Individualism–Collectivism and Co-operation: A Cross-Society and Cross-Level Examination

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Abstract

We examined the influence of Individualism and Collectivism (I–C) on co-operation in workgroups at three levels (societal, organizational, and personal). Data were from 153 American business students representing an individualistic society and 207 Vietnamese counterparts (a collectivistic society). Participants role-played managers for a simulated company with either a collectivistic or individualistic organizational culture in a computerized social-dilemma game. Societal cultures did not moderate the interaction effect between organization-level I–C and person-level Individualism. Those high on individualism pursued their own gains in a dominantly individualistic organizational culture, yet behaving co-operatively in a collectivistic organizational culture. Interestingly, societal cultures moderated the effect of organizational culture on co-operation, such that the positive relationship between organization-level I–C and co-operation was weaker in a collectivistic society (Vietnam) than in an individualistic society (the United States). The results indicate the need for an integrative, cross-level approach to better understand the determinants of co-operation across societies, organizations, and individuals.

Co-operation among workgroup members is essential to the performance and viability of workgroups. In fact, it has long been considered an indispensable factor in determining the success of organizations (Barnard, 1938). Wagner (1995) defined workgroup co-operation as employees' willful contribution to the successful completion of interdependent tasks in an organization. For example, an employee may opt to work closely

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with other colleagues even though there is no official demand to do so from the organization. Executive teams of high-performing companies have judged co-operation within work teams and across internal and external organizational borders as critical to their performance success in the global economy (Gratton, 2005). Not surprisingly, a large body of research has been devoted to finding the socio-psychological determinants of co-operation. Among factors examined, Collectivism and Individualism have consistently emerged as important constructs determining co-operative behaviors among people in workgroups (Chatman & Barsade, 1995; Chatman, Polzer, Barsade, & Neale, 1998; Eby & Dobbins, 1997; Wagner, 1995).

In spite of continued research on the constructs of Individualism and Collectivism (I–C), researchers have conceptualized them differently across levels of analysis. Some researchers consider I–C as a bipolar cultural characteristic of societies (e.g., Boone & Witteloostuijn, 1999; Gelfand & Christakopoulou, 1999; Parks & Vu, 1994; Wade-Benzoni et al., 2002); other scholars have examined it as an organization-level construct only (e.g., Chatman & Barsade, 1995; Chatman et al., 1998; Robert & Wasti, 2002). Yet, some others consider it as an individual characteristic which can be uni- or multi-dimensional (e.g., Chatman & Barsade, 1995; Earley, 1989 & 1993; Probst, Carnevale, & Triandis, 1999; Wagner, 1995). Brewer and Chen (2007) for example, focused on an integrated view of I–C as individual differences being a function of both unique personal characteristics and social interdependence.

Although these three different levels of I–C (societal, organizational, and personal) generally produce similar results with respect to co-operation when studied separately, each is evidently distinct, just as an organizational culture may be distinct from a national culture (cf., Schneider, 1990). Accordingly, a comprehensive understanding of the effects of I–C on co-operation requires examining all three levels of the construct concurrently. Failure to do so is likely to result in contextual fallacies; that is, assuming that findings at one level (e.g., organizational) may apply at another level (e.g., person; Rousseau, 1985).

To date, no published studies have included all three levels of I–C simultaneously in a single study. In this study, we address this lack by examining the impact of the three I–C levels on co-operation concurrently. Chao's (2000) multilevel conceptualization of cultural values and, to a lesser extent, Morgeson and Hoffman's (1999) multilevel theory development guidelines were used to explain why I–C might be polymorphic at different levels of theories, that in turn might explain complex co-operative behaviors in the workplace.

A Multilevel Conceptual Framework of I–C Effects on Co-operation

Specifically, we examined the relationship between I–C and co-operative behavior at three levels: as a function of individuals' personal I–C values, within the context of organizational I–C cultures, in two I–C societies (the United States and Vietnam). This cross-level conceptualization framework of I–C values is based both on important theoretical guidelines in the extant literature and a review of the empirical literature on the effects of varying levels of I–C on co-operative behavior.

In terms of theoretical guidelines, we follow Chao's (2000) critical review of various conceptualized frameworks on the broad construct of culture in cross-cultural research (i.e., comparing between and among two or more cultures). Chao posits that international research is complex because emic and etic perspectives of culture may vary across levels. For example, with an emic approach, researchers may perceive I–C constructs to be universal and comparable at the group (national) level, whereas others with an etic approach may focus on individuals' behavior in a specific context. Although past theories conceptualize culture as either individual-level values or as a collective shared system of values (e.g., national level), Chao asserts that cultural values should be defined as both in studies of cultural effects on individual behaviors.

Second, Triandis (1995) uses the terms individualism and collectivism to depict national level concepts of I–C but he also uses idiocentrism and allocentrism to describe orthogonal individual-level concepts. This practice is the ground for Chao's (2000) position that in international studies, culture is likely to be polymorphic at different levels and, thus, should be conceptualized separately. Morgeson and Hoffman (1999) explicitly propose that researchers should examine structurally dissimilar constructs across levels (e.g., orthogonal individual I–C and bipolar group I–C in this study) as long as these constructs yield similar outcomes (e.g., co-operative behavior). In this light, the previously mentioned inconsistencies in the definitions of I–C constructs across individual and group levels (i.e., orthogonal or bipolar) are more understandable.

Third, Erez and Gati (2004) suggest that I–C can be defined at four levels: individual, group (''meso''), organization (''macro''), and society. On the other hand, Chao (2000) emphasizes that relationships between an individual's cultural values and their performance or behaviors should be theorized (and measured) at the individual level, taking into account group-level implications (i.e., collective shared values). Because our target outcome was individuals' co-operative behavior, our conceptual framework focused on individual-level co-operation as affected by individuals' I–C values, moderated by the context of organization- and/or society-level I–C. Furthermore, the same cultural construct of I–C can be separately conceptualized at different levels of operationalization, allowing us to examine I–C as both a bipolar construct at group levels and orthogonal constructs at the individual level.

Note that, although Erez and Gati (2004) suggest two intermediate levels of the I–C constructs (group and organization), in the current study, we considered both levels as similarly representing group-level I–C (referred to as organization-level I–C). Arguably, workgroup/team culture reflects organizational culture (although there may be exceptions within large organizations) and would therefore be similarly related to members' co-operative behavior. The empirical rationale for our conceptual framework is discussed next.

Effect of Society-Level I–C on Co-operation

Individualism and Collectivism has been a popular topic for research in cross-cultural psychology since the seminal work of Hofstede (1980), who showed that countries could be ranked along four dimensions: Power Distance, Femininity-Masculinity, Uncertainty

Avoidance, and Collectivism-Individualism. Hofstede (1991) defines I–C as follows: ''Individualism pertains to *societies* in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism, as its opposite, pertains to *societies* in which people from birth onward are integrated into strong, cohesive ingroups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty'' (p. 51—italic added).

Similarly, Earley (1989) discusses that the essential attribute of a collectivistic society is that individuals will subordinate their personal interests to the goals of the groups to which they belong. Collectivistic cultures emphasize attending to the needs of other members of a group, fitting-in, and harmonious interdependence (Markus & Kitayama, 1991). On the contrary, individualistic cultures value personal independence, uniqueness, and attending to oneself (Markus & Kitayama). These definitions clearly refer to I–C as a societal level construct which is unidimensional. Thus, societies can be ranked along a continuum with Individualism at one end and Collectivism at the other (Hofstede, 1980, 1991). For example, Triandis, Bontempo, Betancourt, Bond, Leung, et al. (1986) found that Western countries such as France, the Netherlands, and United States measured higher on individualistic values, whereas Asian countries such as Hong Kong, Malaysia, and India were higher on collectivistic values. Parks and Vu (1994) found that the societal norms of Vietnamese society are mainly collectivistic.

The studies discussed above implies that co-operation among ingroup members is generally higher in collectivistic societies where people are expected to work harmoniously with others in groups, as compared with individualistic societies where pursuing personal interests, sometimes at the cost of the group goals, is the norm. Such logic is confirmed by studies showing that a societal culture indeed determines people's co-operative behavior within groups (Boone & Witteloostuijn, 1999; Cox, Lobel, & McLeod, 1991; Gelfand & Christakopoulou, 1999; Parks & Vu, 1994; Wade-Benzoni et al., 2002). At the societal level, I–C constructs have been theorized as polar opposites in the literature, a viewpoint that we adopt in this study.

Effect of Organization-Level I–C on Co-operation

There is relatively little extant empirical work at the meso or macro level of I–C (i.e., work groups, organizations), although it has been argued that this level is theoretically relevant and deserves more attention (Dansereau, 1989; Earley, 1993; Earley & Gibson, 1998; Wagner & Moch, 1986). A handful of studies that empirically examined the effects of organizational level I–C (e.g., Chatman & Barsade, 1995; Robert & Wasti, 2002) found that this level of I–C was related to important organizational outcomes, including co-operative behavior. The reasoning is that co-operative mechanisms, such as organizational practices that reflect the type of cultures adopted by an organization, can effectively influence people's co-operative behavior (Chatman & Barsade, 1995; Chen, Chen, & Meindl, 1998).

One may ask whether organizational culture can be appropriately characterized as individualistic or collectivistic (i.e., being isomorphic with I–C constructs at the society-level). Conceptually, as collective value systems shared by ingroup members, organizational level

I–C constructs should reflect a bipolar dimension of organizational cultures (Robert & Wasti, 2002). That is, they would either emphasizes Individualistic values of placing priority on pursuing individuals' goals and rewarding members based on their personal achievements, or they would highlight collectivistic values of prioritizing collective goals and rewarding members for joint contributions to organizational accomplishments (Chatman & Barsade, 1995; Earley & Gibson, 1998). As such, organizational level I–C is theoretically embodied in dominant values and practices adopted by organizations (Calori & Sarnin, 1991; Gelfand & Christakopoulou, 1999; Hofstede, Neuijen, Ohavy, & Sanders, 1990). Recently, Gelfand, Bhawuk, Nishii, and Bechtold (2004) constructed and validated unidimensional measures of organization-level I–C within the scope of the GLOBE project. As such, the researchers make explicit the bi-polar conceptualization of the constructs, a position we adopt for this study.

Effect of Individual-Level I–C on Co-operation

It has long been recognized that individual members within a society may differ in their respective I–C characteristics. Accordingly, some researchers suggest that the construct should be studied at the person level (Schwartz, 1990). Triandis, Leung, Villareal, and Clack (1985) use the terms ''Allocentric'' and ''Idiocentric'' to denote persons with Collectivistic and Individualistic values, independent of the societal culture in which they live. In his study of collectivistic and individualistic people within an individualistic society (the United States), Wagner (1995) defines Individualists as people who look after themselves and tend to ignore group interests if such interests conflict with their own personal desires. Collectivists, viewed as the opposite of Individualists, are those who let the demands and interests of groups take precedence over their own personal desires and needs. Thus, I–C may be considered as individual tendencies toward co-operation (or lack thereof; Chatman & Barsade, 1995).

Whereas researchers studying the I–C constructs at the higher levels (society and organization) generally treat them as a bipolar construct in accordance with Hofstede's original conceptualization, there appears to be disagreement as to the dimensionality of I–C at the person level. Some researchers view Individualism as being at the opposite end of the continuum from Collectivism (e.g., Chatman & Barsade, 1995), thus individuals could only be collectivists or individualists. The implication for co-operation research is that one would co-operate in groups (Chatman & Barsade, 1995; Wagner, 1995) and in social-dilemma games (Probst, Carnevale, & Triandis, 1999) if one is a collectivist, but not if one is an individualist. In other words, collectivists are generally found to demonstrate more co-operative behaviors than are individualists.

Other researchers take an opposing view and suggest that Collectivism and Individualism represent two relatively independent factors (Earley & Gibson, 1998; Triandis, 1995). Brewer and Chen (2007) and Brewer and Gardner (1996) recently proposed that I–C-related behaviors can be defined as encompassing three orthogonal levels of one's social self construct: *individual self* (i.e., focusing on one's values), *collective self* (i.e., one's relationships with other members of one's group), and *relational self* (i.e., one's relationships with one's significant others). The implication is that individuals'

co-operative behavior in a workgroup may be explained by their self-representation (i.e., because their workgroup outcomes are their outcomes), their belief that their achievement requires workgroup interdependence, and/or the value of being responsive to their teammates' needs. Little is known about how these orthogonal levels of I–C may influence co-operative behaviors.

The conceptualization of I–C as orthogonal constructs has gradually gained empirical and theoretical support (cf., Earley & Gibson, 1998; Oyserman, Coon, & Kemmelmeier, 2002). In light of Chao's (2000) polymorphic approach in conceptualizing and measuring culture separately across levels, we conceptualized I–C constructs as orthogonal dimensions at the person level and as bipolar constructs at the organizational and societal levels. We felt that this approach was not only theoretically sound in terms of cross-cultural research, but it may also help explain some seemingly inconsistent findings in the literature regarding the effects of I–C on the target outcome of co-operation. This conceptual approach enables us to formulate cross-level hypotheses about the interplay of I–C in determining people's co-operative behavior.

Effects of Cross-Level I–C Interactions on Co-operation

Organization × Person I–C

Although I–C constructs generally produce similar main effects on co-operative behavior when examined separately, the levels may potentially interact with each other when they are combined in one setting. Researchers have recognized this problem but have tended to overlook it, implying that the confounding is inconsequential (Chen et al., 1998). However, when the two levels have actually been combined in a single study, their effects on co-operative behavior have often been complex. For example, Gelfand and Realo (1999) found an interaction effect between person-level I–C and accountability (an organizational practice) on co-operative behavior. Specifically, high accountability enhanced co-operation among collectivists, yet enhanced competition among individualists. Earley (1989) and Wagner (1995) also found interaction effects between person-level I–C and co-operative behavior. In their studies, individualists were more likely to adjust their behaviors in response to changes in an organizational practice. Collectivists, on the other hand, appeared to be more consistent and less likely to change their behavior across organizational conditions.

In another study that directly examined the effects of the two levels of I–C (personal and organizational) on co-operation, Chatman and Barsade (1995) found that collectivists, who were very co-operative under collectivistic organizational cultures, behaved unco-operatively when placed in organizations where an individualistic culture dominated. Using follow-up qualitative responses gathered from collectivistic participants, the researchers explained that collectivists were willing to adjust and make decisions based on individualistic expectations regardless of their own preferences. Chatman and Barsade's finding is consistent with the early work of Kelley and Stahelski (1970), who found that co-operators would shift to a competitive strategy when faced with a consistent competitor. That is, co-operators began by co-operating but changed their strategy

if the other person did not co-operate. The behavior of individualists, on the other hand, was not significantly different across organizational cultures.

Thus, empirical results seem to converge on the finding that organizational level I–C moderates the relationship between person-level I–C (as a bipolar predictor) and co-operative behavior. However, the specifics of such interaction effects are not consistent across studies. Specifically, some studies found that individualists changed behaviors more than collectivists across organizational cultures (Earley, 1989; Wagner, 1995), whereas others showed that collectivists changed more than individualists (Chatman & Barsade, 1995). These seemingly contradictory findings might be reconciled if I–C constructs at the person level are conceptualized as two distinct, relatively independent constructs, and not as two poles on a continuum, even though organizational I–C cultures remain a unidimensional concept.

According to Morgeson and Hoffman (1999), in multilevel theory development, researchers should identify contextual factors or structural properties that explain why there is variance in outcomes at a lower level of analysis. Therefore, in this study, we manipulated the contextual factor of organization-level I–C practices and observed changes in behaviors of participants who were higher in either Collectivistic or Individualistic values, under the assumption that they would be more likely to adapt their behavior to a dominant organizational culture than those who are low on these respective values.

Specifically, highly individualistic people (as compared with those low in Individualism), being motivated by self-interest, may realize that by complying with the practices in dominant organizational cultures (a contextual factor), they would facilitate the achievement of their own personal goals (cf. Earley, 1989). For example, they would behave co-operatively under a collectivistic organizational culture and competitively under an individualistic culture. Highly collectivistic people (as compared with those low in Collectivism), who value harmony with social contexts, may similarly adapt their (co-operative) behaviors to the context defined by their organizational culture (cf. Markus & Kitayama, 1991).

Society × Organization × Individual I–C

It should be noted that the evidence supporting the main and interaction effects of I–C on co-operation to date is based mostly on research conducted within an individualistic society (i.e., the United States). Based on Morgeson and Hoffman's (1999) guidelines, researchers should take into account that individualistic and collectivistic societies differ in the types of co-operative mechanisms they may use (Chen et al., 1998). In other words, society-level I–C values may serve as another contextual factor that interacts with individual values in organizational contexts, because of societal differences in trust and co-operation. According to Chen et al. (1998), an equity-based reward distribution system as a co-operation mechanism might be more effective in an individualistic culture than in a collectivistic culture, because members of collectivistic cultures favor an equality-based mechanism. Also, to promote co-operative behaviors, members of individualistic cultures may use cognitive-based trust mechanisms (e.g., knowledge; role

performance); whereas using affect-based trust as a co-operative mechanism (e.g., emotional bonds between members) is likely to work better with members of a collectivistic culture.

Therefore, it is possible that the proposed interaction effects between organizational and personal levels of the I–C construct on co-operation found in an individualistic society (e.g., the United States) may not be generalizable to a collectivistic society (e.g., Vietnam). That is, society-level I–C may further moderate the interaction effects between organization-level and personal level I–C constructs in predicting co-operation.

As a result of the orthogonal properties of the I–C constructs at the individual level, we formulated two separate sets of hypotheses for Collectivism and Individualism. Given Chen et al.'s (1998) research on various co-operation mechanisms between I and C cultures, we operationalized organization-level I–C values as dominant organizational cultures and reward practices. In terms of societies, we chose the United States and Vietnam as representatives of individualistic and collectivistic societies respectively.

Logically speaking, whereas Americans with higher collectivistic values may vary their level of co-operation according to organizational cues (e.g., adopting individualistic strategies in an individualistic company), Vietnamese with higher collectivistic values may be more likely to seek harmony with social ''cues'' provided by their collectivistic society (compared with those low on Collectivism) and may consistently behave in a co-operative manner, ignoring their respective (I–C) organizational cultures. In other words, what matters most to Vietnamese high on Collectivism is whether or not their personal (collectivistic) values are in line with the Vietnamese societal values (also collectivistic); when they are, organizational values may not matter.

***Hypothesis 1*:** Society-level I–C will moderate the interaction effect between person-level *collectivism* and organizational level I–C. Specifically, in the United States, (*1a*) and in a dominantly *collectivistic* organization, Americans high on *collectivism* are more likely than those low in collectivism to behave co-operatively; (*1b*) in a dominantly *individualistic* organization, Americans who are high on collectivism will behave as competitively as those low on collectivism. In Vietnam, however, (*1c*) those high on *collectivism* will consistently co-operate with others regardless of organizational culture.

On the other hand, for either Americans or Vietnamese who are high on Individualism, organizational culture may matter more than their societal cultures: the proximal contextual factor (organization I–C) would determine how co-operatively Vietnamese high on individualistic values would behave, similarly to Americans high on Individualism, because individualists are often busy trying to achieve personal success within the specific context of organizational cultures. As discussed previously, research has shown that those high on Individualism, compared with those who are low, tend to adjust their behavior in accordance with the organizational culture to achieve their personal goals (e.g., Earley, 1989; Wagner, 1995). Since distal societal culture is unlikely to affect such a strong perceived link between behavior and outcomes, we would not expect that the interaction effect between personal level Individualism and organizational level I–C would be moderated by societal level I–C (i.e., no three-way interaction). Instead, we

hypothesized that there would only be an Organizational × Individual I–C interaction in both individualistic (American) and collectivistic (Vietnamese) societies.

***Hypothesis 2*:** In both American and Vietnamese societies, the relationship between personal level *individualism* and co-operation will be moderated by organizational I–C culture. Specifically, in both societies, those who are high on individualistic values, as compared to those who are low, (*2a*) will be more likely to behave co-operatively in collectivistic organizations but (*2b*) will behave competitively in individualistic organizations.

Society-Level I–C × Organization-Level I–C

Another important issue is the potential combined effect between societal and organizational levels of I–C on co-operative behavior. As mentioned above, Chen et al. (1998) proposed that co-operative mechanisms, such as organizational practices, are different across societal cultures. The effect of organizational level I–C on co-operation in individualistic societies has been shown in the literature (e.g., Kirkman & Shapiro, 2001). In collectivistic societies, it is possible that the societal norms of collectivism are so strong that any effects created by manipulation of organizational cultures might be suppressed. Therefore, it is possible that societal level I–C moderates the relationship between organizational level I–C and co-operation differently for an individualistic society than for a collectivistic one. Finding such an interaction could have important implications for organizational practices across cultures.

Specifically, it is expected that collectivistic societies, as compared to individualistic societies, will place stronger demands upon conformity to societal norms, and such societal pressure may attenuate the effect of organizational level I–C on co-operation in collectivistic societies. As a result, the effect of organizational level I–C on a person's co-operation in collectivistic societies is likely to be weaker than that in individualistic societies. Based on this rationale, we suggest the following hypothesis:

***Hypothesis 3*:** The effect of organizational level I–C on co-operation in a collectivistic society (Vietnam) will be weaker than that in an individualistic society (the United States).

Note that while we do not hypothesize any main effects for I–C levels, empirical evidence available in the literature consistently shows that Collectivism at all levels is likely to be related to co-operation in workgroups (e.g., Boone & Witteloostuijn, 1999; Chatman & Barsade, 1995; Earley, 1989 & 1993; Gelfand & Christakopoulou, 1999; Probst et al., 1999; Wagner, 1995).

Method

The study employs a combined etic-emic design approach (see Gelfand, Raver, & Ehrhart, 2006; Pike, 1967). Although we conceptualize I–C constructs as universal across both samples, we also seek to identify factors and elements that may be unique to Vietnamese culture (e.g., content equivalency of measurement instruments; unique research practices).

Participants

Undergraduate business students from a large mid-western public university in the United States (n = 153; 83 females, 70 males) and undergraduate business students from a large public business college in southern Vietnam (n = 207; 83 females, 124 males) participated in the study. American participants voluntarily participated for extra course credit. Vietnamese students voluntarily participated as a fund-raising activity for their student association (i.e., one dollar for each volunteer was donated to their association). Vietnamese participants also received a gift of stationary worth one dollar after completing the tasks. The compensation arrangement for the Vietnamese sample was made after consulting with two local academic researchers: The combination of a nominal personal gift and a small donation to student organizations was the most common and culturally acceptable incentive practice in research using Vietnamese college students, rather than using course credits as an incentive. This methodology follows an emic practice that is recommended in cross-cultural research. In addition, all participants had the opportunity to win one of six small cash prizes. The average age of the U.S. sample was 20.25 years old (SD = 1.95); that of the Vietnamese sample was 21.02 years old (SD = 1.80).

Design and Procedures

In both samples, participants were randomly assigned to one of two organizational culture conditions (Individualistic vs. Collectivistic). Participants were asked to participate in a computerized social-dilemma game, adapted from the Replenishable Resource Game described in Samuelson, Messick, Rutte, and Wilke (1984). Specifically, participants were told that they would role-play a divisional manager of an organization. Participants' ''managerial responsibility'' entailed making interactive budget decisions along with other two (fictitious) divisional managers in the same company. Upon finishing this role-play computer task, participants were asked to respond to a questionnaire consisting of the I–C inventories and other measures. Finally, participants were debriefed about the manipulations used in the study.

Materials

We used two language versions of the game instructions and questionnaires (i.e., English and Vietnamese) for the respective samples. The Vietnamese version was translated and back-translated by two authors who are bilingual and fluent in both languages. A third bilingual local collaborator, unaware of the purposes of the current research, also back-translated the experiment materials; these translations were later checked again for accuracy. Finally, the content of research materials was pilot-tested with a group of five Vietnamese research assistants and college students to check for readability and nuances. A few minor differences in language nuances and concept equivalency were discussed and resolved.

Organizational I–C Manipulation

Organizational culture was a manipulated, dichotomous variable. Before playing the game, participants were given a description about their respective ''organization.'' The descriptions were specifically written to clearly inform participants about their organization's culture (e.g., collectivistic or individualistic). Participants read stories about the founder of the organizations, the founder's personal values and policy, the company's reward system, and so on. Given Chen et al.'s (1998) research on different co-operation mechanisms in different cultures, the organizational I–C manipulation elements were parallel across conditions; for example, the collectivistic condition emphasized co-operation among employees (i.e., within the organization) and the reward system was based on the company's overall profit, whereas the individualistic manipulation emphasized competition among the company's employees with a reward system based solely on individual performance.

The Replenishable Resource Game

Social-dilemma games have been widely used to study the co-operative behavior of individuals within groups (e.g., Wade-Benzoni et al., 2002). Such games are especially useful for our experimental purposes as they provide an objective measure of co-operation (or lack thereof). We adapted the Replenishable Resource Game (cf. Samuelson et al., 1984), with each participant playing the role of a manager from one of three divisions of a transportation organization. The ''managers'' were allowed to determine the amount of the annual budget for each of their divisions by obtaining money from a common resource (the organization's available capital which was $800,000 for the U.S. sample and 12 millions of *dong* for the Vietnamese sample). After all managers had received their budgets for one year, the balance in the common resource was multiplied by 1.10 (representing an annual profit gain of 10% from the organization's investment activity). Managers were then allowed to decide on their budgets for the following year. There were 12 rounds in the game, representing 12 years. Obviously, the more money the managers took out for their own division in each round, the smaller was the common resource that remained to be replenished.

Participants believed that they were interacting with the other two managers in their organization via computers. Unknown to the participants, the other two managers' activities (i.e., budget allocating decisions) were simulated by a computer program. This manipulation was necessary to ensure that all participants received similar responses from the other imaginary players, thereby eliminating the potential confounding influence of variable behavior by other group members.

Measures

In addition to a demographic questionnaire, the following measures were included in the questionnaire administered to the participants upon completion of the social-dilemma game.

Manipulation Check

To examine the success of our organizational culture manipulations, we included ten 6-point Likert-type items assessing participants' understanding of the organizations to which they were assigned. Sample statements included "The company highly values co-operation among its employees," and "You are encouraged to compete with your coworkers for company-wise awards." Scores on the items were summed to form a scale score which indicated the participants' perception of their assigned organizational culture, with higher scores indicating a more collectivistic (organizational) culture. The scale demonstrated satisfactory internal consistency (Cronbach's alpha = .80).

Co-operation

Following the tradition of replenishable social-dilemma games (Samuelson et al., 1984), we used the total budget amount that each participant took for his/her division as the operational measure of co-operative behavior, such that a smaller amount taken indicated a higher level of co-operation.

Measure of Individual-Level I–C

There seems to be little consensus among researchers as to the "best" measure of I–C at the personal level (Brewer & Chen, 2007; Earley & Gibson, 1998). A recent meta-analysis by Oyserman et al. (2002) showed that each existing I–C measure appeared to measure a different construct. Part of the reason is that past research has operationalized I–C constructs somewhat differently. For example, Chatman and Barsade (1995) combined measures of co-operativeness and agreeableness (a personality trait under the Big-Five personality framework; Digman, 1990) into a unidimensional, bipolar construct. Triandis and Gelfand (1998) developed a 4-dimensional measure assessing four relatively independent constructs: Horizontal Collectivism, Horizontal Individualism, Vertical Collectivism, and Vertical Individualism. Wagner (1995) included items from several popular I–C measures in his study and used factor analysis to construct a 20-item measure covering five dimensions of the construct. Those dimensions were found to differentially influence people's co-operation.

As mentioned before, we followed the contemporary conceptualization of personal level I–C (Earley & Gibson, 1998), which suggests that the construct includes two distinct factors, Collectivism and Individualism. Because there is no single measure that operationalizes the personal level I–C constructs perfectly (cf. Oyserman et al., 2002), we chose to combine subsets of items from the measures of I–C in Wagner's (1995) and Triandis and Gelfand's (1998) studies based on several criteria: (a) representativeness of I–C constructs, (b) unique and complementary item content, and (c) having equivalent, understandable concepts in Vietnamese.

Note that we had assessed and established the measurement equivalence of the I–C scale before our hypothesis testing (cf. Ryan, Chan, Ployhart, & Slade, 1999). That is, we ascertained that the measures used in the study similarly reflected the same constructs across Vietnamese and American sub-samples, using the multiple-group factor analytic approach recommended by Vandenberg and Lance (2000). Because there

is little theoretical agreement about the I–C measures in the extant literature, we first used an exploratory factor analysis on the I–C items for the U.S. sample (see Cattell, 1966; Thompson & Daniel, 1996) and extracted four factors: Independence, Competition, Group Belonging, and Individuality Subordination. The factors consisted of a set of 14 items (six from Wagner, 1995; seven from Triandis & Gelfand, 1998; and one common item from both measures). The factors and their item loadings are presented in Table 1.

We next conducted a multiple-group confirmatory factor analysis (CFA), testing nested CFA models in both the U.S. and Vietnamese samples, to examine how similarly participants in these two countries interpreted the items. The first model tested the configural invariance (i.e., same factor structures across both samples; Vandenberg & Lance, 2000); it yielded acceptable fit with the data: *RMSEA* = 0.053, *CFI* = 0.92, *GFI* = 0.93,

Table 1
Results of the Exploratory Factor Analysis (U.S. Sample): Item Loadings on the Main Factors

		Factor			
Item		1	2	3	4
1	If you want something done right, you've got to do it yourself (W)	.46			
2	Winning is everything (W; T&G)		.63		
3	People who belong to a group should realize that they're not always going to get what they personally want (W)				.49
4	In the long run the only person you can count on is yourself (W)	.47			
5	People should be made aware that if they are going to be part of a group then they are sometimes going to have to do things they don't want to (W)				.86
6	Success is the most important thing in life (W)		.52		
7	Doing your best is not enough; it is important to win (W)		.72		
8	The well-being of my friends/co-workers is important to me (T&G)			.68	
9	To me, pleasure is spending time with others (T&G)			.69	
10	I feel good when I co-operate with others (T&G)			.96	
11	Parents and children must stay together as much as possible (T&G)			.51	
12	I'd rather depend on myself than others (T&G)	.62			
13	I often do ''my own thing.'' (T&G)	.63			
14	I rely on myself most of the time; I rarely rely on others (T&G)	.66			

Note. W, I–C items from Wagner's (1995) measure; T&G, items from Triandis and Gelfand's (1998) study. Factor 1: independence; Factor 2: competition; Factor 3: group belonging, and Factor 4: individuality subordination.

$\chi^2 = 213.99$, $df = 142$, $p < .01$. The second model tested the metric invariance (i.e., constraining factor loadings for all the items to be equal across samples), also yielding acceptable fit: $RMSEA = 0.053$, $CFI = 0.91$, $GFI = 0.93$, $\chi^2 = 229.38$, $df = 152$, $p < .01$. Of special importance, the Chi-square difference between this model and the first model was not statistically significant ($\Delta\chi^2 = 15.39$, $\Delta df = 10$, $p = .11$), suggesting that item loadings on the factors were likely to be similar across our samples.

Based on our a priori conceptual I–C constructs, we next tested a multiple-group, hierarchical model of two second-order factors (Individualism and Collectivism) and four first-order factors (i.e., Competition and Independence underlying Individualism; Group Belonging and Individuality Subordination underlying Collectivism). This model fit the data fairly well ($RMSEA = 0.052$, $CFI = 0.92$, $GFI = 0.90$, $\chi^2 = 220.31$, $df = 148$, $p < .01$). As expected, Collectivism and Individualism were relatively independent of one another (i.e., weak factor correlation estimates; $r = -.17$ in the U.S. sample and $r = .14$ in the Vietnam sample). Internal reliability for Individualism scale was acceptable (Cronbach's alpha = .73) and adequate for Collectivism scale (.61) and consistent with the reliabilities in the literature. Subsequent analyses were based on these scales.

Results

Manipulation Check

We compared participant scores on the manipulation check scale using ANOVA. In both samples, participants who were assigned to the collectivistic organizational culture scored significantly higher than those assigned to the individualistic organizational culture, $F(1, 356) = 110.86$, $p < .01$. This finding suggests that our manipulation of the organizational cultures was successful.

Though not manipulated, the assumption was that the U.S. sample might be more individualistic and less Collectivistic than the Vietnamese sample because of their societal membership. Surprisingly, on Collectivism, American participants ($N = 153$; $M = 34.44$, $SD = 4.64$) scored higher than Vietnamese ($N = 207$; $M = 31.81$, $SD = 4.71$); $t(358) = 5.29$, $p < .01$. On Individualism, American participants ($N = 153$; $M = 33.45$, $SD = 7.60$) scored lower than Vietnamese ($N = 207$; $M = 38.99$, $SD = 7.21$); $t(358) = 7.04$, $p < .01$. These findings were not consistent with our expectations. It appears that study participants might be more individualistic (for Vietnamese) or more collectivistic (for Americans) than their respective populations.

Cross-Level I–C Effects on Co-operation

Descriptive statistics and correlations among the measured variables are presented in Table 2. It can be seen therein that the correlation between organizational culture and the budget amount taken (the operational measure of co-operation) was significant in the U.S. sample ($r = -.35$; $p < .01$) indicating that Americans in a collectivistic organizational culture tended to take less money (e.g., being more co-operative) than those in an individualistic organizational culture. In the Vietnamese sample, this effect was in

Table 2
Correlations Among Measured Variables

	M†	*SD*‡	Gender§	Org. culture¶	Individualism**	Collectivism††	Amount‡‡
Gender	–	–	–	.19*	.19*	.02	−.04
Organizational culture	–	–	−.02	–	.04	.03	−.08
Individualism	38.9/33.5	7.21/7.60	.26*	−.02	–	.28*	−.07
Collectivism	31.8/34.4	4.71/4.64	−.18*	.12	−.10	–	.02
Amount taken§§	532.6/5.108	211.7/2.036	.13	−.35*	−.01	−.07	–

Notes. *$p < .05$. Correlations above diagonal: Vietnamese sample ($N = 207$); correlations below diagonal: U.S. sample ($N = 153$).
†Mean of Vietnamese sample/mean of U.S. sample.
‡Standard deviations (*SD*) of Vietnamese sample/*SD* of U.S. sample.
§Gender: female = 0; male = 1.
¶The manipulated condition of organizational cultures to which the participants were assigned (individualistic culture = 0; collectivistic culture = 1).
**Participants' scores on the individualism scale (individual-level).
††Participants' scores on the collectivism scale (individual-level).
‡‡Amount of budget taken by participants (a proxy of co-operation [reversed]).
§§Unit for Vietnamese sample = millions in Vietnamese *dong*; Unit for U.S. sample = thousand dollars.

the expected direction but was not significant ($r = -.08$; $p > .10$). Surprisingly, all of the correlations between the personal level of the I–C constructs and co-operation were small and statistically nonsignificant across both samples.

A series of four hierarchically nested regression models were examined on the combined sample. Results of these analyses are shown in Table 3. In Model 1, we controlled for gender (because gender correlated significantly with I–C); the effect of gender was not significant. In Model 2, the main effect of organizational level I–C reached the statistical significance level ($\beta = .20$, $p < .05$), whereas the main effects of societal level I–C and personal levels of I–C did not. That means generally, participants in a Collectivistic organizational culture tended to be more co-operative than those in Individualistic organization (by taking less money). American and Vietnamese samples did not significantly differ in terms of co-operation. These results were consistent with findings obtained from the zero-order correlations in Table 2.

Effect of Person-Level Collectivism × Societal I–C × Organizational I–C on Co-operation

Hypothesis 1 predicted that societal I–C would moderate the interaction effect between person-level Collectivism and organization-level I–C. None of the two-way interactions involving person-level Collectivism was statistically significant in Model 3. As previously mentioned, these two-way interaction terms were included to create the baseline model against which to test the effect of the three-way interaction of interest. Subsequently, in Model 4, the three-way interaction involving person-level Collectivism did not reach statistical significance. Therefore, Hypothesis 1 was not supported.

Table 3
Effects of the Collectivism-Individualism Levels on Co-operation (Combined Sample)

	Regression Model											
	Model 1			Model 2			Model 3			Model 4		
Independent variables	β	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2
		.01	.01		.04	.03*		.08	.04*		.08	.00
Control variable												
Gender	−.03			−.07			−.06			−.06		
I–C variables												
Societal culture (SC)				.01			.14*			.14*		
Organizational culture (OC)				.20*			.35*			.35*		
Individualism (individual level; II)				.05			−.12			.15		
Collectivism (individual level; IC)				−.01			−.01			−.10		
Two-way interactions												
SC × OC							−.24*			−.24*		
OC × IC							.02			.13		
OC × II							.18*			.21*		
SC × IC							−.04			.07		
SC × II							.07			.09		
Three-way interactions												
SC × OC × IC										−.15		
SC × OC × II										.00		

Note. $N = 360$. *$p < .05$. β = Standardized regression coefficient. The dependent variable (co-operation) was created by reverse-coding amount taken.

Effect of Person-Level Individualism × Organization I–C on Co-operation

Hypothesis 2 predicted that organizational level I–C would moderate the relationship between person-level Individualism and co-operation in both societies. In Model 3, only the hypothesized interaction between individual-level Individualism and organizational level I–C was significant ($\beta = .18$, $p < .05$). This interaction effect remains statistically significant in Model 4 ($\beta = .21$, $p < .05$). The direction of this effect indicated that those high on Individualism were likely to change their behavior (in terms of budget amount taken) across organizational cultures, as compared to those low on Individualism. This finding, coupled with the fact that the three-way interaction among societal I–C, organizational I–C, and person-level Individualism was virtually zero ($\beta = .00$, $p > .90$), indicates that Hypothesis 2 was supported by the data. Figure 1 illustrates this two-way interaction.

Effect of Societal I–C × Organizational I–C on Co-operation

Hypothesis 3 predicted the interaction effect between societal and organizational levels of I–C. As shown in Table 2, this interaction effect ($\beta = -.24$, $p < .05$) indicates that the relationship between organizational level I–C and co-operation was moderated by societal cultures, such that the link between organizational I–C and co-operation was weaker in collectivistic societal cultures, as compared to that in individualistic societal

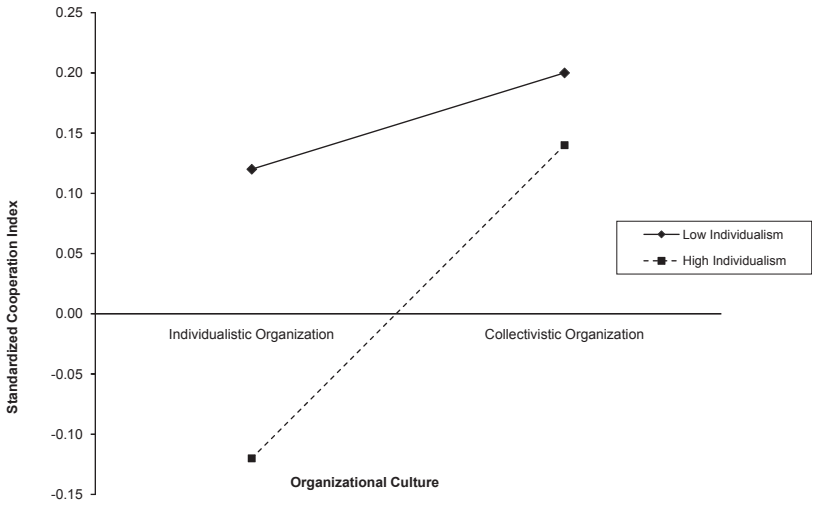

Figure 1. Interaction between individual-level individualism and organizational I–C on co-operation.

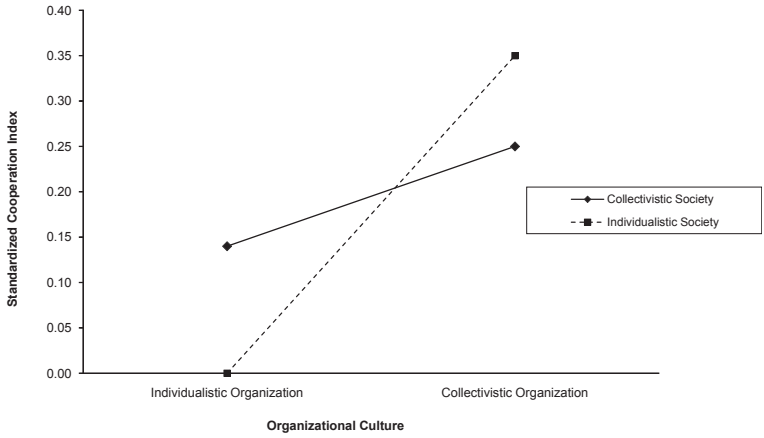

Figure 2. Interaction between society- and organization-level I–C on co-operation.

cultures (see Figure 2; note that the unit for the Y-axis in this figure is standardized amount of budget taken). Therefore, Hypothesis 3 was supported.

Discussion

The success of multinational organizations partly depends on how co-operatively employees work with one another in a global setting. To understand organizational and

societal cultural barriers that could hinder or promote workgroup co-operation, knowledge about the nature of co-operation within the context of corporate culture as well as within the country of operation is critical. Accordingly, organizational researchers must answer the question: how does organizational culture interact with societal culture to affect co-operation, given individual-level values? This study provides the first investigation into this question.

We characterized I–C cultures (at societal and organizational levels) and individual-level I–C values based upon a cross-level I–C framework that allows separate conceptualization of I–C across levels (i.e., bipolar at group levels and bi-dimensional at individual level) based on Chao's (2000) and Morgeson and Hoffmann's (1999) relevant guidelines, taking into account that co-operation is an individual-level phenomenon. We examined the combined effects of these levels of I–C on co-operation because these levels have been separately found to be important determinants of co-operative behavior in workgroups (Chatman & Barsade, 1995; Earley, 1989 & 1993; Gelfand & Christakopoulou, 1999; Parks & Vu, 1994; Probst et al., 1999; Wagner, 1995). The results were mixed.

Are Vietnamese Individualistic?

First, though not hypothesized, we tested the assumption that the respective national I–C stereotypes would be reflected in participants' personal I–C values in our samples. Surprisingly, we found that the Vietnamese sample was less collectivistic and more individualistic than the American sample. This finding contradicted Ralston, Thang, and Napier's (1999) results that American managers were higher on overall Individualism and lower on overall Collectivism than Vietnamese managers. Because American culture is long established as individualistic (e.g., Hofstede & Bond, 1988), one explanation for our finding was that the Vietnamese sample might be not representative of the I–C societal norms because of the business-oriented nature of the Vietnamese sample. Anecdotal corporate evidence suggested that Vietnamese employees might be individualistic in a corporate environment but still collectivistic in small groups (super-business.net, n.d.). It was also likely that the opposite might be true for the U.S. sample. The variations of I–C in the current samples are therefore likely to be less than what they are in the population. The implication for the present study is that the society-level I–C might have not interacted with other levels of the research design in the expected direction. Note that nonrepresentative samples of certain cultures are not uncommon. A cross-culture study by Earley (1994) investigated the relationships among I–C, the focus of a training program, and managerial performance. He found that some Hong Kong and Chinese managers were more individualistic than their country's mean score, whereas some Americans were more collectivistic than their country's mean score.

Are Individual-Level I–C Values Associated With Co-operation?

Another surprising result involved the nonsignificant relationships between individual-level I–C values and co-operation, inconsistent with previous findings (e.g., Chatman & Barsade, 1995). A possible explanation lies in the orthogonal nature of the I–C concepts in this study, as opposed to the bi-polar conceptualization of I–C in past studies.

Another possible explanation is that the organizational manipulation was so strong that it overpowered individual differences in I–C. Also, restriction in range of the I–C variable in the current samples might attenuate the relationships between I–C and co-operation. As such, range restriction could explain why the effect of individual-level I–C was not found.

The Influence of Organization-Level I–C

Regarding the Organization × Individual I–C interaction hypothesis, as predicted, we found that no matter to which societal culture (American or Vietnamese) the participants belonged, those who were high on Individualism were very adaptive to their proximal organizational context (i.e., following the modal behavior encouraged by the organization), as compared with those low on Individualism. In other words, those high on Individualism pursued their own gain when they ''worked'' in an individualistic organizational culture, but under a collectivistic organizational culture, they ''absorbed'' the values of that culture and behaved co-operatively. (Those low on Individualism, on the other hand, did not change their co-operative behaviors in response to organizational I–C practices. That is, they behaved relatively consistently across organizational cultures.)

This finding regarding the universal adaptation to the immediate organizational culture of those high on Individualism is consistent with the findings of Earley (1989) and Wagner (1995). The earlier studies, however, did not explicitly examine organizational level I–C, did not directly test the moderating effect of societal culture (Earley, 1989), and only included samples from the United States (Wagner, 1995). Our study therefore complements the earlier studies and allows a more conclusive understanding as to the cross-cultural universality of the interaction effect between organizational level I–C and individual-level Individualism. Future research should investigate to what extent personal motivation mechanisms (e.g., goal achievement) further explain these findings.

The Influence of Society-Level I–C

We expected a high level of adaptive behavior among those high on Collectivism in an individualistic societal culture (the United States), such that they would become less co-operative in a dominantly competitive corporate culture compared to those low on Collectivism, as previously evidenced in the literature (Chatman & Barsade, 1995). We also predicted that in a collectivistic society (Vietnam), those high on Collectivism would ''ignore'' the organizational cues and steadfastly adhere to the societal norms. The data, however, did not support our predictions. There was no difference in the extent to which American or Vietnamese who were high on Collectivism engaged in co-operation; nor was there a difference between those high and low on Collectivism. One explanation is that the Vietnamese sample was low on Collectivism as a whole (compared with American participants). A possible reason for this finding is that our adapted Collectivism scale was not sufficiently sensitive to detect such a three-way interaction effect. The reliability of this scale ($\alpha = .61$) is lower than that of the Individualism scale ($\alpha = .73$), which might result in a lower power to detect interaction effects (Busemeyer & Jones, 1983). Future studies need to revisit this important question before any

conclusions about the nature of interplay among these three levels of I–C in determining co-operative behavior can be made.

Organization × Society Effect

We found an interaction effect between societal level and organizational level I–C on co-operation, such that organizational I–C was positively related to co-operation in an individualistic society (United States), but not in a collectivistic society (Vietnam). The findings were consistent with Kirkman and Shapiro (2001) in terms of the effect of organizational level I–C in individualistic societies on co-operation. However, it is possible that Vietnamese societal norms suppressed organizational norms and practices. Because little research has examined the effects of organizational cultures in collectivistic societies, the appropriateness of our speculation is subject to future cross-cultural investigations. Nevertheless, it is theoretically possible, as collectivistic cultures tend to integrate individuals into "strong, cohesive ingroups" from birth (p. 51, Hofstede, 1991), which means co-operation is not only a learned trait but also a socially enforced way of life. Some indirect evidence may shed light on this issue. For example, Pasa, Kabasakal, and Bodur (2001) examined the effects of organizational culture on managers' perceptions of leadership behavior and attributes in Turkey, a highly collectivistic society. The researchers found that, regardless of the variance in organizational norms and practices, Collectivism consistently affected perceptions at multiple levels of analysis, such that an ideal leadership style was perceived as the ability to satisfy the needs of group belonging, a characteristic of Collectivism.

Further, Lewis and Earley (1997) found the effects of societal culture on perceptions of elements of quality across countries. The researchers proposed using societal cultural values to explain why the same quality improvement policies implemented in multinational organizations yield mixed results around the world. The converging empirical evidence indicates that there may be differential interaction patterns between the societal- and organizational cultures on organizational behavior and attitudes (i.e., Collectivistic societies provide a stronger contextual effect than Individualistic societies). The current finding of the interaction between societal and organizational levels of I–C on co-operation is consistent with these earlier findings. Hence, our study provides further support for the influence of societal cultures on the links between organizational practices and organizational outcomes.

Practical and Theoretical Implications

For practitioners and organizations interested in managing international co-operation among global staff, the effects of the I–C interaction across the society-, organization- and person-levels may be of particular interest. Although limited, the evidence of cross-influences found in the present study sheds further light on the nature of individuals and organizations across country borders, thereby facilitating successfully adaptive human resource strategies. For example, our findings tentatively suggest that organizations with a strong collectivistic culture may not be overly concerned about potential effects of personal values that their employees may hold: even those with a

higher individualistic tendency may still be willing to co-operate and collaborate in such a strong collectivistic culture.

Conceivably, the current finding has theoretical implications as it provides a contextual perspective for understanding people's behavior in workgroups by specifying an integrative framework that explains how the three levels of the I–C construct may influence co-operation. Specifically, based on theoretical suggestions by Chao (2000), we developed and tested a polymorphic cross-level model of I–C values impacting individual-level co-operative behavior, where I–C values at the individual level are theorized as bi-dimensional constructs, and the group-level I–C is conceptualized as a bi-polar construct, providing contextual factors for the target relationship. This new approach may be controversial but grounded in a flexible multi-level framework of culture in general, with a focus on an individual-level phenomenon. Future research may further explore the target relationship at a unit level (e.g., co-operation across types of organizations), and even investigate the possibility that I–C values are two independent constructs that separately affect co-operation at the macro level.

Limitations

We included samples from two countries representing the two poles of the societal level I–C spectrum, the United States and Vietnam. Using countries as proxies for societal level I–C as in the current study means that any differential effects found in the two samples would be assumed to be entirely due to their differences in the I–C construct. This assumption may not hold in certain situations because the two countries included in the study, the United States and Vietnam, are also different in many other dimensions (e.g., power distance, femininity-masculinity, uncertainty avoidance; Hofstede, 1980). Nevertheless, we believe that I–C provides an initial meaningful framework to organize cross-cultural differences (cf. Robert & Wasti, 2002), since I–C has been found to relate to co-operation, the criterion of interest in the current study. It should be noted that previous studies also have used countries as proxies for societal level I–C (e.g., Boone & Witteloostuijn, 1999; Gelfand & Christakopoulou, 1999; Parks & Vu, 1994; Wade-Benzoni et al., 2002).

Another potential limitation related to the generalizability of the findings is the use of college students as samples. Student participants might lack managerial experiences and related insights in navigating a company budget. However, participants in both samples were business majors; most of them had full- or part-time work experience. As such, they are likely to have at least some textbook understanding of how company finances are managed. Empirical evidence also shows that college students and real-world managers share the same perceptions of societal cultural values, including Collectivism, power distance, gender egalitarianism, and future orientation (e.g., Keating, Martin, & Szabo, 2002). These factors help to alleviate any disadvantage in generalizing our findings from a student sample to real-world situations.

One concern may involve the generalizability of the study findings due to the artificial social-dilemma game utilized in manipulating organizational I–C. While it is conceivable that corporate cultures contain nuances and richness that may not be easily

induced by such a simple task, social-dilemma games have been extensively used in experimental and interaction research since the important work of Luce and Raiffa (1957). Despite the criticism that participant reactions might not accurately reflect what employees would do in a real-world situation, researchers consistently found that individual social values, or orientations toward specific goals, are predictive of resource dilemma behaviors (e.g., Parks, 1994). Furthermore, individual behavior in such games is conceptually predictive of actual behavior according to reinforcement learning models (see, for example, Bender, Diermeier, & Ting, 2003). Because we were fundamentally interested in analyzing cross-cultural behaviors in situations of interdependence and conflict, social-dilemma games provided the most effective methodology. Nevertheless, field studies in other Collectivistic and Individualistic societies may wish to focus on the relationships between organizational culture and individuals in actual companies in order to shed further light on the current findings.

Conclusion

The theoretical question of how societal cultures might differentially influence organizational I–C cultural norms on individuals' co-operative behavior has important implications for cross-cultural organizational research and practice. Addressing this question is challenging because it requires a complex research design, involving individualistic and collectivistic people from countries and organizations that also have individualistic and collectivistic tendencies. The current study is one of the first to directly examine this question, and, as such, responds to earlier calls for attention to levels of cultural constructs when studying their effects (Bond & Smith, 1996). While questions remain, we believe the current findings offer intriguing and interesting implications that will, hopefully, stimulate more research on this important topic.

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