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USING SELF-CATEGORIZATION THEORY TO UNDERSTAND RELATIONAL DEMOGRAPHY–BASED VARIATIONS IN PEOPLE'S RESPONSIVENESS TO ORGANIZATIONAL CULTURE

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We investigated how demographic differences affected people's responses to organizational cues to cooperate with their coworkers. Officers from a large financial services firm who were more demographically different from their coworkers behaved more cooperatively when their business unit emphasized collectivistic rather than individualistic cultural values. Our results imply that understanding and managing cooperative behavior requires considering the interplay between relational demography and organizational culture.

Driven by increasing technological complexity and global competition, organizations are attempting to improve internal coordination and reduce redundancies by encouraging employees to work collaboratively (e.g., Townsend, DeMarie, & Hendrickson, 1998). Effective individual contributions are increasingly defined by how well employees can exchange knowledge and information and offer distinct competencies for completing group tasks (e.g., Griffith & Neale, 2001; King, 1999). Unfortunately, many organizations are failing to realize the intended structural and procedural gains of these efforts (Hackman, 1998; Robbins & Finley, 2000). Even given organizing around teams, implementing evaluation systems that emphasize teamwork, and increasing the value placed on collective objectives—practices that should set the stage for employees to cooperate—some may resist cooperating and instead, pursue their own self-interested goals (e.g., Kramer, 1989; Milgrom & Roberts, 1988).

Prior research has shown that individuals' responsiveness to contextual cues to cooperate depends on both person and situation factors. For example, Chatman and Barsade (1995) examined matches between personal dispositions and cultural values to explain differences in cooperative behavior. They found that people who were more dispositionally cooperative were more responsive to situational norms for cooperation than those who were less cooperative. In the current study, we focused not on *content* matches between personal and situational factors but, rather, on *social categorization processes* elicited by the combination of a person's demographic similarity or dissimilarity to others in his or her business unit and that business unit's organizational culture, to explain variations in cooperative behavior. We draw on organizational culture research showing that emphasizing group-level values increases the salience of common group memberships. At the individual level, we draw on studies that show that demographic heterogeneity distracts work group members' attention away from common group memberships. We use these approaches together to model how the interplay of demographic similarity between coworkers and a work group's cultural cues to cooperate may explain differences in cooperative behavior among individuals. Specifically, we develop the hypothesis that, on the basis of similarity to or difference from their coworkers, some people may be highly responsive to cultural cues and thus readily adapt to an organization's emphasis on cooperative behavior, while others may be less responsive to such cues.

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DEMOGRAPHIC DIFFERENCES, SOCIAL CATEGORIZATION, AND COOPERATIVE BEHAVIOR

People use demographic differences, particularly those that are visible, to categorize one another (e.g., Harrison, Price, & Bell, 1998). People categorize demographically different people as out-group members and similar people as in-group members and also vary their cooperation depending on these categorizations (Brewer, 1979). For example, Zenger and Lawrence (1989) found that the more an engineer's age and tenure differed from those of others in his or her project team, the less the engineer communicated with these colleagues. Tsui, Egan, and O'Reilly (1992) found that visible demographic differences in age, sex, and race influenced people's commitment to team and organizational goals and objectives.

Given an established link between in-group categorization and associated cooperative behavior, the question then becomes, What causes work group membership to be more salient than demographic group differences? One possible clue emerged from a business simulation study in which subjects were more likely to view organizational membership as salient and categorize even demographically different coworkers as in-group members when their organization's culture emphasized collective efforts and interchangeable interests (Chatman, Polzer, Barsade, & Neale, 1998). Further, following from the principle of functional antagonism, in which as one category becomes more salient, others become less salient (Turner, Oakes, Haslam, & McGarty, 1994), the more subjects focused on organizational membership, the less they focused on categories that differentiated them, such as demographic differences. This finding suggests that an organization's or business unit's culture can influence members' cooperation in demographically diverse groups by increasing the salience of common group membership.

Organizational culture has been viewed as a form of social control that operates when members of a group or organization share values and expectations about appropriate behavior (O'Reilly & Chatman, 1996). Members who uphold strong cultural values are rewarded with their colleagues' acceptance; those who deviate from such values are rejected. The extent to which organizations or groups emphasize independence or interdependence is central to characterizing how work is conducted (e.g., Earley, 1994). Those emphasizing independence, or individualism, place a high priority on pursuing and maximizing individuals' goals; members are rewarded for and derive satisfaction from performance based on their own achievements. Those emphasizing interdependence, or collectivism, place a high priority on collective goals and action; members are rewarded for and derive satisfaction from collective accomplishments and cooperative behavior (e.g., Hofstede, Neuijen, Ohayv, & Sanders, 1990; Wagner & Moch, 1986).

One simple expectation is that people are more likely to cooperate in collective cultures than in those emphasizing individual independence. However, the effects of cultural cues to cooperate are likely to influence individuals differently, suggesting a more complex phenomenon (e.g., Chatman & Barsade, 1995). Specifically, people who are demographically similar to other organizational group members already categorize one another as in-group members, so the effect of making their shared organizational membership salient is somewhat redundant with the effect of their demographic similarity; they are likely to categorize the same organizational members as in their in-groups regardless of whether they use organizational or demographic attributes as the basis for categorization. For demographically different people, however, categorizing coworkers as in a common in-group on the basis of organizational membership may displace the process of categorizing these same people into out-groups based on demographic differences (Gaertner, Mann, Murrell, & Dovidio, 1989). Cultural inducements to cooperate will shift different people's focus from categorizing others into out-groups based on demographic differences to categorizing them into in-groups based on shared organizational membership. Thus, demographically different people are likely to be more responsive to organizational cues to cooperate, cooperating more when collective goals are emphasized and less when individual goals are emphasized. Therefore, we predict that relational demography and organizational culture will interact in such a way that individuals who are demographically different from their coworkers will be more cooperative in organizational cultures that emphasize collectivism than in cultures that emphasize individualism, and those who are demographically similar will exhibit similar levels of cooperation in both collectivist and individualistic cultures.

METHODS

Research Site, Design, and Data Sources

We conducted this study in ten business units of the North American division of a large multinational financial services firm headquartered in the United States. The company employs over 80,000

people and operates in over 90 countries. All officers from these business units, 91 percent of whom had the title of vice president or a higher title, were asked to participate in this study. Of the 276 managers to whom our surveys were distributed, 238 participated in the study (the overall participation rate was 86 percent).[1] We randomly assigned participants to serve as respondents *or* organizational informants, administering distinct surveys to each. We tested our hypothesis using data provided by the s*urvey respondents*. One hundred eighty of the 210 to whom we sent surveys returned them completed, yielding a respondent response rate of 86 percent (52 of the 180 who returned surveys were subsequently dropped owing to missing data, as described further below, yielding a final, usable sample of 128 respondents). *Organizational informants* provided information about each business unit's cultural norms (58 of 66 to whom we sent the culture assessment participated; the response rate was 88 percent). The business units included in the study ranged in size from 9 to 58 officers ($\bar{x}$ = 28.32, s.d. = 13.91) and conducted work in global finance, generating revenue for the company through sales and trading, loan structuring, and credit analysis, and providing investment advice and other related services to corporate clients.

Data sources and survey administration. We collected data for this study from four primary sources: (1) a culture assessment instrument administered to the randomly selected informants, (2) a survey that we developed and respondents completed, (3) company personnel data, including performance evaluations and information on salary increases, departure, and demographic characteristics, and (4) cross-evaluations provided by managers, peers, and subordinates, which served as one of our primary dependent variable measures of cooperative behavior.[2] A *cross-evaluation* consists of aggregated performance evaluations of a focal individual provided by multiple coworkers, typically the focal individual's bosses, peers, and subordinates. The surveys and culture instrument were administered to respondents and informants, respectively, approximately three months before the company collected cross-evaluations and traditional performance evaluations, both of which were used as our dependent variables (see below for more detail). We mailed surveys and culture instruments to the heads of participating business units, and they distributed the relevant materials to each of their officers. Participants returned materials directly to us in preaddressed envelopes and were assured that their responses would be completely confidential and would not be identified to their employer. We obtained personnel and cross-evaluation data from human resource representatives.

Survey respondents. The survey respondents were, on average, 42.77 years old (s.d. = 7.77) and had worked for the company for 10.18 years (s.d. = 7.46). Eighteen percent were women, 11 percent were people of color (5.8% Asian-American, 2.3% Hispanic, and 2.9% African-American), and 11 percent were citizens of countries other than the United States, with the highest proportion being citizens of Great Britain (1.8%).

Organizational informants. Approximately 23 percent of the people from whom we collected data for this study were randomly selected to act as organizational informants, reporting on their business unit's cultural norms. Informants averaged 41.67 years old (s.d. = 7.28), and their average tenure with the company was 10.63 years (s.d. = 7.43). Thirty-six percent were female; 13 percent were people of color (7.5% Asian-American, 3.0% Hispanic, and 3.0% African American); and 6 percent were citizens of countries other than the United States, with the highest proportion, again, being citizens of Great Britain (3%).

Independent Variables

Individualistic/collectivistic business-unit culture. We used the Organizational Culture Profile (OCP; O'Reilly, Chatman, & Caldwell, 1991) to assess the extent to which each business unit emphasized collectivism or individualism. The OCP is a reliable and valid Q-sort instrument containing 54 values representing seven cultural dimensions. Informants were asked to sort 54 items describing different cultural values into nine categories (ranging from 9, "most characteristic of my business unit's culture," to 1, "most uncharacteristic of my business unit's culture"). Informants sorted the items according to a forced distribution of categories that allowed for more values in the middle,

[1] To insure that no sample biases existed, we compared those who participated in the study with those who were asked to participate but did not on a number of relevant dimensions. These included dichotomous categories for sex, race, and nationality, continuous measures from company records for tenure and job level, and a measure of cooperative behavior (described more fully below). We found no significant differences between participants and nonparticipants on any of these dimensions.

[2] As mentioned above, we excluded 52 respondents from our analyses because they had missing data, primarily gaps in their company-provided personnel data; these excluded respondents who did not vary in any systematic ways from our usable sample on any study variable.

more neutral, categories, and for fewer at the extreme ends.

We used seven items from the OCP to assess the individualism/collectivism dimension: team-oriented, collaborative, people-oriented, individually demanding (reverse-scored), supportive, fair, and competitive (reverse-scored). We selected these on the basis of our factor analysis of the 54 items and on past research utilizing a similar item set to indicate collectivism (O'Reilly et al., 1991). The Cronbach's alpha for the reliability of the individualism/collectivism scale was .70. Further, on each dimension, the level of agreement among informants in the same business units (the interrater reliability) was high (within-unit r_{wg} = .78–.92; average r_{wg} = .86). We therefore aggregated the culture items to the business-unit level by first averaging the ratings for the seven items assigned by each participant and then averaging these average ratings across all participants within each business unit (James, Demaree, & Wolf, 1984). Before assigning the resulting value to each participant within each business unit, we calculated within-unit intraclass correlations in our dependent variables to test for the possibility of group-level effects interfering with the independence of our individual-level outcome variables (Kenny & LaVoie, 1985). Neither intraclass correlation was significant: for cooperation (subordinate and peer cross evaluation), the intraclass correlation was .01, and for cooperation (managerial ratings of all participants), it was .00, suggesting that individual data could appropriately be interpreted at the individual level. We therefore assigned the resulting business-unit average value for collectivism of cultural norms to each participant within each business unit.

Relational demography. Relational demography refers to the difference between an individual and all other individuals in a business unit on various demographic attributes. Past research has established that demographic differences based on visible and enduring characteristics such as sex or race have consequences (e.g., Pelled, 1996). We based our relational demography variable on three such characteristics: sex, race, and nationality.

Respondents' relevant reference group for our relational demography calculations was their business unit, as it was more permanent than their "deal teams" (each officer was simultaneously a member of multiple teams conducting various transactions), and more meaningful than their cross-evaluation groups, which were, by design, never assembled. To reflect respondents' actual work experience of being similar to or different from their coworkers, we included all members of an individual's business unit (respondents, informants, and nonrespondents) in the relational demography calculations.

We calculated relational demography as Euclidian distances: $[(1/n)\Sigma(x_i - x_j)^2]^{1/2}$, where x_i was a focal individual's score on a dimension (e.g., 0 = "male," 1 = "female"); x_j was each other focal individual's network member's score on that dimension; and n was the number of members in the focal individual's network. First, we calculated the relational demography score for each characteristic separately by comparing each respondent's sex, race, and nationality with those of every other individual in the business unit. For example, since multiple categories for nationality existed in this sample, an individual from Great Britain was scored as different from a coworker from the United States, and as different from a coworker from India.

Social categorization theory focused us on the existence of differences, per se, rather than their content (which has been the focus in prior demography research [e.g., Riordan & Shore, 1997]). In this sense, personal demographic differences are best interpreted, at least in relational demography terms, as an amalgamation (e.g., Wayne & Liden, 1995). Therefore, we grouped differences by summing the results for sex, race, and nationality to get one relational demography score for each respondent and standardized that amalgamation. The higher the resulting relational demography score, the more different the respondent was from coworkers within his or her business unit in terms of demographic characteristics.

Dependent Variables

Cooperative behavior. We developed two measures of cooperative behavior. The first applied to four business units in which 84 survey respondents participated in a cross-evaluation program being piloted by the company. The program included training in the skills required to conduct cross-evaluations and on the logic behind them, and collection of 10–20 subordinates', peers', and superiors' evaluations of each participant. To prevent collusion and socially desirable responding, focal individuals had limited input into selecting their evaluators. Each focal individual's supervisor and human resource representative chose the final set of evaluators to represent colleagues who had significant interaction and task interdependencies with the focal individual, multiple job levels (e.g., peers, subordinates, managers), and all relevant job families, functions, and geographies. The list of evaluators was confidential—that is, focal individuals did not know who actually rated them (aside from their direct supervisor), and they received

aggregated feedback at the end of the cross-evaluation cycle.

The measure we used consisted of cross-evaluations from each respondent's peers and subordinates. Cross-evaluators rated respondents on a teamwork scale ranging from 0 ("unsatisfactory") to 3 ("exceptional"). Descriptions on the rating form included "supports and gives credit to team members," "communicates and responds appropriately with others," and "will subordinate his/her views for the benefit of the group." Each respondent was evaluated by an average of 13.14 peers and subordinates (s.d. = 4.81). We then averaged these ratings for each focal respondent (average r_{wg} = .91; $\bar{x}$ = 2.01, s.d. = 0.33). To insure that there were no systematic differences among respondents whose business units were and were not participating in the cross-evaluation program, we compared the two groups. No statistically significant differences were found among them on sex, race, nationality, tenure, job level (the measurement of each of these variables is described in the control variable section below), or levels of cooperative behavior. Nonetheless, we also controlled for participation in the cross-evaluation program in our regression equations.

Yammarino and Waldman (1993) showed that manager and subordinate ratings of a focal individual can differ. Our second measure of cooperative behavior therefore consisted exclusively of managers' evaluations and included respondents from our entire sample, not just those participating in the cross-evaluation pilot program. We constructed this measure either from items pertaining to cooperative behavior on respondents' most recent annual performance evaluation (for business units not using cross-evaluations), or from their supervisor's teamwork rating of them on the cross-evaluation form (for those participating in the cross-evaluation program). Since performance evaluation forms and rating scales varied across business units not using cross evaluations, we identified and grouped ratings pertaining to cooperative behavior within each evaluation form using items such as "collaboration," "consensus building," and "teamwork." We standardized performance evaluation forms that used numerical ratings of cooperative behavior (n = 16 respondents) using a four-point Likert-type rating (0, "unsatisfactory," to 3,"exceptional"). For performance ratings that did not include numerical ratings (n = 36 respondents), three coders blind to respondents and their business-unit affiliation independently rated the qualitative comments relating to cooperation with others on a scale of 0 ("low") to 2 ("high"). The resulting interrater reliability was .89. We then standardized the three types of data separately and assigned the appropriate standardized score to each respondent for whom one was available. This process generated cooperative behavior ratings by managers for 131 respondents ($\bar{x}$ = 0.00, s.d. = 0.99).

To assess the predictive validity of cooperative behavior in this organization, we related the two cooperative behavior measures to three separate measures of individual effectiveness. Using data provided by the company, we measured increases in compensation from the year in which we collected the survey data to the following year. We first summed each respondent's annual salary and bonus data for the year in which we collected survey data and the subsequent year and calculated compensation increases as the difference in compensation from the first year to the next. Our second measure of individual effectiveness was likelihood of involuntary departure from the organization. The company coded whether employees left voluntarily or whether the departure was, instead, initiated by the company, and we expected involuntary departure to negatively relate to cooperative behavior. Finally, we considered managers' single-item ratings of their employees overall annual performance as a third measure of individual effectiveness (1, "did not meet expectations"; 2, "met expectations"; 3, "exceeded expectations"). We conducted regression analyses and found that: (1) with job level, tenure, and promotion in the prior year (0 = "not promoted," 1 = "promoted") controlled, people who received higher cooperative behavior ratings earned marginally higher year-to-year increases in compensation (β = 0.09, $p < .10$); (2) with job level and tenure controlled, people who received higher cooperative behavior ratings were less likely to be involuntarily terminated from the organization (logistic regression: $b = -0.56$, $p < .05$); and (3) with controls for job level, tenure, prior year performance, and the extent to which respondents felt their performance evaluations were tied to their compensation (a two-item, self-reported variable), people who received higher cooperative behavior ratings were also more likely to receive higher performance ratings from their managers (β = 0.12, $p < .05$). Taken together, these analyses validated our understanding that cooperative behavior, as measured, was important and consequential within this organization.

[3] The range and distribution of this measure of cooperation (and the results reported later) were no different if manager ratings were included.

Control Variables

We created dichotomous dummy variables and controlled for nationality (1, "country other than U.S."; 0, "U.S."), race (1, "not Caucasian"; 0, "Caucasian"), and sex (1, "female"; 0, "male") in our hypothesis tests as these variables could affect a person's propensity to behave cooperatively. For example, people from some races may be more cooperative than those from other races (Cox, Lobel, & McLeod, 1991). Because job responsibilities can affect opportunities to demonstrate cooperative behavior, we also controlled for job family and job level using the company's existing categories. We created dummy variables for each of the company's four job families (product, origination, and sales, leaving risk management as the unassigned dummy code), and we included job level as a continuous variable based on the company's assigned values, which ranged from 1 to 8 ($\bar{x}$ = 5.61; s.d. = 1.03). Additionally, we controlled for tenure (in years) and self-reported intent to remain, because self-categorization based on tenure and intent to stay may affect commitment to an organization (e.g., McCain, O'Reilly, & Pfeffer, 1983). For the latter, respondents indicated their extent of agreement with the statement, "I have thought seriously about changing business units since beginning to work in this unit" (1, "strongly disagree"; 7, "strongly agree"), We also controlled for respondents' perceptions of their business unit's culture strength since, independent of content, stronger cultures might affect behavior more than weaker cultures (O'Reilly & Chatman, 1996). We calculated this as the average of two Likert-type ratings of how "widely shared" and "strongly held" the values of their business unit were (α = .83). Finally, as mentioned above, we controlled for business units' participation in the cross-evaluation program with a dummy variable (1, "business unit participated"; 0, "business unit did not participate").

RESULTS

Descriptive statistics and correlations among the study variables appear in Table 1. We used hierarchical regression analyses to test our hypothesis, entering the control variables in the first block, relational demography in the second block, busi-

TABLE 1
Means, Standard Deviations; and Correlation among Study Variables

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Sex																
Male	82.22%															
Female	17.78%															
2. Nationality			−.07													
U.S.	89.44%															
Non-U.S.	10.56%															
3. Race			−.07	.24*												
White	89.39%															
Nonwhite	10.61%															
4. Job level	5.61	1.03	−.17*	−.08	−.20*											
5. Tenure	10.18	7.47	−.05	−.15*	−.10	.33*										
6. Product job family	25.00%		−.13	.14	.09	.08	.17*									
7. Origination job family	22.78%		−.08	−.14	−.19*	.29*	.07	−.31*								
8. Sales and trading job family	37.22%		.09	.04	.15*	−.30*	−.27*	−.45*	−.42*							
9. Strength of business-unit culture	3.24	0.88	−.08	−.09	−.07	.26*	.07	−.01	.10*	.02						
10. Intent to remain in unit	3.30	2.11	−.07	.06	.00	.03	.11	.01	.13	−.22*	−.35*					
11. Cross-evaluation group			−.14	.00	.04	.22*	.18*	.24*	−.09	−.14	.08	−.10				
Control	47.78%															
Cross-evaluated	52.22%															
12. Cultural collectivism	4.76	0.31	−.03	.09	.07	−.08	.00	−.01	−.10	.17*	.19*	−.12	−.01			
13. Relational demography	−0.09	0.98	.31*	.58*	.53*	−.26*	−.23*	−.16*	−.21*	.32*	−.24*	.04	−.02	.07		
14. Cooperation[a]	1.98	0.36	−.02	−.02	.11	.08	−.02	−.05	.02	.01	.16	−.27*	n.a.	−.07	−.03	
15. Cooperation[b]	−0.07	1.00	.02	−.08*	−.10	−.02	−.11	.10	−.04	−.14	.01	−.12	.03	−.17*	−.16	.40*

[a] Cross-evaluated group only.
[b] All participants.
* $p < .05$

ness-unit culture in the third block, and the predicted interaction in the fourth block. We regressed these variables on our different measures of cooperation in two separate models and present them in Table 2.

To analyze the hypothesized interactive effects on the two cooperative behavior measures, we first determined whether the interaction coefficient was significant in the regression equation, signaling meaningful divergence between demographically similar people and demographically different people on cooperative behavior across cultural conditions. Specifically, we predicted that demographically different coworkers would be more cooperative when their business units emphasized collectivism over individualism, while demographically similar coworkers would be similarly cooperative regardless of the cultural emphasis in their business unit's culture. Model 1 shows a significant interaction between relational demography and culture ($\beta = 9.90$, $p < .01$), as does model 2 ($\beta = 4.67$, $p < .05$), suggesting that the effects of culture on cooperative behavior changes as a function of relational demography.

TABLE 2
Results of Hierarchical Linear Regression Analysis Predicting Cooperative Behavior from Relational Demography and Business-Unit Culture[a]

Variables	Model 1: Cross-Evaluation by Peers and Subordinates	Model 2: Respondents' Manager's Ratings
1. Control		
Sex	−0.02	0.02
Nationality	−0.09	−0.16
Race	0.03	−0.15
Job level	0.01	−0.02
Tenure	0.01	−0.17
Product job family	−0.14	−0.05
Origination job family	−0.11	−0.16
Sales and trading job family	−0.10	−0.28*
Strength of business-unit culture	0.06	−0.10
Intent to remain in business unit	−0.21	−0.20
Participation in cross-evaluation pilot	n.a.	−0.02
ΔR^2	0.08	0.13
2. Relational demography	−0.03	−0.11
ΔR^2	0.00	0.00
3. Cultural collectivism	−0.08	−0.16
ΔR^2	0.01	0.02
4. Relational demography × culture	9.90**	4.67*
ΔR^2	0.22	0.05
Full-equation F	2.28*	2.03*
Full-equation R^2	0.30	0.20
Adjusted R^2	0.17	0.10
Degrees of freedom	13, 71	14, 114

[a] Entries are standardized coefficients.
* $p < .05$
** $p < .01$
All two-tailed tests.

To illustrate the form of the interactions, we calculated mean differences and conducted post hoc tests, choosing the somewhat arbitrary, but conventional, points of one standard deviation above and below the means. Specifically, we compared the levels of cooperative behavior across cultural conditions for people who were more similar (more than one standard deviation below the relational demography mean) and for those who were more different (one standard deviation above the relational demography mean) (Jaccard, Turrisi, & Wan, 1990). Figure 1 illustrates the form of the interaction in model 1.

As predicted, our measure of peer and subordinate ratings of cooperative behavior was significantly higher for relationally different respondents working in units emphasizing collectivistic values than it was for those working in individualistic units ($t = 4.07$, $p < .01$). A result that was not hypothesized also emerged: Cooperative behavior among more similar individuals also varied according to the cultural norms of their business units; surprisingly, they behaved *less* cooperatively in business units emphasizing collectivistic rather than individualistic cultural values ($t = 2.73$, $p < .01$). Though we did not predict this difference in similar people's behavior, the form of the predicted interaction was consistent with our hypothesis in that the magnitude of the difference between cooperative behavior in more and less collectivistic business units was greater for demographically different people than for demographically similar people. The significant interaction of relational demography and culture from model 2, which is illustrated in Figure 2, revealed that relationally different people's cooperation, as rated by their managers, was marginally significantly higher in collectivistic business-unit cultures than in units emphasizing individualistic values ($t = 1.59$, $p < .10$), while relationally similar people's cooperation did not vary significantly across the two types of cultures ($t = 0.17$, n.s.), as predicted. Thus, in both of the interaction models analyzed, we found support for our prediction that demographically different individuals' cooperative behavior was higher in collectivistic cultures and was more different across cultural conditions than that of demographically similar people.

FIGURE 1
Interaction of Relational Demography and Cultural Collectivism on Peer and Subordinate Ratings of Respondents' Cooperative Behavior

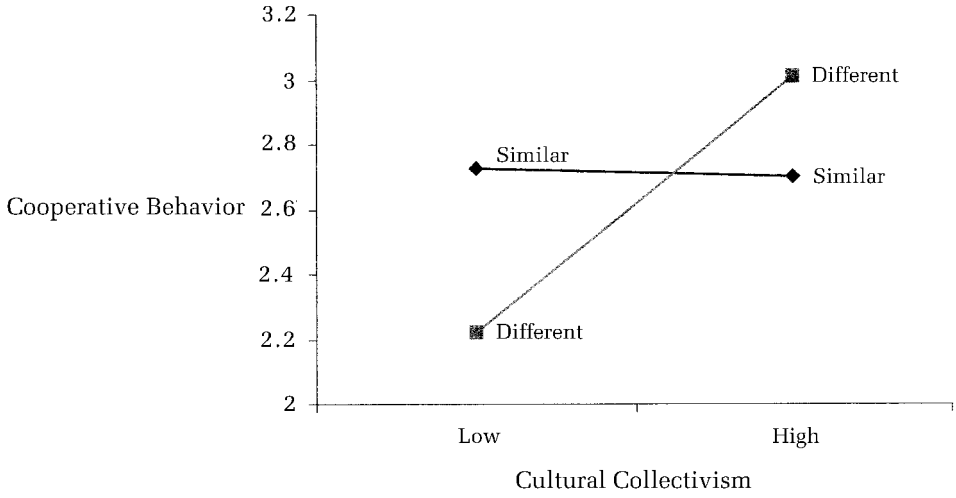
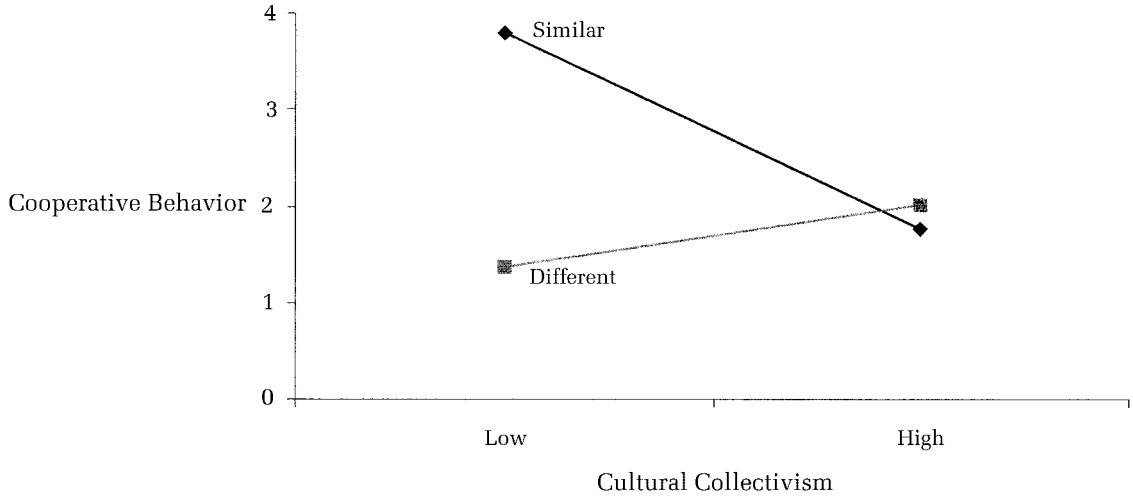


FIGURE 2
Interaction of Relational Demography and Cultural Collectivism on Managers' Ratings of Respondents' Cooperative Behavior



DISCUSSION

Cooperation among employees is increasingly important to organizations but has proven to be somewhat elusive. Results from our field study suggest that it is the interplay between demographic characteristics as compared to coworkers', on the one hand, and organizational culture, on the other, that determines a person's cooperative behavior. Our research model and results contrast with research that treats cooperation as either primarily situationally induced (e.g., Fama, 1980; Petersen, 1992), or as induced through personal characteristics (e.g., Gabriel & Gardner, 1999), or as equally or additively influenced by person and situation factors (e.g., Earley, 1993). Our model and results thus suggest a more complex model of cooperative behavior in organizations.

Specifically, we found that bank officers' demographic differences from their business-unit colleagues influenced responses to their units' cultural emphases on individualism or collectivism. Different people were significantly less cooperative in business units emphasizing individualistic rather than collectivistic cultural values, according to coworkers, subordinates, and managers, while relationally similar people's cooperative behavior was unchanged or lower in business units emphasizing collectivism. Excluding the latter finding for

the moment, this pattern of results suggests that demographic differences remain salient categories unless an organizational culture emphasizes commonalities among members' interests. And, when demographic differences are salient, people may focus on individual goals rather than on collective (business-unit) goals (Chatman et al., 1998).

These results, therefore, contribute to social categorization theory by suggesting that the extent to which a person is demographically similar or different from coworkers and an organization's cultural emphasis not only influence social categorization processes, but also people's resulting cooperative behavior. Thus, increasing focus on organizational membership may counteract the dysfunctional consequences of focusing on demographic differences, which are typically less relevant to work.

Our results may also explain why demographically different people have fared poorly in organizations and teams (e.g., Flynn, Chatman, & Spataro, 2001; Williams & O'Reilly, 1998). If organizations fail to incorporate inducements to cooperate, cooperation among similar colleagues may still, usefully, arise spontaneously on the basis of demographically determined in-groups. Different people in such contexts are, however, less likely to exhibit and benefit from such cooperation among colleagues who are more similar to each other (e.g., Ibarra, 1995).

Though emerging in only one of two significant interactions, our finding that similar people were, surprisingly, less cooperative in collectivistic than in individualistic business-unit cultures suggests that the social categorization process may not actually be fully redundant with existing work groups for these people. It may be interesting to explore whether similar people in collectivistic cultures feel that they no longer determine their in-group and, instead, that the organization imposes it. McPherson and Smith-Lovin (1987) distinguished between "induced homophily" and "choice homophily." They defined *induced homophily* as ties emerging between similar others because of constraints on available others imposed by the composition of a group or organization. By contrast, *choice homophily* is ties among similar others occurring because of unconstrained choices among individuals, reflecting preferences or individual biases. To the extent that similar people feel that homophily is induced, they may react by reducing their willingness to cooperate. Future research might test this possibility directly.

Finally, the link between relational demography and culture may transcend any particular content dimension of culture, applying to a person's adherence to other cultural values, such as a results orientation or a detail orientation. Above and beyond our findings for inciting cooperation within organizations, the results of this study suggest that requiring or expecting behavioral adherence to cultural values of all types may vary for demographically similar and different people. The greater variation in cooperative behavior for relationally different than for similar people may indicate that different people may be more motivated to fit in and be accepted within their business units. Since they cannot automatically be categorized as in-group members by virtue of their demographic attributes, they are more likely than are demographically similar people to try to attain in-group status by adjusting their behavior to fit their organization's cultural values. Those who are already demographically similar may not need to adhere to cultural values as closely to be accepted in an organization, as they can use their demographic similarity as a foundation for in-group status. The implications of this possibility for demographically different people, in particular, is that their behavior may be more constrained, that is, more dictated by organizational norms. Although this constraint may be advantageous in some ways (for instance, greater behavioral adherence to organizational culture may result in performance benefits for the organization), if there is inequity in the extent to which similar and different people are conforming to cultural ideals, the potential benefits of diversity, such as increased divergent thinking, may fail to materialize. As Kanter's (1977) classic research showed, women, who were more demographically different by virtue of being in the minority in their organization, stifled their work contributions in order to fit in. Future research should, therefore, examine the extent to which demographically similar and different people are more or less likely to adhere to other of their organization's cultural values, beyond cooperation.

Limitations

Though conducting this study in a field setting allowed us to observe naturally occurring variation in concepts that have previously been manipulated in artificial settings, it also limited some aspects of the design and data. First, we traded our ability to generalize these findings to other organizations for the control we gained over industry- and organization-level variations by focusing on multiple business units within a single organization. Our sample also included relatively small numbers of business units and individuals within them and, unlike in laboratory research, the business units were not perfectly matched or randomly assigned to culture

conditions. Thus, we cannot rule out alternate explanations for results as completely as can be done in laboratory research. Further, it would be useful to compare our perceptual measures of cooperation with actual behavioral evidence and to use uniform measures in another sample in which such measures were available. Future research might also examine person and organization constructs longitudinally, uncovering the process by which they contribute to cooperative behavior.

Practical Implications

Our study suggests a number of managerial implications. First, understanding cooperative behavior requires considering the interactions among person and organizational characteristics, rather than considering either in isolation. Indeed, developing and maintaining employees' cooperation may be difficult, in part because managers have not fully appreciated the interactive nature of the personal and situational factors influencing such behavior. Second, demographic differences positively influence people's responsiveness to cues to cooperate in organizations. Managers might, therefore, differentiate among jobs that do and do not benefit from incumbents who are responsive to cues to cooperate. Within financial services organizations, for example, it may be more effective for traders to remain highly competitive, even internally with coworkers, while financial product specialists and their deal teams may benefit from increased cooperation and focus on customer objectives. Further, our findings suggest that those who are demographically different from their coworkers may be better candidates for jobs requiring some flexibility in terms of cooperation and individual achievement, as it is possible that they will vary their behavior more in response to each emphasis.

Demographically similar people's relative lack of responsiveness to their organizational culture highlights the importance of better understanding the cues that will elicit desired responses from them. Future research might investigate other types of cues that may be more meaningful to demographically similar coworkers, such as explicit directives that are clearly tied to financial compensation. This is especially important since the less responsive group in this study constitutes, by definition, the majority of employees.

Cooperation among employees is integral to organizational success. This study demonstrates the complications in eliciting desired cooperative behavior from employees: increasing cooperation depends on an interplay between cues from an organization to cooperate and personal factors that contribute to individuals' responsiveness to such cues.

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