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Struggles for cooperation: conflict resolution strategies in multicultural groups

Struggles for cooperation

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Abstract

Purpose – The aim of this paper is to examine the influence of group composition in cultural values on conflict management styles in groups.

Design/methodology/approach – A field study using data from 125 groups was conducted.

Findings – The results show that in groups where members feel they are equal and connected (horizontal collectivism) cooperation is better, and contending and avoiding conflict management styles are used less. When people view themselves as unequal and independent (vertical individualism (VI)) the avoiding style of conflict management is more frequently used. Within-group similarity (low variety) in VI leads to more cooperation and less avoidant conflict management strategies as well as less third party interventions. High group variety in views of being unequal, but interconnected (vertical collectivism), as well as in the views of being equal but independent (horizontal individualism), leads to more cooperative conflict resolution strategy.

Practical implications – The results show that small and consistent within-group differences in cultural values are beneficial (with the exception of VI) for cooperative strategies. By showing that group compositional configurations in cultural values (vertical/horizontal individualism and collectivism) impact on conflict management strategies, the study has important implications for team design.

Originality/value – The paper extends current research by conceptualizing cultural values (it considers the horizontal vs vertical orientation in individualism-collectivism) as configural group properties and by testing the impact of specific team configurations in cultural values on conflict management strategies.

Keywords Conflict management, Collectivism, Individual behaviour, Group behaviour

Paper type Research paper

Introduction

Understanding the impact of cross-cultural diversity on cooperation and conflict resolution processes in teams is a critical factor for team success and organizational effectiveness. Until recently, this issue was mainly studied in geographically dispersed teams, with members from different cultural contexts (Earley and Gibson, 1998). Nowadays, due to globalization and increased population mobility, teams operating in one cultural context are increasingly cross-culturally diverse. Cooperation is essential whenever people have to coordinate activities of differentiated tasks (Wagner, 1995). Therefore, cooperation in culturally diverse teams is a significant topic of organizational research (Wagner, 1995).

The individualism-collectivism “cultural syndrome” has consistently been found to be a significant difference among cultures in a large number of studies (Earley and Gibson, 1998; Hofstede, 1980; Oyserman *et al.*, 2002; Triandis, 1996). Collectivists conform more to group norms than individualists, and have more cooperative groups



than individualists. The cooperation of individualists, on the other hand, is instrumental: when they can only achieve their individual goals in groups, individualists do not differ in their levels of cooperative behaviour from collectivists (Wagner, 1995).

Differences in cultural values between collectivistic and individualistic societies influence attitudes toward conflict and conflict management (Kirkbride *et al.*, 1991; Lee and Rogan, 1991; Leung, 1988; Taggar and Haines, 2006; Ting-Toomey *et al.*, 1991; Wheeler, 2002). Conflict with out-groups is perceived as natural by collectivists. Collectivists tend to see more differences between the in- and out-groups, and they do not consider it a virtue to put themselves into other people's shoes (Triandis, 1994). When dealing with the in-group, on the other hand, the primary focus of collectivists is to avoid actions that will strain relationships and lead to weakening and dissolving the relationship. Individualists nevertheless tolerate and are able to cope with high levels of within-group conflict (Leung, 1997). Therefore, group members' cultural values are certainly related to the way members deal with intra-group conflicts. Research to date mostly focused on making group level inferences by averaging levels of individualism-collectivism of the individual group members and little to no interest was shown in conceptualizing cultural values as a configural group property (Klein and Kozlowski, 2000). In our study, we consider the diversity of cultural values as a configural group property, defined as the variability of individual cultural values within a group. Thus, we extend current research by capturing the impact of specific team configurations with respect to cultural values on conflict management strategies.

Therefore, the main aim of the present study is to explore the impact of the diversity in individualism-collectivism of the group on the conflict resolution styles used by this group. We take into account both the average level of the individualism/collectivism as well as the diversity of individualism/collectivism in the team. We first outline our theoretical framework and discuss the hypotheses of the study. In the second part, we articulate our study design and detail the methodological approach. Finally, the third part of the paper presents the findings and their implications.

Conceptual framework

Cross-cultural issues in conflict resolution

There are many studies and theoretical models on conflict resolution in groups. With respect to conflict resolution styles in groups, Rahim and Bonoma (1979) developed a typology with two orthogonal dimensions – concern for self and concern for others – to differentiate between four conflict resolution styles: cooperating/integrating (high concern for self and high concern for others), obliging (high concern for others and low concern for self), contending/dominating (low concern for others and high concern for self), and avoiding (low concern for others and low concern for self) (Rahim, 2002). Empirical research based on this model showed that factor analysis only supported three of the four factors: cooperating, contending, and avoiding (Oetzel and Ting-Toomey, 2003). Later empirical studies added a fourth dimension, namely third party intervention (de Dreu and van Vianen, 2001).

The cooperating (integrating) style is characterized by openness; people tend to exchange information and look for alternatives. They are willing to examine the existing differences and to find effective solutions that are acceptable to both parties. This style is appropriate when problems to be solved are complex and require the integration of multiple resources or perspectives. People who are using the contending

(dominating) style are oriented to achieve their own goals or objectives and as a result ignore the expectations or the needs of the other party. This style has been associated with forcing behavior to win one's position. The avoiding style has been associated with withdrawal or sidestepping situations. People who are using this style fail to satisfy their own concern as well as the concerns of the other party (Rahim, 2002). The third-party involvement resolution style implies revolving to an external mediator to seek solutions for the conflict and mediate the negotiation between the parts in conflict (de Dreu and van Vianen, 2001).

Two meta-analyses (Earley and Gibson, 1998; Oyserman *et al.*, 2002) integrate the results of cross-cultural studies on differences in conflict resolution styles across individualistic vs collectivistic cultures. With respect to intra-group conflicts with in-group members, people in collectivistic cultures have a stronger preference for avoiding, and less for contending style than people in individualistic cultures (Leung, 1997). People in collectivistic cultures tend to use third party strategies more often than people in individualistic cultures (Earley and Gibson, 1998). An explanation for this difference is sought in the strong preferences of individualists for procedures of dispute resolution in which participants in the dispute have considerable control over the process to reach resolution, as opposed to procedures where the judge has the control over the process (Earley and Gibson, 1998).

Individualism-collectivism refined

In cross-cultural psychology, a distinction is made between horizontal and vertical orientations in cultural values (Singelis *et al.*, 1995; Triandis, 1989, 1994; Triandis and Gelfand, 1998; Triandis *et al.*, 1993). This distinction is based on Markus and Kitayama's (1991) dichotomy of independent-interdependent vs same-different self-construal. Applied to individualism/collectivism, a four-category typology based on the vertical-horizontal and individualism-collectivism dimensions can be created (Earley and Gibson, 1998). Horizontal individualism reflects an independent/same self construal: people view each other as equal but independent beings; they want to be unique and do "their own thing." Vertical individualism (VI) reflects an independent/different self construal, meaning that people view themselves as unequal but independent; they want to do their own thing and also to be "the best." Horizontal collectivism (HC) reflects an interdependent/same self construal: people view themselves as equal but interconnected; they are part of their in-group. Vertical collectivism reflects an interdependent/different self, meaning that people view themselves as unequal, but interconnected. They submit to authority in the group and are willing to sacrifice themselves for their group (Triandis, 1994, 2001; Triandis and Gelfand, 1998).

So far, only a few studies explored the relationship between these four types of cultural values and preferred conflict management strategies. To our knowledge, no studies investigated this relation at group level yet. Komarraju *et al.* (2008) found that VI and horizontal individualism was related to using the contending style, whereas vertical collectivism was associated with lower use of the contending style. Vertical collectivism was associated with using an avoiding style, and in horizontal individualism the avoiding style was used less. A cooperating style occurred more often in HC and vertical collectivism and less in VI. In contrast, Kaushal and Kwantes (2006) found the contending style to be positively associated with VI and vertical collectivism, and negatively associated with HC, although the latter relation was not

significant. In their study, the avoiding style was positively associated with VI and vertical collectivism, and negatively with horizontal individualism.

As illustrated by these studies (Kaushal and Kwantes, 2006; Komarraju *et al.*, 2008), the most relevant dimensions for conflict management in groups are VI and HC. These two types of cultural value patterns are the two opposing poles with respect to the preoccupation for self and others in group settings. Therefore, they are most likely to impact on the likelihood of adopting a conflict management strategy. Groups composed of members scoring high on HC (thus with a high group mean score for this attribute) are likely to adopt a more cooperative style of conflict resolution, to avoid more and to adopt less a contending conflict resolution style. The opposite effects are expected for groups composed of members scoring high on VI. Because they see themselves as independent from the group and their use of group identity is not so emphasised, it is likely that they will adopt a more contending and less cooperating conflict resolution style. Moreover, given the fact that in general, people scoring high on individualism have a higher tolerance for in-group conflict, groups in which at least some group members score high on VI will have a lesser tendency to avoid conflict or adopt a third-party strategy when the level of conflict is too high.

Based on these findings, we posit that:

- H1.* A higher level of VI in the group will be associated with a higher use of a contending conflict resolution style, and lower use of the cooperative, avoiding, and third party resolution styles.
- H2.* A higher level of vertical collectivism in the group will be associated with higher use of an avoiding conflict resolution style.
- H3.* A higher level of horizontal individualism in the group will be associated with a higher use of a contending and lower use of an avoiding conflict resolution style.
- H4.* A higher level of HC will be associated with higher use of an avoiding, cooperating and third party conflict resolution style, and lower use of the contending style.

Cross-cultural diversity in groups

Recent arguments in multi-level group research question the sole use of means as indicators of group level constructs and argue that compositional differences should also be taken into account when analysing group level phenomena (Klein and Kozlowski, 2000). Configural team properties have systemic implications and will impact on both emergent states (e.g. conflict and conflict management strategies, trust, cohesion, and team cognition), as well as group effectiveness (Curşeu, 2006; Curşeu *et al.*, 2008). In line with these arguments, we argue that assessing cultural values at the individual level and simply averaging them at the group level is insufficient to predict group preferences in conflict resolution styles. When trying to explain conflict resolution, one needs to also look at the group compositional configuration with respect to cultural values.

Group composition with respect to cultural values is a configural team property (Klein and Kozlowski, 2000) describing the distribution of cultural values within a group, or, in other words, the degree of differentiation that exists among the group members with respect to cultural values (Harrison and Klein, 2007). Therefore, in our

study, we consider diversity in individualism-collectivism as a group-level variable and we strive to capture the array of configurations that impact on cooperation in groups. We use two of the three possible forms of group diversity proposed by Harrison and Klein (2007), namely variety and disparity. Variety implies a uniform distribution of individualism/collectivism, with even spread of members across all possible categories of individualism/collectivism. In other words, a group with a high variety in cultural values has members evenly spread from low to high levels of individualism/collectivism. In such a group configuration, cultural differences are most probably easier to bridge and thus cooperation is more likely, while conflict avoidance and contending are less likely to occur. Small and consistent differences among group members will most probably foster communication, generate an increased awareness of interpersonal differences and the development of a new shared group identity (Earley and Mosakowski, 2000), which will ultimately foster cooperation. Disparity is reflected in a positively skewed distribution of individualism/collectivism, with one member at the highest point on the continuum, and others at the lowest. High levels of disparity thus reflect a group configuration in which one group member scores high, while most members score low on a particular set of cultural values. The asymmetric distribution of cultural values and norms within a group may trigger miss-understandings, communication deficits, and frustration (Harrison and Klein, 2007) and as a consequence disparity is expected to be detrimental to cooperative efforts. Therefore, in groups with a high disparity configuration, individual differences in cultural values are more difficult to bridge and therefore cooperation is less likely to occur. Therefore, we posit that:

- H5.* High group variety in individualism-collectivism will be associated with higher use of cooperative conflict resolution strategies.
- H6.* High group disparity in individualism-collectivism will be associated with lower use of cooperative conflict resolution strategies.

Method

Sample and procedure

Early research argued individualism is specific to industrialized Western cultures, whereas collectivism is higher in traditional Eastern cultures (Hofstede, 1980), while more recent studies (Dutta-Bergman and Wells, 2002; Singelis *et al.*, 1995) report significant within-culture variation of individualism-collectivism values. Therefore, in order to maximize the variance in our independent variables we decided to collect data in two cultures (one individualistic and one collectivistic). Given the complexity of the models to be tested, a rather large number of teams is needed, hence data were collected in a sample of 460 (216 women) students in two large universities (one Dutch and one Chinese). We made sure that in both Dutch and Chinese samples we surveyed multicultural groups so as to increase the chances of within group variance of the independent variables (in order to better capture different compositional configurations). The average age in the sample was 21.83 and the students were organized in 125 groups, with an average group size of four members. They had a task of writing a group paper as part of a course. The students worked together during a whole semester and at the end of the project, they were asked to individually fill in a questionnaire with several scales evaluating the constructs considered in this study.

Measures

The individualistic-collectivistic cultural values were evaluated with a scale developed by Triandis and Gelfand (1998), consisting of 16 items, four for each dimension and extensively used in previous cross-cultural research (Oyserman *et al.*, 2002). The answers were recorded on a seven-point Likert scale (from 1 = strongly disagree to 7 = strongly agree). Cronbach's α for the horizontal individualism scale is 0.74 (item example "I'd rather depend on myself than others"), for VI is 0.75 (item example "It is important that I do my job better than others"), for HC is 0.69 (item example "If a coworker gets a prize, I would feel proud.") and for vertical collectivism is 0.60 (item example "Parents and children must stay together as much as possible."). To further investigate the reliability of the scale scores as indicators of the underlying constructs, we performed a confirmatory Mokken scale analysis (MSA) (Sijtsma and Molenaar, 2002) on each of the four scales. In a confirmatory MSA, it is evaluated whether a fixed set of items form a Mokken scale by investigating whether:

- the items measure the same unidimensional construct; and
- whether the items have a monotone relation with the underlying construct.

A set of items comprises a Mokken scale if both criteria of unidimensionality and monotonicity are satisfied. For Mokken scales, the scalability coefficient H is used to evaluate whether the items have enough in common to accurately order subjects on the underlying trait by the sum score. For scales to be used in practice, the following rules of thumb are commonly used (Mokken, 1971; Sijtsma and Molenaar, 2002): $0.3 \leq H \leq 0.4$ means a weak scale; $0.4 \leq H \leq 0.5$ a medium scale; $H \geq 0.5$ a strong scale; and $H < 0.3$ means that the items are unscalable. When the items form at least a weak scale, the summation of the items into a single score is justified and persons can be accurately ordered on the underlying scale (Sijtsma and Molenaar, 2002). We used Mokken scaling procedure (Molenaar and Sijtsma, 2000) for the MSA, and found that all scales form a Mokken scale, and we found H values of 0.45 for horizontal individualism, 0.46 for VI, 0.38 HC, and 0.30 for vertical collectivism, indicating weak to moderate scales.

In this study, we considered individualism-collectivism as a group attribute, therefore, we used several group level scores: group mean scores (indicative for the mean level of the four constructs in the groups), the within-group agreement index (Rwg) score (indicative for within group variety of scores) and the coefficient of variation (an index of disparity). The coefficient of variation is computed by dividing the SD by the average group score. It reaches a maximum when $n - 1$ group members are at the lower end of the scale, and one of the group members is at the higher end of the scale (Harrison and Klein, 2007).

Because we used scale scores at the aggregated level, we also estimated the reliability of group means (Snijders and Bosker, 1999, p. 26). Using an average group size of 3.68, we found for the group mean scores reliabilities of 0.91 for horizontal individualism, 0.92 for VI, 0.89 for HC, and 0.85 for vertical collectivism. This reliability estimates show that for all scales the group mean scores are sufficiently reliable even though Cronbach's α for individual scores were somewhat low for the collectivism scales.

Group relational conflict was evaluated using four items from an intrateam conflict scale introduced by Jehn (1995). Sample items include: "To what extent are personality clashes present in your group" or "How much emotional conflict is there in your work group." The answers were recorded on a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree). Cronbach's α for this scale was 0.89.

The conflict resolution styles were evaluated using a questionnaire of de Dreu and van Vianen (2001). The avoiding, contending, and cooperating styles are evaluated using three items for each style and the Cronbach's α s are 0.64 for avoiding, 0.62 for contending, and 0.55 for collaborating. The third-party interventions scale included only two items and the alpha for this scale was 0.61. For these scales, an additional Mokken scales analysis was performed. MSA yielded scale H values of 0.39 for avoiding, 0.41 for contending, 0.33 for collaborating, and 0.46 for third party. The reliabilities of the mean scores were 0.87 for avoiding, 0.86 for contending, and 0.82 for collaborating. For third-party interventions, the reliability was 0.85.

For group relational conflict and the conflict resolution strategies, we first explored whether the evaluations provided by the group members were sufficiently similar. We used two ways to estimate agreement. First, we used the procedure proposed by James *et al.* (1984) to estimate the inter-rater reliability (the index of agreement within groups). The Rwg can take values between zero and one, and generally, a value of 0.70 or higher is considered to reflect a reasonable amount of agreement within a group (James *et al.*, 1984). Second, the results of the analysis of variance with the groups as independent factors were used to back up the decision to aggregate individual scores to the group level. Results of the analysis of variance yield significant F scores showing that between group variance exceeds within group variance for all group level variables: avoidance $F(124,1) = 2.73$, $p < 0.0001$; contending $F(124,1) = 2.35$, $p < 0.0001$; cooperating $F(124,1) = 1.68$, $p < 0.0001$; third party $F(124,1) = 3.63$, $p < 0.0001$; relational conflict $F(124,1) = 7.61$, $p < 0.0001$.

Combining the analysis of variance results with the Rwg scores, we can conclude that the team members reported similar perceptions of conflict management strategies as well as the amount of relational conflict experienced in the group.

Results

Mean, SDs, and correlations between the variables considered in this study are presented in Table I.

Correlations reveal a positive association between relational conflict and avoiding, contending and third party conflict management strategies. These correlations are not surprising, since groups experiencing high levels of relationship conflict are also more likely to engage in different strategies of dealing with intra-team conflict. As a consequence, the level of relationship conflict was added in the regression analyses as a control variable to rule out the possibility that a particular conflict management strategy is actually influenced by the level of intra-team conflict. Moreover, we have controlled for group size in order to exclude the possible associations between group size and conflict management strategies, as well as to exclude any group size effect from the diversity measures. In order to test our hypotheses we have estimated a regression model for each type of conflict management style in which we entered group size and level of relational conflict in the first step as controls, mean of individualism-collectivism on both horizontal and vertical dimensions in the second step, group variety in cultural values (as the Rwg scores) in the third step, and disparity (as the coefficient of variation) in cultural values in the fourth step of the regression. The results of these regression analyses are presented in Table II. The variance inflation factor scores were lower than 2.2, therefore, no major multi-collinearity problems are identified.

Table I.
Mean, SDs, and
correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Group size	3.68	0.84	1																
2. Mean RC	1.80	0.74	-0.03	1															
3. Mean HI	4.61	0.75	0.16	-0.00	1														
4. Mean VI	3.92	0.82	0.05	0.14	0.44**	1													
5. Mean HC ₀	5.34	0.62	0.05	-0.13	0.08	0.12	1												
6. Mean VC	3.47	0.63	-0.03*	0.06	0.28**	0.26**	0.27**	1											
7. RwgHI	0.80	0.06	-0.22*	0.04	-0.20*	0.02	-0.07	-0.01	1										
8. RwgVI	0.80	0.07	-0.15	0.13	-0.16	-0.06	-0.10	-0.00	0.34**	1									
9. RwgHC	0.81	0.06	-0.27**	0.06	-0.34**	-0.24**	-0.09	0.02	0.36**	0.22*	1								
10. RwgVC	0.82	0.06	-0.27**	0.10	-0.24**	0.07	-0.10	0.06	0.48**	0.32*	0.38**	1							
11. CVHI	0.16	0.09	0.00	-0.03	-0.18*	-0.20*	0.07	0.05	-0.46**	-0.31**	-0.25**	-0.24**	1						
12. CVVI	0.22	0.14	0.13	-0.18*	0.01	-0.23**	0.15**	-0.15	-0.30**	-0.61**	-0.21**	-0.30**	0.36**	1					
13. CVHC	0.11	0.07	0.11	0.04	0.05	0.19*	-0.27*	-0.12	-0.24**	-0.29**	-0.35**	-0.22**	0.30**	0.25**	1				
14. CVVC	0.19	0.13	0.09	-0.08	0.08	-0.12	0.02	-0.38**	-0.30**	-0.37**	-0.33**	-0.55**	0.17	0.42*	0.31**	1			
15. Avoidance	1.88	0.50	-0.03	0.37**	-0.01	0.16	-0.16	0.03	0.04	-0.17	0.11	0.11	-0.10	0.01	0.00	-0.09	1		
16. Contending	2.00	0.49	0.00	0.48**	0.03	0.15	-0.17	0.06	0.12	0.00	0.09	0.15	-0.17	-0.09	0.03	-0.05	0.53**	1	
17. Cooperating	3.66	0.41	-0.05	-0.11	-0.04	-0.10	0.34**	-0.01	-0.30**	-0.01	-0.17*	-0.25**	0.21*	0.19*	-0.03	0.18*	-0.08	-0.07	1
18. Third-party	2.22	0.71	0.05	0.28**	0.08	0.14	0.03	0.00	-0.02	-0.16	-0.14	0.02	0.13	0.08	0.22*	-0.01	0.30**	0.25**	0.06

Notes: * $p < 0.05$, ** $p < 0.001$ (two-tailed); RC, relationship conflict; HI, horizontal individualism; VI, vertical individualism; HC, horizontal collectivism; VC, vertical collectivism; Rwg, within group agreement index; CV, coefficient of variation

Modal/step	Avoiding				Contending				Cooperating				Third party				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
1	Group size	-0.01	0.01	0.00	-0.02	0.02	0.02	0.05	0.04	-0.05	-0.07	-0.16	-0.15	0.06	0.04	0.01	0.02
2	Relationship conflict	0.37 ^{***}	0.32 ^{***}	0.35 ^{***}	0.37 ^{***}	0.48 ^{***}	0.44 ^{***}	0.45 ^{***}	0.45 ^{***}	-0.11	-0.04	-0.04	-0.03	0.28 ^{***}	0.28 ^{***}	0.31 ^{***}	0.31 ^{***}
	Mean HI	-0.09	-0.06	-0.06	-0.14	0.00	0.00	0.05	0.00	0.03	0.03	-0.07	-0.09	0.04	0.04	0.02	0.12
	Mean VI	0.18 ^{**}	0.17 ^{**}	0.17 ^{**}	0.19 ^{**}	0.09	0.09	0.06	0.04	-0.16 [*]	-0.16 [*]	-0.10	-0.04	0.11	0.11	0.04	0.02
	Mean HC	-0.15 [*]	-0.15 [*]	-0.16 [*]	-0.20 ^{**}	-0.15 [*]	-0.15 [*]	-0.12	-0.13	0.38 ^{***}	0.35 ^{***}	0.35 ^{***}	0.30 ^{***}	0.30 ^{***}	0.07	0.06	0.14
	Mean VC	0.01	0.02	0.00	0.00	0.03	0.03	0.02	0.08	-0.07	-0.07	-0.05	-0.03	-0.03	-0.08	-0.06	-0.14
3	Rwg HI			0.02	-0.03	0.10	0.05	0.10	0.05	-0.26 ^{**}	-0.26 ^{**}	-0.25 ^{**}	-0.25 ^{**}			0.03	0.09
	Rwg VI			-0.23 ^{**}	-0.31 ^{**}	-0.13	-0.13	-0.12	-0.12	0.15	0.15	0.15	0.22 ^{**}			-0.20 ^{**}	-0.15
	Rwg HC			0.13	0.02	0.05	0.05	0.04	0.04	-0.12	-0.12	-0.12	-0.15 [*]			-0.14	-0.01
	Rwg VC			0.07	0.01	0.09	0.09	0.12	0.12	-0.14	-0.14	-0.14	-0.16 [*]			0.11	0.06
4	CV HI				-0.14			-0.15					0.02			0.13	
	CV VI				0.10			0.03					0.14			0.01	
	CV HC				-0.11			0.01					-0.06			0.21 [*]	
	CV VC				0.11			0.08					0.03			-0.15	
F change	10.27 ^{***}	1.49	3.16 ^{**}	1.17	18.32 ^{***}	0.93	1.29	0.53	0.99	4.84 ^{***}	5.10 ^{***}	0.42	5.75 ^{***}	0.76	1.64	1.57	
R ²	0.14	0.18	0.27	0.29	0.23	0.25	0.29	0.30	0.01	0.15	0.28	0.29	0.08	0.10	0.15	0.20	
AdjR ²	0.13	0.14	0.20	0.21	0.21	0.21	0.22	0.23	0.00	0.12	0.22	0.22	0.07	0.06	0.08	0.10	

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$; standardized regression coefficients are reported for the respective regression steps; $n = 125$; HI, horizontal individualism; VI, vertical individualism; HC, horizontal collectivism; VC, vertical collectivism; Rwg, within group agreement index; CV, coefficient of variation

Table II. Regression results for means individualism-collectivism and group compositional configurations on individualism-collectivism

Group size has a small negative impact on the use of cooperative conflict resolution style. As shown also in the correlation table, a higher level of relational conflict was related to higher use of the avoiding, contending, and third-party resolution styles.

For the mean levels of horizontal/VI/collectivism, we found partial support for only one of our hypotheses (namely, *H4*). HC had a negative impact on avoiding and contending, and a strong positive impact on cooperating (partial support *H4*). Vertical individualism had a positive impact on avoiding.

Table II also highlights the impact of variety in individualism-collectivism on conflict resolution styles. Low scores on Rwg reflect a high dispersion of the scores. As expected, variety impacted conflict resolution styles to a larger extent than the mean scores. As stated in *H5*, variety in cultural values had in general a positive impact on cooperation (significant effects for horizontal individualism and vertical collectivism), yet the result for VI is opposed to the hypothesized effect. Variety with respect to VI had a positive impact on avoiding and third party interventions, and a negative effect on the cooperating strategy. Hence, we received only partial support for *H5*. For group disparity in cultural values, only one relation was significant: disparity in HC impacted positively on third party. Therefore, no statistically significant results were found to support the claims of this hypothesis.

Discussion

This paper set out to investigate the impact of various types of group diversity in individualism-collectivism on conflict resolution styles in groups. The main contributions of the study are the following: we extended the scope of knowledge by moving from the individual to the group level of analysis. In addition, we used group diversity indicators to identify group configurations that impact on conflict resolution strategies. The discussion is organized around two points:

- (1) How the general level of individualism-collectivism in a group predicts conflict resolution strategies?
- (2) How the two group configurations (variety and disparity) of individualism-collectivism affect the conflict resolution styles?

Level of conflict

We found that the general level of relationship conflict had a very strong positive impact on three conflict resolution styles: avoiding, contending, and third party. In this study, we controlled for conflict intensity, whereas previous studies neglected to do this. Since individualists are known to exhibit and tolerate higher level of conflicts than collectivists (Earley and Gibson, 1998), it might be the case that the results of previous research might reflect an effect of conflict intensity, and not a conflict resolution preference. Nevertheless, this assumption requires further investigation.

General level of individualism-collectivism

Only two of the four types of individualism-collectivism had a significant effect on conflict resolution styles: HC and VI. Vertical individualism had a positive impact on avoiding, while HC impacted positively on cooperative, and negatively on avoiding and contending styles. Previous research consistently showed a positive impact of HC on cooperative strategies (Kaushal and Kwantes, 2006; Komarraju *et al.*, 2008). So far,

there was no evidence with respect to the influence on avoiding and contending. Only Kaushal and Kwantes (2006) posited a negative effect of HC on contending strategies.

The results obtained here are in line with Triandis's conceptualization of individualism and collectivism using the interdependent-independent axis, as well as with Rahim's conceptualization of conflict resolution styles using the concern for self vs concern for others. Both cooperative strategies and HC reflect an assumption of interdependence/high concern for others. On the other hand, the avoiding and contending strategies imply a low concern for others, which is incompatible with the interdependence assumption. Based on the same logic, VI is supposed to impact positively on both contending and avoiding styles. Previous research supports predominantly the impact on contending (Kaushal and Kwantes, 2006; Komarraju *et al.*, 2008), although Kaushal and Kwantes (2006) found a significant impact on avoiding, too. In our study, the only significant predictor of contending was HC (negative), while VI only impacted the avoiding style.

Group diversity on the individualism-collectivism dimension

Group variety. There were two aspects we were interested in with respect to the impact of group variety. First, in line with Harrison and Klein (2007) and Earley and Mosakowski (2000), we hypothesized that variety would have a positive effect on the use of cooperative strategies. Second, we wanted to explore the preferred conflict resolution strategies for each type of variety.

We received mixed evidence on the beneficial impact of variety on cooperative conflict resolution styles. While variety on vertical and HC, as well as horizontal individualism had a positive impact on cooperative strategies, variety on VI did not. Group configurations with small and consistent differences in cultural values among the group members are conducive for cooperative behaviors because the cultural differences between the members are easier to bridge (Earley and Mosakowski, 2000). In groups with maximum variety, everyone is different from the other, hence members are more open and receptive to one another's views (Harrison and Klein, 2007). Members in such groups engage in extensive communication and explore the individual differences in a constructive way. This open attitude, along with the enriched behavioural repertoire in solving conflicts, increases the chance of adopting cooperative conflict resolution strategies in groups with a high variety of cultural values. Ultimately, fostered cooperation within groups and building a shared group identity that overcomes individual differences is beneficial for task-related performance (van Dick *et al.*, 2009).

For the preferred conflict resolution styles of various types of variety, VI was consistently the strongest predictor. Similarity (i.e. low variety) with respect to VI impacts negatively on avoiding and third-party strategies, and positively on cooperative ones. Also, VI is the only type of similarity that positively impacts on cooperative strategies. This may be because individualists have clear ideas about the means and the ends in conflict resolution, preferring to have control over the process (Earley and Gibson, 1998). Even if each individual member desires to be the best, group functioning is the means of achieving that. Should the group fail, they as individual would fail as well. Therefore, although instrumental, cooperation becomes a primary interest, and this vision is shared by all members. In other words, an instrumental view on conflict and cooperation, combined with high commitment to the group task (the desire of vertical individualists to be "the best") is a driver for group cooperation. Ting-Toomey (1985)

also pointed that individualists are more likely to perceive conflict, too, as instrumental, marked by opposing practices or goals. Also, they possess a confrontational, direct attitude toward conflict. This would explain why these groups are not using avoiding and third party strategies. Because they have a clear goal of using the group to achieve their individual purposes, the best way of resolving conflicts is for them a cooperative style.

Group disparity. On HC has a positive impact on third party resolution. Third party resolutions are specific for collectivists (Earley and Gibson, 1998), because of their focus on the ends instead of process control. We did not obtain a significant influence of either horizontal or vertical collectivism as general orientations of the group (i.e. group mean score) on third-party resolutions. However, disparity on HC has a strong positive effect on it. This looks like a strong case for minority influence: if a group member is a horizontal collectivist, he can convince the other team-mates to adopt third-party resolution to solve a conflict. Minority influence, could also explain why disparity on any of the four forms of individualism-collectivism did not bear a consistent and significant influence on cooperative strategies (as suggested by *H6*). Minority influence can make the group adopt a preferred conflict resolution style (e.g. HC – avoiding and third party). Still, because of the power struggles inherent to any case of disparity, it will not induce cooperative conflict resolution strategies.

Implications of the findings

The results have several theoretical and practical implications. First, our data showed that predictions based on the mean level of individualism-collectivism for each group are poorer and sometimes contrasting with those based on diversity indices. This implies that results obtained at the individual level of analysis cannot be “freely imported” to the group level and that group compositional configurations should be taken into account when exploring the impact of cultural values on conflict management strategies. Our results show that small and consistent within-group differences in cultural values is in general conducive for cooperation, yet VI seems to give the opposite pattern of results. Next to the inconsistent pattern of results for group disparity in cultural values, this suggests that several mechanisms are at play in explaining the impact of compositional configurations on conflict management strategies. The systemic explanation that small inter-individual differences are easier to bridge seems to hold in general, yet other mechanisms like minority influence could play an important role as well. Moreover, research on cultural values and conflict management in groups could benefit from integrating research on leader’s preferred conflict management strategy (Yukkl *et al.*, 2009). Interactions between leadership and cultural values could yield interesting results on when and how minority influence mechanisms are at play. Also, further research on group compositional configurations with respect to individualism-collectivism is strongly needed. It could be that cultural values are interdependent in impacting on conflict management strategies. Different patterns of cultural values are likely to co-occur at the intra-individual as well as within-group levels. Therefore, the particular case of cultural values acting as moderators for cultural values should be explored in multi-level models since intra-individual and within-group configurations in cultural values could yield distinctive effects on conflict management strategies. Second, our research shows again that different types of diversity have a different impact on group functioning (Curşeu *et al.*, 2007; Harrison and Klein, 2007). In this research, we chose to

use an existing taxonomy (Harrison and Klein, 2007) for cross-cultural groups. By using this taxonomy, we were able to advance hypotheses with respect to the mechanisms underlying the influence of individualism-collectivism in group conflict resolution strategies.

In terms of practical implications, the most important results of this study are in line with the ones reported by Earley and Mosakowski (2000), and thus have important consequences for cooperation management in multicultural groups. Managers should be aware that group members viewing themselves as unequal to and independent from others (scoring high on VI) are more likely to cooperate with people holding similar cultural values, while in general, small and consistent within group differences in the other three dimensions presented here are conducive for cooperation. Another team configuration beneficial for cooperation is the homogeneity with respect to HC. In other words, groups where all members feel they are equal and connected are very likely to adopt cooperation as a dominant conflict management strategy. Nevertheless, cultural values will most likely interact with other diversity dimensions as well, and thus managers should be aware of these complex interactions and their impact on cooperation when designing teams. Similar with previous research (van Dick *et al.*, 2009), our study shows that managers should focus on building a shared group identity that bridges across individual differences within groups.

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Further reading

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