correlated negatively ($r = -.63, p < .05$) with overall information seeking for European Americans in the investigative stance condition but was uncorrelated with it in the other conditions. Hence, even in this one significant interaction, the pattern is not the same as with NFC. We can conclude that the effects of Need for Cognition and Political Conservatism differ from those of NFC. This suggests the relationship of NFC to cultural conformity is not explained by the effort-minimization or political conservatism accounts.

Discussion

Study 2 results provide evidence that the link between NFC and culturally varying conflict styles hinges on the motive for closure through consensus rather than effort minimization. There were two key findings. First, the Culture \times NFC \times Type of Information interaction supports our central hypothesis that NFC increases adherence to cultural norms. The Study 2 evidence from information-seeking measures complements the Study 1 evidence from preference measures.

Second, there was a Culture \times NFC \times Assigned Stance interaction reflecting that NFC increases information seeking for participants assigned to a culturally less familiar stance. A critic might ask whether the culturally less familiar styles seemed especially less familiar to the high-NFC participants, given their culturally conformist habits. Does the greater gulf between their habits and the assigned style by itself account for their greater information seeking? This story would fit if the effect were a four-way inter-

Table 4
Predicted Values of Information Sought as a Function of
Culture and NFC (Study 2)

Culture and information type	NFC		
	Low ^a	Average ^b	High ^c
European Americans			
Diagnostic	3.54	4.94	6.33
Relational	2.57	3.41	4.25
Difference	0.97	1.53	2.08
Asian Americans			
Diagnostic	5.70	5.59	5.47
Relational	3.68	4.03	4.39
Difference	2.02	1.56	1.08

Note. NFC = need for closure.

^a Estimated values when NFC was two standard deviations below the mean. ^b Estimated values when NFC was equal to its means. ^c Estimated values when NFC was two standard deviations above the mean.

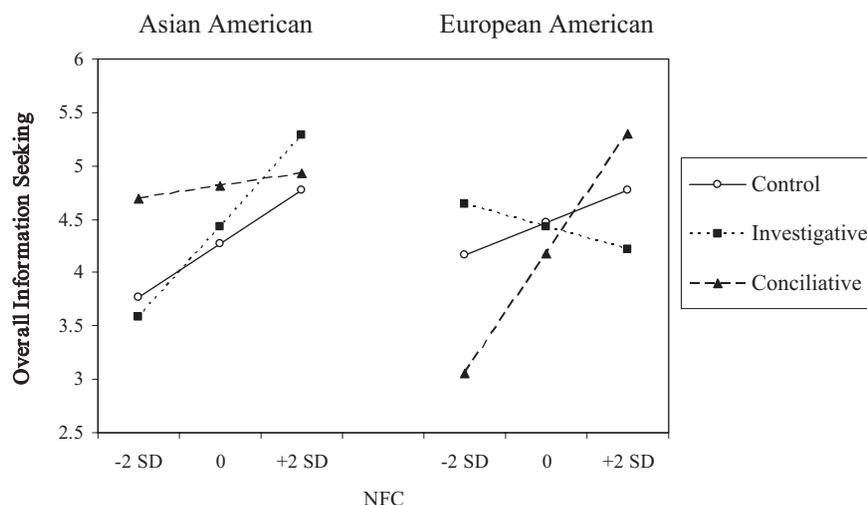


Figure 2. Regression lines predicting overall information seeking as a function of culture, assigned style, and NFC (Study 2). The left and right graphs show results for Asian American and European American participants, respectively.

action in which the increase held only for information relevant to the less familiar style, but it is not. Our explanation is that high- (vs. low-) NFC individuals gather all types of information because they want to forge consensus around the unfamiliar stance. That is, they gather more information when assigned a conflict stance with which they lack familiarity, just as they show greater attitude shift in persuasion studies when assigned a stance with which they lack familiarity (Webster & Kruglanski, 1994, Study 6).

Another test of alternative accounts in Study 2 used individual difference measures related to cognitive effort-minimization and political conservatism. Neither of these interacted with the manipulated variables in the way that NFC did, which indicates that neither is the mechanism through which NFC has its effect on culturally conventional behavior.

Study 3—Judging Reward Allocation

Reward allocation is a central topic of workplace conflict, as there are several standards (equity or equality) that can be endorsed as fair. It is also a task for which the political conservatism and consensus motive accounts of NFC yield diverging predictions. A defining feature of political conservatism is acceptance of economic inequality (Jost et al., 2003). The prediction from this alternative account is that NFC should be associated with endorsement of equity and not equality, regardless of culture. By contrast, the consensus motive account suggests that NFC should be associated with allocation rules to the degree that they correspond to cultural norms. Past research suggests that cultural norms of fairness depend greatly on the context, and the workplace is one where the equity rule is generally endorsed (Leung, 1995). However American and Chinese cultural norms differ with regard to reward allocations within the ingroup: Americans are more inclined toward equity, and Chinese are more inclined toward equality (Leung & Bond, 1984). Hence, the prediction from the consensus motive account is that the relationship of NFC to endorsement of

equity versus equality should differ between the contexts of American culture and Chinese culture.

To complement the quasi-experimental methods in past studies, in Study 3 we manipulated the cultural context through priming. Past research indicates that Hong Kong is characterized by a mix of Chinese and Western norms (Fu, Chiu, Morris, & Young, 2007). Over 95% of the residents in Hong Kong are ethnic Chinese. Most Hong Kong Chinese are native speakers of Cantonese, a Chinese dialect, grew up in a Chinese cultural milieu, and are familiar with the Chinese cultural traditions. At the same time, people are also socialized in Western norms, values, and customs. Hong Kong was a British-administered territory from 1842 to 1997. Before it was returned to China, English, not Chinese, was officially the language of instruction in approximately 80% of the high schools in Hong Kong (Young, Giles, & Pierson, 1986). Additionally, Hong Kong Chinese have been exposed to American culture through their education and the media. For example, a total of 27 U.S. television channels are available in Hong Kong. From 1997 to 2003, among the 20 most popular movies in Hong Kong each year (in terms of box office records), 7 to 13 are U.S. movies. During this period, half of the 100 most popular movies are U.S. movies (Chiu & Hong, 2006). School children in Hong Kong also learn Western cultural values through reading stories of famous Americans like Thomas Edison and Abraham Lincoln (Fu & Chiu, 2006). Past research on “frame switching” has also found that bicultural Hong Kong individuals become more likely to exhibit Chinese response patterns after being primed with images of Chinese culture and American response patterns after being primed with images of American culture (Hong et al., 2000). Biculturals should be able to gain epistemic closure through consensus with either of these cultural norms if it is cued by the given setting.

The crucial test that discriminates the consensus motive and political conservatism accounts is whether the cultural prime interacts with NFC to affect endorsement of the equity rule over the

equality rule. The consensus motive account predicts an interaction in which higher NFC would be associated with greater endorsement of the rule that is conventional in the primed culture (equity for American culture, equality for Chinese culture), whereas the political conservatism account predicts that NFC would always be associated with preference for equity over equality.

Method

Participants. Two hundred thirty-nine Hong Kong Chinese university undergraduates (70.7% women, 29.3% men; age: $M = 19.69$, $SD = 0.82$), each paid HK\$50 (approximately US\$6.50), participated in the current study. They were randomly assigned to different conditions of the prime (American, Neutral, or Chinese) and rule (Equity or Equality) factors.

Scenario. Given the sensitivity of reward allocation to contextual factors (Leung, 1995), we pilot tested a vignette about a workplace scenario to check that American and Chinese samples diverge in their fairness judgments. American students ($N = 180$; 52% Caucasian, 48% other ethnicities) recruited from a California university (44% female, 56% male; age: $M = 20.02$, $SD = 1.59$) and Chinese students ($N = 156$; all ethnically Chinese recruited from a Hong Kong university; 54% female, 46% male; age: $M = 21.24$, $SD = 5.57$) read a story about a reward allocation decision adapted from Leung and Bond (1984). In the equity condition, the story was as follows:

Pat and Alex work in the same railway company and are assigned to design a new signaling system for the company. Compared with Alex, Pat has done two times more work on the project. The signaling system was a big success, and Pat and Alex are given a cash bonus for their work. Pat is asked to divide the reward, and Pat divides it according to their relative contribution. In other words, the amount of money Pat received is two times more than the amount Alex received.

In the equality condition, the story was identical except that it ended with a different decision "Pat divides it equally. In other words, the amount of money Pat received is equal to the amount that Alex received."

Hence, data were submitted to a 2 (culture: American or Chinese) \times 2 (rule: equality or equity) between-subjects ANOVA. There was a main effect of rule, $F(1, 332) = 268.01$, $p < .001$, $\eta_p^2 = .45$, reflecting that participants generally perceived greater fairness in an equity-based ($M = 5.83$, $SD = 1.21$) rather than equality-based allocation ($M = 3.26$, $SD = 1.63$). This is not surprising given that the vignette used in the current study depicted a workplace context (Leung & Park, 1986). It is important to note that there was a Culture \times Rule interaction, $F(1, 332) = 8.52$, $p < .01$, $\eta_p^2 = .03$, reflecting that Chinese participants ($M = 3.57$, $SD = 1.42$) endorsed the equality rule more than did the American participants ($M = 3.00$, $SD = 1.74$), $t(153.9) = 2.3$, $p < .05$, whereas American participants ($M = 5.99$, $SD = 1.22$) endorsed the equity rule marginally more than did the Chinese participants ($M = 5.65$, $SD = 1.15$), $t(166.8) = -1.84$, $p = .07$. Hence, the scenario was effective in evoking the typical cultural difference in reward allocation fairness norms.

Procedure. Participants arrived at the laboratory in groups and signed the consent forms for what was ostensibly a session involving two separate studies. In the first study on picture interpretation, they began by filling out the 42-item NFC Scale (Webster & Kruglanski, 1994). Then they were shown a series of images and

were asked to write a sentence about each one. The content of the images varied across three conditions. In the culturally neutral control condition, the images were cloud formations. In the cultural prime conditions, they were icons of Chinese and American culture, respectively, such as images of flags, fictional characters, famous works of architecture, and so forth (see Hong et al., 2000).

After all participants in the group had completed their task for the first study, the experimenter collected the materials and left the room. A different experimenter entered to introduce what was purportedly a separate experiment pertaining to fairness judgments. After responding to the vignette by rating the fairness of the reward allocation, participants were debriefed. All materials and measures presented to the participants were written in Chinese.

Results and Discussion

The fairness rating was submitted to a 2 (rule: equality, equity) \times 3 (prime: American, neutral, Chinese) \times Continuous NFC GLM analysis. Results showed a significant prime main effect, $F(2, 227) = 90.79$, $p < .001$, $\eta_p^2 = .29$, and a significant Rule \times NFC interaction effect, $F(1, 227) = 13.54$, $p < .001$, $\eta_p^2 = .06$. These were qualified by the hypothesized Prime \times Rule \times NFC interaction, $F(2, 227) = 5.48$, $p < .01$, $\eta_p^2 = .05$.

Simple slope analysis was performed to understand the nature of the three-way interaction. Results supported our consensus motive account. When NFC was high (centered at two standard deviation units above the mean), the Prime \times Rule interaction was significant, $F(2, 227) = 4.18$, $p < .02$. As shown in Table 5, and consistent with our hypothesis, when NFC was high, Chinese culture priming (vs. control or American culture priming) resulted in greater perceived fairness of the equality rule and lower perceived fairness of the equity rule. When NFC was low (centered at two standard deviation units below the mean), the Prime \times Rule interaction was also significant, $F(2, 227) = 5.10$, $p < .01$. As in Studies 1 and 2, counternormative responses were observed when NFC was low: Perceived fairness of equality was lower following Chinese culture priming (vs. control or American culture priming), and perceived fairness of equity was lower following American culture priming (vs. control or Chinese culture priming). We

Table 5
Predicted Values of Fairness Judgment as a Function of Cultural Priming and NFC (Study 3)

Judgment and culture prime	NFC		
	Low ^a	Average ^b	High ^c
Equality			
Chinese	3.09	3.29	3.49
Control	5.05	3.58	2.11
American	5.68	3.47	1.25
Equity			
Chinese	5.57	5.37	5.17
Control	5.25	5.82	6.39
American	4.12	5.19	6.26

Note. NFC = need for closure.

^a Estimated values when NFC was two standard deviations below the mean. ^b Estimated values when NFC was equal to its means. ^c Estimated values when NFC was two standard deviations above the mean.

speculate that low-NFC individuals consider alternative and non-conventional solutions more thoroughly than do high-NFC individuals and thereby are led to decisions that depart from the norms of their ingroup. More studies have to be done to replicate and understand such counternormative behaviors and preferences.

General Discussion

The current studies found that NFC moderates cultural influences on conflict resolution behavior and supported an account of its relevance in terms of seeking closure through consensus. We investigated the role of NFC in relation to a prominent cultural difference in the conflict resolution literature, namely that in Chinese and other Confucian cultures, compared with American and other Western cultures, people favor relationship-preserving styles of handling conflicts with coworkers. The pilot survey of Study 1 showed that the more prevalent use of competing styles of managing disagreements by American than by Chinese participants was moderated by their levels of NFC. The main study found that the greater tendency of American participants to choose relationally unconnected third parties, and of Chinese to choose relationally connected third parties, was moderated by their levels of NFC. Study 2, which put participants in the role of a third-party intermediary, found that NFC moderated the differential tendency of European Americans to seek information relevant to investigative approaches and Asian Americans to seek information relevant to conciliative approaches. Study 3 found that NFC moderated the tendency of bicultural participants to favor equality-based allocations more in a condition where Chinese culture was primed and to favor equity-based allocations more when American culture was primed.

Overall, the current findings provide converging evidence for the moderating role of NFC from studies with three different ways of operationalizing culture as an independent variable (cross-national comparison, cross-ethnic comparison, and priming) and three different dependent measures (preference, information seeking, and fairness judgment). This suggests that, despite the inconsistency in the past evidence from country differences, there are reliable patterns of cultural norms. We submit that, rather than simply looking for differences as a function of country, cultural researchers would do better to focus on interaction effects between these cultural group variables and individual difference dimensions, such as NFC, that tap propensities to conform to norms. Country effects often fail to replicate because of high within-group variation, yet by controlling for the relevant individual differences, researchers can separate the signal (individuals who are following cultural norms) from the noise (individuals who reach their judgments in other ways).

Now let us review the findings that distinctly favor our account that high-NFC individuals adhere to norms because they want the epistemic security of consensual validation.⁶ In Study 1, we examined whether the effect on preference for third-party procedures could be accounted for by expectancies of fairness or expectancies of interpersonal consensus. Mediation analyses revealed that the effect was driven by differing consensus expectancies and not by differing fairness expectancies.

Studies 2 and 3 tested the consensus motive account against two alternative accounts based, respectively, on the overlap of NFC with effort minimization and political conservatism. In Study 2, individual difference scales targeting these two constructs (need for cognition and political conservatism) did not replicate the

patterns seen with the NFC Scale. In addition to this test, we also used experimental conditions to tease apart predictions from the consensus motive and effort-minimization accounts. In past research they have been teased apart experimentally through epistemically insecure conditions, such as assignment to an unfamiliar opinion stance, which induce high-NFC people to process information in order to forge consensus (Webster & Kruglanski, 1994, Study 6). Following this approach, some conditions of Study 2 assigned participants to culturally less familiar conflict styles, whereas other conditions assigned participants to culturally familiar conflict styles. As predicted, higher NFC was associated with greater information seeking in the less familiar stance condition. The alternative account equating the role of NFC with effort-

⁶ To show that both specific (freezing) and nonspecific (seizing) factors of NFC are needed for the NFC's moderation effect, we conducted separate analysis by replacing the overall NFC scores with either component in each study to determine whether either component could singly account for the results obtained. Overall, the results showed that neither component by itself fully captures the essence of the desire for consensus. When we replaced NFC with either component in our analyses, as expected, both components produced the hypothesized effects in some studies, but neither component produced consistent results across the studies. The results are reported in the following paragraphs.

Study 1 pilot: A 2 (culture: American or Chinese) \times Continuous Motive GLM was performed on the conflict management style data. When we replaced overall NFC with specific closure, the critical Culture \times Motive interaction was obtained in avoidant style, $F(1, 331) = 11.31, p < .005, \eta_p^2 = .03$, and collaborative style, $F(1, 331) = 4.62, p < .05, \eta_p^2 = .01$, but not in competitive style, $F(1, 331) = 2.57, ns$. When we replaced overall NFC with nonspecific closure, this critical interaction was observed in avoidant style, $F(1, 331) = 17.59, p < .001, \eta_p^2 = .05$, competitive style, $F(1, 331) = 5.30, p < .05, \eta_p^2 = .02$, and accommodative style, $F(1, 331) = 11.90, p < .005, \eta_p^2 = .04$.

Study 1 main study: A 2 (culture: American or Chinese) \times 2 (connectedness: connected or unconnected) \times 2 (formality: formal or informal) \times Continuous Motive GLM was performed on the third-party preference data. Connectedness and formality were repeated measure variables. When specific closure motive was used, the critical Specific Closure \times Culture \times Connectedness interaction was significant, $F(1, 111) = 4.23, p < .05, \eta_p^2 = .04$. When nonspecific closure motive was used, we obtained the critical Nonspecific Closure \times Culture \times Formality interaction, $F(1, 111) = 5.67, p < .05, \eta_p^2 = .05$.

Study 2: A 2 (cultural group: Asian or European American) \times 3 (assigned style: control, investigative, or conciliative) \times 2 (type of information: diagnostic or relational) \times Continuous Motive GLM was performed on information seeking data. Type of Information was a repeated measure variable. The critical effects in this study were the Culture \times Information Type \times Motive interaction and the Culture \times Assigned Stance \times Motive interaction. When specific closure was used, we obtained the critical Specific Closure \times Culture \times Information Type interaction, $F(1, 57) = 6.30, p < .05, \eta_p^2 = .10$ but not the Specific Closure \times Culture \times Assigned Stance interaction, $F(2, 57) = 2.87, ns$. Nonspecific closure motive did not yield any significant critical interactions.

Study 3: A 3 (priming: Chinese, American, or Neutral) \times 2 (rule: equity or equality) \times Continuous Motive GLM was performed on the fairness judgment data. The critical effect in this study was the Motive \times Priming \times Rule interaction. When Specific Closure was used, we obtained the critical Specific Closure \times Priming \times Rule interaction, $F(1, 227) = 4.42, p < .05, \eta_p^2 = .04$. Nonspecific closure motive did not yield any significant critical interactions.

minimizing strategies cannot account for these findings in which higher NFC is associated with greater information gathering.

Study 3 focused on the alternative account that the role of NFC in cultural conformity comes from its tie to political conservatism. The component of the political conservatism construct (Jost et al., 2003) that is not identical to cultural conformity, and can thus potentially account for it, is acceptance of economic inequality. This political conservatism account predicts that, in any culture, increasing NFC would be associated with greater endorsement of the equity rule over the equality rule. By contrast, the consensus motive account predicts this pattern in the context of American culture (where equity is a pervasive norm) but not in Chinese culture (where equality is a salient norm). The results of Study 3 showed the crucial finding in support of our proposed mechanism: Endorsement of the equity (equality) rule was higher when American (Chinese) culture was primed than when Chinese (American) culture was primed.

Implications for Conflict Research

The current findings make several contributions to research on conflict. First, they demonstrate that influences of national culture on conflict resolution styles can be observed more clearly when individual differences in NFC are considered. Epistemic motives moderate the extent to which individuals take cultural conventions as their guide. This is a new approach to clarifying cultural patterns through individual difference measurements that may accelerate the progress in culture and conflict research.

Second, the current findings contribute to research on the link between NFC and conflict strategy. Research has found that negotiators high in NFC are more likely to rely on heuristic judgments (de Dreu et al., 1999), less likely to take others' perspectives (de Dreu, Koole, & Steinel, 2000), and more likely to adopt an equity-oriented style in conflict management (de Grada et al., 1999). The current investigation builds on these previous findings by suggesting a possible mechanism for these NFC effects (making judgments according to norms) and eliminating two possible mediating mechanisms of these NFC effects—effort minimization and political conservatism.

Like us, Golec and Federico (2004) proposed that NFC does not just push conflict-related information processing in the direction of greater simplicity; it also pushes in the direction of greater adherence to conflict norms. Hence, competitiveness follows for high-NFC individuals in settings in which competitive norms are salient but not in settings in which this is not the case. Golec and Federico (2004) found that NFC is associated with competitiveness among members of an extremist political party but not among members of a moderate party. They speculate that in settings in which cooperation—rather than competition—is the norm, “the cue-taking tendency associated with high NFC may actually overpower the simplicity tendency, producing greater cooperation” (p. 759). Our findings corroborate this proposal that NFC does not always lead to simpler information processing and more competitive conflict strategies.

The current findings may also elucidate the impact of contextual variables on conflict behavior. Study 3 revealed that cultural priming shifts participants' relative endorsement of equity and equality rules. Other contextual factors may also interact with NFC to foster cultural conformity. Consider, for instance, findings on the role of accountability: Whereas American negotiators become more competitive in the context of accountability, Chinese negotiators become more conciliatory (see Gelfand & Dyer, 2000). The pressure of accountability

to ingroup others may weigh particularly hard on those with a predisposition to seek closure. Future research can investigate the interaction between accountability and NFC.

A final point concerns the relevance of the current findings to intercultural conflict. As Study 1 finds, high-NFC Americans prefer third parties who are not connected to the two disputants, whereas high-NFC Chinese prefer the opposite. What Western models of third-party intervention offer—an impartial stranger—is not attractive through the conventional Chinese lens. What traditional Chinese practices offer—a familiar acquaintance—is not attractive when seen through the American lens. The suspicion created by the clash of models could easily lead to an escalation of conflict. However, as the current findings show, not all individuals habitually think in the terms their culture provides. Low-NFC individuals, who are more inclined to use culturally unfamiliar frameworks, may be better suited to handling cross-cultural conflicts. NFC may be an important predictor of successful cultural adaptation in intercultural negotiations (Francis, 1991).

Future Research on Motives and Culture

Epistemic and existential motives. Our emphasis on motives has an interesting parallel in the literature on terror management theory. This theory proposes that cultural identifications as well as other psychological tendencies, such as self-esteem, are buffers against existential anxiety related to mortality (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997). Mortality salience leads people, particularly those low in self-esteem (Kashima, Halloran, Yuki, & Kashima, 2004) and those who are insecurely attached (Mikulincer & Florian, 2000), to engage in acts of cultural worldview defense, such as endorsing traditional values, sanctioning deviants, and enhancing the ingroup (Arndt et al., 1997; Castano, 2004). This raises intriguing questions about the interplay of existential anxieties and epistemic motives. For instance, does mortality salience magnify the tendency of high-NFC individuals to cling to their cultural frameworks? If mortality salience increases culturally based thinking in conflicts, then cross-cultural understanding and adaptation may be most difficult to achieve in precisely those conflicts in which it is most needed. If certain types of individuals (low NFC, high self-esteem, and securely attached) are more immune to this response, then it may be particularly valuable to select for such types in roles of international conflict resolution and crisis intervention.

Cultural transmission. The current analysis of cultural conformity dovetails with recent findings on acculturation. Kosic, Kruglanski, Pierro, and Mannetti (2004) found that for immigrants who arrive to a new culture alone, higher NFC is associated with greater assimilation into the main culture. However, for immigrants arriving with a group of compatriots, higher NFC predicts less assimilation. Solo immigrants are in an epistemically insecure situation, so high NFC leads them to work hard to bring themselves into consensus with the main culture. But group immigrants are in the secure cocoon of their compatriot community, so high NFC leads them to resist assimilation. The same pattern should hold in the cultural learning of individuals visiting another culture—tourists, students, or expatriates. Solo visitors high in NFC should internalize the norms more than those low in NFC, yet the reverse should be true of those who visit as a member of a group.

Another possible reason for the above phenomenon is that NFC and the desire for security in one's judgments increases sanction-

ing of other people who deviate from group norms. Studies of group problem solving have found that high (vs. low) NFC groups are associated with less creativity and more silencing of dissent (Chirumbolo et al., 2004). In an organizational survey, Chen and Hooijberg (2000) found that intolerance for ambiguity (a subscale of NFC) affects managers' attitudes toward cultural diversity programs. The desire for closure through consensus may lead to suppression of cultural diversity and hybridity.

Conclusion

The current findings have clarified American–Chinese cultural differences in conflict behavior. Also they have elucidated the mechanism responsible for the role of NFC in cultural conformity—the wish for closure through consensus. Moreover, this account illuminates a number of recent findings concerning conflict choices and cultural dynamics.

References

- Arndt, J., Greenberg, J., Solomon, S., Pyszczynski, T., & Simon, L. (1997). Suppression, accessibility of death-related thoughts, and cultural worldview defense: Exploring the psychodynamics of worldview defense. *Journal of Personality and Social Psychology, 73*, 5–18.
- 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*, 1173–1182.
- Bierbrauer, G. (1994). Toward an understanding of legal culture: Variations in individualism and collectivism between Kurds, Lebanese, and Germans. *Law & Society Review, 28*, 243–264.
- Bond, M. H., & Wang, S. (1983). Aggressive behavior in Chinese society: The problem of maintaining order and harmony. In A. P. Goldstein & M. Segall (Eds.), *Global perspectives on aggression* (pp. 58–74). New York: Pergamon.
- Briley, D. A., Morris, M. W., & Simonson, I. (2000). Reasons as carriers of culture: Dynamic versus dispositional models of cultural influence on decision making. *Journal of Consumer Research, 27*, 157–178.
- Briley, D. A., Morris, M. W., & Simonson, I. (2005). Cultural chameleons: Biculturals, conformity motives, and decision making. *Journal of Consumer Psychology, 15*, 351–362.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116–131.
- Castano, E. (2004). In case of death, cling to the ingroup. *European Journal of Social Psychology, 34*, 375–384.
- Chen, C. C., & Hooijberg, R. (2000). Ambiguity intolerance and support for valuing-diversity interventions. *Journal of Applied Social Psychology, 30*, 2392–2408.
- Chirumbolo, A., Livi, S., Mannetti, L., Pierro, A., & Kruglanski, A. W. (2004). Effects of need for closure on creativity and small group interactions. *European Journal of Personality, 18*, 265–278.
- Chiu, C., & Hong, Y.-y. (2006). *Social psychology of culture*. New York: Psychology Press.
- Chiu, C., Morris, M. W., Hong, Y., & Menon, T. (2000). Motivated cultural cognition: The impact of implicit cultural theories on dispositional attribution varies as a function of need for closure. *Journal of Personality and Social Psychology, 78*, 247–259.
- Chiu, R. K., & Kosinski, F. A. (1994). Is Chinese conflict-handling behavior influenced by Chinese values? *Social Behavior & Personality, 22*, 81–90.
- Cox, T., Lobel, S., & McLeod, P. (1991). Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *Academy of Management Journal, 34*, 827–847.
- de Dreu, C. K. W., Koole, S. L., & Oldersma, F. L. (1999). On the seizing and freezing of negotiator inferences: Need for cognitive closure moderates the use of heuristics in negotiation. *Personality and Social Psychology Bulletin, 25*, 348–362.
- de Dreu, C. K. W., Koole, S. L., & Steinel, W. (2000). Unfixing the fixed pie: A motivated information-processing approach to integrative negotiation. *Journal of Personality and Social Psychology, 79*, 975–987.
- de Grada, E., Kruglanski, A. W., Mannetti, L., & Pierro, A. (1999). Motivated cognition and group interaction: Need for closure affects the contents and processes of collective negotiations. *Journal of Experimental Social Psychology, 35*, 346–365.
- Doo, L. (1973). *Dispute settlement in Chinatown*. Cambridge, MA: Harvard Law School.
- Festinger, L. (1950). Informal social communication. *Psychological Review, 57*, 271–282.
- Fischer, R., & Smith, P. B. (2003). Reward allocation and culture: A meta-analysis. *Journal of Cross-Cultural Psychology, 34*, 251–268.
- Francis, J. N. P. (1991). When in Rome? The effects of cultural adaptation on intercultural business negotiations. *Journal of International Business Studies, 22*, 403–428.
- Friedman, R., Chi, S. C., & Liu, L. A. (2005). An expectancy model of Chinese-American differences in conflict-avoiding. *Journal of International Business Studies, 37*, 76–91.
- Fu, J., Chiu, C., Morris, M. W., & Young, M. (2007). Spontaneous inferences from cultural cues: Varying responses of cultural insiders and outsiders. *Journal of Cross-Cultural Psychology, 38*, 58–75.
- Fu, J.-Y., & Chiu, Y.-Y. (2006). *Local culture's responses to globalization: Exemplary persons and their attendant values*. Unpublished manuscript.
- Gelfand, M. J., & Dyer, N. (2000). A cultural perspective on negotiation: Progress, pitfalls, and prospects [Special issue]. *Applied Psychology: An International Review, 49*, 62–99.
- Golec, A., & Federico, C. M. (2004). Understanding responses to political conflict: Interactive effects of the need for closure and salient conflict schemas. *Journal of Personality and Social Psychology, 87*, 750–762.
- Hardin, C. D., & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. *Handbook of motivation and cognition, 28*–84.
- Hong, Y., Morris, M. W., Chiu, C., & Benet-Martinez, V. (2000). Multi-cultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*, 709–720.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*, 339–375.
- Kashima, E. S., Halloran, M. J., Yuki, M., & Kashima, Y. (2004). The effects of personal and collective mortality salience on individualism: Comparing Australians and Japanese with higher and lower self-esteem. *Journal of Experimental Social Psychology, 40*, 384–392.
- Kerlinger, F. N. (1984). *Liberalism and conservatism: The nature and structure of social attitudes*. Hillsdale, NJ: Erlbaum.
- Knowles, E., Morris, M. W., Chiu, C. Y., & Hong, Y. (2001). Culture and the process of person perception: Evidence for automaticity among East Asians in correcting for situational influences on behavior. *Personality and Social Psychology Bulletin, 27*, 1344–1356.
- Kosic, A., Kruglanski, A. W., Pierro, A., & Mannetti, L. (2004). The social cognition of immigrants' acculturation: Effects of the need for closure and the reference group at entry. *Journal of Personality and Social Psychology, 86*, 796–813.
- Kruglanski, A. W., Pierro, A., Mannetti, L., & De Grada, E. (2006). Groups as epistemic providers: Need for closure and the unfolding of group-centrism. *Psychological Review, 113*, 84–100.
- Kruglanski, A. W., Shah, J. Y., Pierro, A., & Mannetti, L. (2002). When similarity breeds content: Need for closure and the allure of homogeneous and self-resembling groups. *Journal of Personality and Social Psychology, 83*, 648–662.

- Kruglanski, A. W., & Webster, D. M. (1996). Motivated closing of the mind: "Seizing" and "freezing." *Psychological Review*, *103*, 263–283.
- Kruglanski, A. W., Webster, D. M., & Klem, A. (1993). Motivated resistance and openness to persuasion in the presence or absence of prior information. *Journal of Personality and Social Psychology*, *65*, 861–876.
- LeResche, D. (1992). Comparison of the American mediation process with a Korean-American harmony restoration process [Special issue]. *Mediation Quarterly*, *9*, 323–339.
- Leung, K. (1987). Some determinants of reactions to procedural models for conflict resolution: A cross-national study. *Journal of Personality and Social Psychology*, *53*, 898–908.
- Leung, K. (1995). Negotiation and reward allocations across cultures. In P. C. Earley & M. Erez (Eds.), *New perspectives on international industrial/organizational psychology* (pp. 640–675). San Francisco: Jossey-Bass.
- Leung, K., & Bond, M. H. (1984). The impact of cultural collectivism on reward allocation. *Journal of Personality and Social Psychology*, *47*, 793–804.
- Leung, K., Bond, M. H., & Schwartz, S. H. (1995). How to explain cross-cultural differences: Values, valences, and expectancies? *Asian Journal of Psychology*, *1*, 70–75.
- Leung, K., & Fan, R. M.-T. (1997). Dispute processing: An Asian perspective. In H. S. R. Kao & D. Sinha (Eds.), *Asian perspectives on psychology* (pp. 201–217). New Delhi, India: Sage.
- Leung, K., & Iwawaki, S. (1988). Cultural collectivism and distributive behavior. *Journal of Cross-Cultural Psychology*, *19*, 35–49.
- Leung, K., & Park, H. (1986). Effects of interactional goal on choice of allocation rule: A cross-national study. *Organizational Behavior and Human Decision Processes*, *37*, 111–120.
- MacKinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effect measures. *Multivariate Behavioral Research*, *30*, 41–62.
- Mikulincer, M., & Florian, V. (2000). Exploring individual differences in reactions to mortality salience: Does attachment style regulate terror management mechanisms? *Journal of Personality and Social Psychology*, *79*, 260–273.
- Morris, M., Menon, T., & Ames, D. (2001). Culturally conferred conceptions of agency: A key to social perception of persons, groups, and other actors. *Personality and Social Psychology Review*, *5*, 169–182.
- Morris, M. W., Leung, K., & Iyengar, S. S. (2004). Person perception in the heat of conflict: Negative trait attributions affect procedural preferences and account for situational and cultural differences. *Asian Journal of Social Psychology*, *7*, 127–147.
- Morris, M. W., Williams, K. Y., Leung, K., Larrick, R., Mendoza, M. T., Bhatnagar, D., et al. (1998). Conflict management style: Accounting for cross national differences. *Journal of International Business Studies*, *29*, 729–747.
- Neuberg, S. L., Judice, T. N., & West, S. G. (1997). What the Need for Closure Scale measures and what it does not: Toward differentiating among related epistemic motives. *Journal of Personality and Social Psychology*, *72*, 1396–1412.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, *128*, 3–72.
- Pierro, A., de Grada, E., Mannetti, L., Livi, S., & Kruglanski, A. W. (2004). The need for cognitive closure and response to normative violations of an everyday character. *Giornale Italiano di Psicologia*, *31*, 129–140.
- Pye, L. (1982). *Chinese commercial negotiating style*. Cambridge, MA: Oelgeschlager, Gunn & Hain.
- Rahim, M. A. (1983). A measure of styles of handling interpersonal conflict. *Academy of Management Journal*, *26*, 368–376.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173–220). New York: Academic Press.
- Sherif, M. (1936). *The psychology of social norms*. New York: Harper.
- Smith, P. B., & Bond, M. H. (1999). *Social psychology across cultures* (2nd ed.). Boston: Allyn & Bacon.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco: Jossey-Bass.
- Takano, Y., & Osaka, E. (1999). An unsupported common view: Comparing Japan and the U.S. on individualism/collectivism. *Asian Journal of Social Psychology*, *2*, 311–341.
- Tang, S., & Kirkbride, P. (1986). Development of conflict management skills in Hong Kong: An analysis of some cross-cultural implications. *Management Education and Development*, *17*, 287–301.
- Tetlock, P. E. (2000). Cognitive biases and organizational correctives: Do both disease and cure depend on the politics of the beholder? *Administrative Science Quarterly*, *45*, 293–326.
- Thibaut, J., & Walker, L. (1978). A theory of procedure. *California Law Review*, *26*, 1271–1289.
- Ting-Toomey, S., Gao, G., Trubisky, P., Yang, Z., Kim, H., Lin, S., & Nishida, T. (1991). Culture, face maintenance, and styles of handling interpersonal conflicts: A study in five cultures. *International Journal of Conflict Management*, *2*, 275–296.
- Triandis, H. C., Bontempo, R., Betancourt, H., Bond, M., Leung, K., Brenes, A., et al. (1986). The measurement of the etic aspects of individualism and collectivism across cultures. Special Issue: Contributions to cross-cultural psychology. *Australian Journal of Psychology*, *38*, 257–267.
- Trubisky, P., Ting-Toomey, S., & Lin, S.-L. (1991). The influence of individualism-collectivism and self-monitoring on conflict styles. *International Journal of Intercultural Relations*, *15*, 65–84.
- Van de Vijver, F. J. R., & Leung, K. (2000). Methodological issues in psychological research on culture. *Journal of Cross-Cultural Psychology*, *31*, 33–51.
- Webster, D. M., & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, *67*, 1049–1062.
- Weldon, E., & Jehn, K. A. (1995). Examining cross-cultural differences in conflict management behavior: A strategy for future research. *International Journal of Conflict Management*, *6*, 387–403.
- Young, L., Giles, H., & Pierson, H. (1986). Sociopolitical change and perceived vitality. *International Journal of Intercultural Relations*, *10*, 459–469.

Appendix A

Conflict Vignette Used in Study 1

Amy and Linda work in the Marketing Division at a large candy company. Amy is under the team of print advertising and Linda is under the team of TV commercial advertising. They are at the associate level, below the level of manager, which in turn is below the level of VPs. The Marketing Division is located in the same building as the Human Resources Division. For the last several months, Amy and Linda have been developing an integrated Print/TV advertising package for a new candy. The VP told them that whoever came up with the best idea would receive a bonus. Amy and Linda were told to talk about the preliminary ideas with each other but to ultimately present their individual, polished proposals at a meeting. At the end of the meeting, the VP selected Amy's plan. Linda was surprised that the plan Amy presented was quite similar to an idea that Linda had sketched out weeks before;

Amy had rejected it, suggesting that it had little potential. After the meeting, Linda checked her records and became even more convinced that her original plan had inspired Amy's idea. Linda approached Amy and shared her impression that she deserved partial credit for the idea. Amy was surprised and angered because she did not see much similarity between the rough ideas she remembered Amy having mentioned and the polished plan that she had worked hard to perfect. After an increasingly awkward and angry conversation, the two women stormed off to their respective offices. A few hours later, Linda called Amy and suggested that they needed to resolve this misunderstanding. Linda agreed and suggested that they find a third party to be mediator to help them sort out the issues. When they thought about whom they could approach as a mediator, four managers who worked in their building came to mind as possible options.

Appendix B

University Vignette Used in Study 2

You are the Head of the Department of Alternative Medicine in a big research university. Today, you receive a phone call from the Chancellor of University. Professor Jones of Golden Gate University, a small teaching university in California, has written to accuse a senior colleague in your department of intellectual copyright infringement. According to Jones, Professor Tony Smith of your department used the research data Jones collected in California to publish several influential papers in the *New England Journal of Medicine* on the therapeutic effects of meditation.

To understand the situation, you interview Smith. Smith tells you that the research idea is his own original idea. He received a research grant from the university to study the beneficial effects of meditation on blood pressure regulation. Because he needs to collect data from California, he subcontracted the research project to Jones on two conditions. First, Jones would receive research

money from Smith to support Jones's research staff in California. Second, Jones would not claim authorship for the articles Smith would publish on the project.

However, Jones claims that he developed this research idea with a master student in California. Later, this student did a PhD degree with Smith, and Smith stole Jones's idea from this graduate student. Jones also claims that when he agreed to collect data for Smith, Smith promised that Jones would be the second author in all the publications on the project. Later, Jones was shocked to discover that his name was not included in any of Smith's publications.

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