Vol. 19, No. 4, July–August 2008, pp. 517–532 ISSN 1047-7039 | EISSN 1526-5455 | 08 | 1904 | 0517

Culture and Coworker Relations: Interpersonal Patterns in American, Chinese, German, and Spanish Divisions of a Global Retail Bank

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This paper examines coworker networks in the American, Chinese, German, and Spanish divisions of a global retail bank. Because the bank has standardized structure and policies across countries, it is possible to examine how norms rooted in national culture impact on various features of informal ties. We propose that cultures vary in the models on which coworker interaction norms are based, with market, family, law, and friendship relations serving as alternative templates. In elucidating these templates, we generate hypotheses about how each culture's norms influence the content and structure of employees' interactions with coworkers. Results from an egocentric network survey largely support the hypotheses. We discuss implications for organizational behavior research on culture as well as practical implications for multinational firms.

Key words: employee relationships; culture; international management *History*: Published online in *Articles in Advance* February 11, 2008.

In this era of global corporations, an increasingly important question is how employee behavior differs across national cultures. One answer, from classic social theory (Durkheim 1933, 1951; Tonnies 1957; de Tocqueville 1969), is that cultures vary in *relational norms*, in their prototypical patterns of interpersonal interaction. This answer implies that employees in different countries bring different habits and expectations about interactions and relationships into the workplace, leading to different patterns of informal communication in the organization.

Another answer, from organizational psychology (Hofstede 1980), is that employees' *values* vary across cultures. This answer, in turn, suggests that employees in different countries want different things from work. Frequently the contrast is drawn between the values of individualism (the desire for autonomy, individualbased performance metrics, merit-based hiring, etc.) and collectivism (the desire for solidarity, group-based performance metrics, nepotistic hiring, etc.). In a survey of IBM employees in many countries, Hofstede (1980) found that the Western Anglophone nations, where most organizational research has been conducted, fall on the extreme individualistic end of the spectrum. Most of the world's population lives in the understudied countries on the collectivistic end of the spectrum. Although this finding propelled a wave of cross-cultural research, researchers have continually debated whether individualism and collectivism should be conceptualized as opposite ends of a single dimension, as independent dimensions, or as encompassing multiple dimensions (Chen et al. 1997, House 2004, Ho and Chiu 1994, Oyserman et al. 2002, Triandis 1995).

At the same time, other scholars have questioned whether cultural patterns can be adequately captured in terms of individuals' espoused values, regardless of the number of underlying dimensions. Echoing past arguments in anthropology (Geertz 1975), Kitayama (2002) has rejected the search for culture in values on conceptual grounds, arguing that culture is to us like water is to the fish—an aspect of the environment that enables and structures our behavior without us being aware of it. Cohen (2007) has proposed that cross-cultural analyses should be grounded in people's actual social behavior, rather than in the abstract values that people use to talk about themselves. A key aspect of behavior, of course, is patterns of interpersonal interaction, which brings us back to the classical construct of relational norms.

The present research takes up the challenge to study culture in patterns of interaction. Departing from the predominant focus on internal values, we propose that culture is carried by the relationship patterns in which

people are embedded. Drawing on literatures from several disciplines, we propose patterns that distinguish four national cultures that have figured centrally in past theorizing-American, Chinese, German, and Spanish cultures. We introduce an empirical approach to cultural differences that fits with this conception. Rather than surveying employees about what they value in the abstract, we rely on an egocentric network survey methodology (Burt 1992, Ibarra 1997, Podolny and Baron 1997) to survey employees about their concrete relationships to particular coworkers. We use this data to identify features of network structure such as density and multiplexity, as well as attributes of relationships such as longevity and affective tone. Through this rich, multifaceted look at relationships, we seek to uncover fresh insights about cultural variation in employee behavior, not only differences between individualistic and collectivistic cultures, but also differences among collectivistic cultures that prioritize qualitatively different kinds of collectivities.

Our theoretical framework brings together insights from mid-20th century sociology and contemporary cognitive anthropology. As part of his systems theory, the sociologist Parsons (1951) described patterns of interpersonal interaction distinctive to American, Chinese, German, and Spanish cultures. Of course, Parsons's functionalist assumptions have been discarded by subsequent sociologists (Wrong 1961). However, a baby may have been thrown away with the functionalist bathwater. As we shall see, Parsons provides the start to an analysis of cultural patterns at the interpersonal level.

Our account draws equally on contemporary anthropological accounts of how cultural norms evolve from preexisting relational models (e.g., Fiske 1991). Different basic relational models are salient in different cultures, and we contend that salient models in a culture can spill over into other domains of relationships such as the workplace. For example, in Chinese culture, the filial responsibility of child to parent is a salient model and a template for other relationships. Hence, we hypothesize that coworker patterns should reflect this template. The present research explores several such hypotheses about distinctive features of the four cultures. Without attempting to capture all the ways the cultures differ, this study seeks to illuminate some important differences in the ways employees interact with their coworkers.

Cultural Patterns

The predominant approach in the studies of national culture and employee behavior in recent decades has been to study culture in employees' values. After Hofstede's (1980) identification of an individualism-collectivism dimension from country-level means of value scores, Triandis (1995) and others have sought to measure this

value dimension at the individual level. However, the accumulated evidence for this dimension and its dramatic pattern of cultural differences is not very strong (Oyserman 2002, Takano and Osaka 1999). To redress this shortcoming, value researchers have proposed multidimensional instruments that distinguish different kinds of individualism and collectivism that characterize different historical and regional traditions. Triandis and Gelfand (1998) separated horizontal (equality-related) versus vertical (hierarchy-related) facets of each (see also Chen et al. 1997, He et al. 2004). The GLOBE study, which integrates practices with values, distinguishes the dimensions of institutional collectivism, which is high in Confucian as well as Northern European cultures, and family-based collectivism, which is high in Confucian as well as Mediterranean cultures (House 2004).

Although distinguishing different kinds of collectivism seems a step in the right direction, there may be deeper problems in cultural values research than specifying the right number of dimensions. People's self-reports of their values are biased by different reference points (Heine et al. 2002). Moreover, self-perceived values are situationally variable, contingent on participationreinforcing practices (Kitayama et al. 1997) and malleable as a function of recent exposure to stimulus cues (Hong et al. 2000). Hence, culture may be carried less by stable internal value orientations than by the external social situations and structures that define the possibilities for action in a given cultural setting (Kitayama 2002, Morris et al. 2001).

An aspect of social structure familiar in organizational research is the informal structure of ties among coworkers that coalesces from recurrent interactions (Blau 1955, Roesthlisberger and Dickson 1948). We suggest that different informal structures may form in different cultures as a result of different interpersonal norms. A precedent for identifying cultural patterns at the interpersonal level can be found in Parsons's (1951) theory of social systems.¹ From a functionalist perspective, he argued that cultural patterns are answers to two interrelated dilemmas. The dilemma of universalism versus particularism centers on whether one's treatment of others follows a general rule or varies according to the particular relationship. The dilemma of achievement versus ascription concerns whether to focus, respectively, on others' performances (what they can do) or their characteristics (who they are). Parsons illustrated the four resulting patterns with reference to different national cultures. Let us review these, focusing on the observations at the interpersonal level of analysis. These observations, as we shall see, can be removed from the functionalist metatheory, reinterpreted and elaborated in terms of contemporary norm theories, and ultimately operationalized in terms of egocentric networks.

First, Parsons's (1951) example of achievement orientation combined with universalism was North American culture. In this universalistic achievement pattern, ego chooses interpersonal interactions in the way that most efficiently serves ego's various interests, without concern for social classifications or prior relationships. In Parsons's terms, ego looks to "performances independent of relational foci" (p. 183). Parsons suggested that this orientation allows businesspeople to pursue changing opportunities, keeping these instrumental ties segregated from more enduring "generalized status ascriptions or affective attachments" (p. 190).

Next, the achievement orientation combined with particularism was illustrated by Chinese culture. Contrary to the values research view of Americans and Chinese as cultural antipodes, Parsons argued that Chinese are similar to Americans in their orientation toward achievement, albeit achievement channeled in a particularistic rather than universalistic direction. This means achievement within the social order, not through overturning the hierarchy. In Parsons's terms,

the shift from universalism to particularism precludes that the primary criteria of valued achievement should be found in universalistic terms such as efficiency.... They must, on the contrary, be focused on certain points of reference within the relational system...[notably] relations of superiority-inferiority. (p. 195)

Following Weber, Parsons suggested that classical Chinese culture emphasizes propriety within "hierarchical relationships...all the way from the Emperor's responsibility for the society as a whole, to the father's responsibility for his family" (p. 195). The American pattern would lead employees to collaborate opportunistically with whomever, whereas the Chinese pattern would lead employees to direct their energies toward their official superordinates.

For examples of ascription orientations, Parsons turned to European cultures. In the universalistic version, exemplified by Germany, ego looks to alter characteristics defined by external classifications, such as nationality, profession, and other group memberships. This involves a tendency to reify and essentialize groups—"to ascribe qualities to the whole group to which an individual belongs" (p. 192). A by-product of focusing on these impersonal "classificatory qualities" rather than on personal connections to the other is "strong inhibitions on affectivity" (p. 193).

Finally, the particularistic version of ascription orientation was illustrated by Spanish culture. In this pattern, ego focuses on characteristics of alter that are defined by their particular relationship, such as being a friend or relative. This pattern fosters sociability, as social energies are not subordinated to achievement goals (as in American and Chinese culture), nor constrained by social classifications (as in German culture). As Parsons put it, in Latin cultures the "emphasis is thrown in the expressive direction" (p. 199). It is interesting to note that the Spanish pattern contrasts starkly with the German pattern with regard to affectivity, despite their common orientation toward ascribed characteristics.

Parsons believed that these four patterns emerge as solutions to two inexorable dilemmas in social functioning. However, one need not believe the functionalist origin story in order to find some value in these descriptions of distinctive interpersonal tendencies. Indeed, even Parsons dropped the functionalist language when summarizing the patterns, instead lapsing into a more thematic lexicon-untrammeled instrumentality reflected an "'economic' bias in American society" (p. 190); dedication to superordinates, a form of "'familism' in Chinese society" (p. 196); emphasis on formal classifications, a "political accent" in German social behavior (p. 193); and warm sociability, an "expressive orientation" (p. 199) in Spanish culture. The resonance of these patterns to economic, familial, political, and affiliative relationships, to which Parsons himself alludes, suggests a different way of understanding their origins. Cultural traditions may differ in the relational templates that have predominantly shaped their interpersonal norms, particularly in domains like the corporate workplace where norms evolve by drawing on preexisting models.

Present Proposal

Whereas for Parsons norms persisted because they were contingent on the other elements of a society, contemporary accounts posit that norms evolve in somewhat arbitrary templates, yet then often become self-perpetuating and functionally autonomous from the conditions in which they originated (Sperber 1994). For example, whether a society drives on the right or the left side of the road is not contingent on their political or economic system; societies need to have a norm for coordination and meshing of behavior, but either rule would fit in any society. Members of a cultural community converge upon a norm to coordinate in a domain. One way this happens is through appropriating a model that is already established in another domain. This is well understood in the case of new organizations, where norms are constructed from patterns familiar to their members, such as family roles (Schein 1993). National and ethnic cultural norms have also been traced to a set of elemental models (Fiske 1991). Most scholars now regard the endurance of a given cultural norm not as a reflection of its role in an integrated system, but rather as one of several possible equilibrium solutions to the coordination problem that a domain presents (Cohen 2001).²

In this spirit, we propose that the different interpersonal patterns that Parsons observed are reflections of different models. For each of the four cultures, we propose a relational model that is a distinctively salient template for coworker norms. Going beyond Parsons's generalities, we propose specific forms of interaction that

Universalism	Particularism
American culture,	Chinese culture,
economic emphasis	familial emphasis
Template:	Template:
Market transaction	Filial responsibility
German culture,	Spanish culture,
political emphasis	expressive emphasis
Template	Template
Legal procedure	<i>Honor-bound sociability</i>
	economic emphasis Template: <i>Market transaction</i> German culture, political emphasis

Table 1 Parsons's Typology of Patterns and Our Proposed Relational Templates

would leave an imprint on different aspects of coworker interactions—market transaction for Americans, filial responsibility for Chinese, legal procedure for Germans, and sociability bound by codes of honor for Spanish. Table 1 shows these proposed templates as they correspond to Parsons's typology. Each proposal, in turn, yields hypotheses about aspects of workplace relationships that should stand out as distinctive in the focal culture compared to the other cultures.³

To develop proposals about cultural patterns that can be empirically tested, we elaborate our arguments in the terms of the social network literature, which has developed concepts to distinguish different types, attributes, and patterns of relationships. For example, relationships are often categorized into expressive versus instrumental ties (Ibarra 1995, Umphress et al. 2003). Expressive ties are identified by asking employees about workplace friendships (Dalton 1959, Roethlisberger and Dickson 1948). Instrumental ties are coworkers with whom an employee shares information (Gouldner 1960, Homans 1950) or to whom they look for resources (Blau 1955, Emerson 1962). Theories distinguish attributes of relationships such as longevity and frequency of interaction (Granovetter 1973) and affective closeness (Clark and Reis 1988). Likewise, attributes of the larger network are distinguished, including density or the interconnectedness of alters (Burt 1992), multiplexity or overlap of informal ties with each other and with formal relationships (Podolny and Baron 1997, Portes 1995).

In sum, social network analysis provides a conceptual lexicon for stating testable hypotheses about cultural differences in aspects of coworker interaction. We can elaborate proposals of distinctive relational norms in these terms in order to reach more precise and testable formulations. We do so drawing on Parsons as well as on the earlier theorists that were his sources, and on empirical studies.

American Norms and Market Transactions. In perhaps the earliest account of American individualism, de Tocqueville (1969) noted the comparative ease with which Americans initiated new working relationships. Whereas Europeans of his day feared initiating new interactions "lest some slight service rendered should draw them into an unsuitable acquaintance," Americans more readily initiated new interactions and associations to achieve practical ends. For Europeans, a consensually understood class structure determined appropriate interaction partners, meaning that instrumental exchanges had to be embedded within broader, more enduring ties. For Americans, lacking this received social structure, the standard was simply interacting with those who served one's interests. Hence, instrumental exchanges for Americans neither required nor implied broader social connections. Ironically, it was precisely because Americans felt less bound by social ties-"Such folk owe no man anything and hardly expect anything from anybody" (p. 508)-that they were eager joiners and collaborators. This notion that Americans are more inclined to treat interpersonal interactions like market transactions is partially captured in Parsons's universalistic achievement pattern. It is echoed more clearly in recent studies of Americans' ties to community, which find that social interactions are described in terms of free choice and personal goals rather than obligations to collectivities (Bellah et al. 1985).

If American norms for coworker interactions are distinctively influenced by a market transaction model, this should be apparent in the multiplexity of their relationships and the longevity of their instrumental ties. American employees should be comparatively less likely to have multiple informal ties to the same coworker (e.g., friendship and information exchange) if they strive to maximize the unique benefit of a given tie. Doublestranded relationships more likely to occur in would-be cultures where a preexisting tie of some sort creates an obligation to broaden the relationship.⁴ Ethnographers have suggested that multiplexity of this sort is more pervasive in some non-Western workplaces than American workplaces (e.g., Dore 1983, Gluckman 1967), although to our knowledge there have been no controlled comparative studies. A market template would give rise to thin, single-stranded relationships. Hence, we hypothesize:

HYPOTHESIS 1A (H1A). Tie overlap should be lower in American culture than in the other three cultures.

Second, the American market orientation should be manifest in reduced duration or longevity of instrumental ties. If people have a limited carrying capacity for relationships, then maintaining old ties inhibits the initiation of new ties. Instrumental ties tend to decline in value over time due to the changing expediencies of jobs and assignments. Therefore, a market transaction ethos should encourage more frequent updating of one's portfolio of instrumental ties, "dropping" old exchange partners to make room for new ones. Hence, we can hypothesize:

HYPOTHESIS 1B (H1B). Employees' instrumental ties would be more short-lived in American culture than the other cultures.

Chinese Norms and Filial Responsibility. Chinese social norms center on the duties inherent in the Confucian conception of cardinal relationships. This starts with the filial responsibility of son to father, and unfolds into other hierarchical relationships, such as that of subjectto-emperor and student-to-teacher (Hsu 1953, 1971). Parsons's particularistic achievement pattern drew on these familiar points about Confucian role responsibilities, as well as Weber's (1964) dubious analysis of their economic consequences. Ethnographic studies of modern Chinese settings (Hsu 1953) underscore the persistence of Confucian relational roles, despite shifts in macrolevel economic institutions. In particular, scholars have suggested that filial piety provide a model for interactions between workplace subordinates and superordinates (Redding and Wong 1986). Yang (1957) invoked the concept of "pao" for the tendency of Chinese subordinates to do favors, beyond the call of duty, in order to forge filial/paternal relationships (Silin 1976).

If Chinese workplace norms are shaped by the template of filial duties, this should be evident in favors and affective deference toward superordinates.

HYPOTHESIS 2A (H2A). In social network terms, this means a greater proportion of instrumental exchanges should focus on superordinates in Chinese culture than in the other cultures.

HYPOTHESIS 2B (H2B). Chinese relationships to superordinates should be characterized by an affective tone of respect and admiration.⁵

German Norms and Legal/Political Procedure. Perhaps the most famous account of cultural influence on workplace norms is Weber's (1958) analysis of the Protestant work ethic. Weber argued that the Calvinist notion of a "calling" proscribed expressive or sociable interactions in the workplace: "to use time in idle talk, in sociability, is evil because it detracts from the active performance of God's will in a calling" (Bendix 1977, p. 62). In his analysis of bureaucracy in German hospitals, Weber (1947) noted a decline in emotional bonds with the imposition of formalized rules and categories. Parsons blends elements of these arguments in the universalistic-ascriptive pattern of attention to impersonal, classificatory characteristics. Contemporary ethnographic evidence suggests that an enduring feature of German workplace relations is emphasis on formalized rules and categories (Hall 1990, Windolf 1986) and formalized collectivities, such as corporations and workers' councils (Borneman 1992). In terms of our current framework, we propose that coworker interaction norms, to a greater extent in Germany than elsewhere, reflect the template of interactions in a legal or political procedure, where one's actions toward others are governed by formalized rules and categories.

If coworker interaction norms in Germany bear the imprint of formal procedural interactions, this should be manifest in several aspects of employee networks. One sign would be the alignment of informal instrumental ties with categories of formal organizational structure. In the current setting, that would be bank branches. Instrumental ties beyond the branch occur for various reasons, such as searching for better information outside, cultivating ties to higher-ups, or maintaining ties to transferred branch colleagues. However, to the extent that German norms emphasize adherence to formal categories (rather than instrumentality, filiality, or sociality), employees should have fewer ties that cross the branch boundary. Hence, we hypothesize that:

HYPOTHESIS 3A (H3A). Instrumental exchanges would focus on same-branch coworkers to a greater extent in German culture than in the other cultures.

Second, an orientation to formal rules and categories may be evident in the content of workplace interactions. Some exchanges of information and resources are required by one's job, and others are not.

HYPOTHESIS 3B (H3B). An orientation toward formal rules may be evident in a greater focus on job-required topics in Germany than elsewhere.

Relatedly, these rule-bound interactions may also be characterized by reduced affective closeness. Notably, cross-cultural leadership research finds that Germany is high (compared to other countries) in expectations that leaders adhere to official rules, yet low in expectations that leaders display compassion or paternalistic kindness (Brodbeck et al. 2002).

HYPOTHESIS 3C (H3C). Instrumental ties should be comparatively lower in affective closeness in German culture than elsewhere.

Spanish Norms and Honor-Bound Sociability. Parsons's description of Spanish culture was influenced by Weber's (1958) image of the more personal, expressive quality of coworker interactions in Catholic, as opposed to Protestant, cultures. Again, although Weber's chain linking religion, relationships, and macroeconomic outcomes may be tenuous, contemporary evidence corroborates the existence of personal, close relationships in the Spanish workplace. Ethnographies make the case that displaying warmth and generosity toward workplace friends is a matter of honor (Alvarez and Cantos 1994, Murphy 1983). Related observations have been made in studies of Spanish-influenced cultures such as Mexico (Diaz-Guerrero 1967, Lindsley and Braithwaite 1996). Cross-cultural psychological studies suggest that expectations of sociability toward one's friends guide interactions across a broader range of situations in Latin cultures than in Anglo cultures (Triandis et al. 1984). In Latin cultures there is a greater negative reaction to managers who are task focused and lacking in sociability (Sanchez-Burks et al. 1998). In sum, warmth and loyalty

toward workplace friends as a matter of honor may be more pervasive in Spanish culture than most others.

We hypothesize that this distinctive theme of Spanish norms should be evident in several features of workplace friendships. First, a key way of maintaining a sociable tone is discussing non-job-required topics.

HYPOTHESIS 4A (H4A). Workplace friendships would be characterized by more non-job-required talk in Spanish culture than in the other cultures.

Relatedly, another aspect of sociability is affective expression.

HYPOTHESIS 4B (H4B). Friendship ties should involve a higher level of affective closeness in Spanish culture than in the other cultures.

The codes of personal friendship should also be evident in the longevity of friendships ties. Consider how different norms would affect responses to the common situation of having one's friend transferred to another branch: Whereas the American transactionality, Chinese filiality, and German formality would not create any particular pressure to keep the relationship alive, Spanish sociability would entail an obligation to maintain the tie.

HYPOTHESIS 4C (H4C). Friendship ties should be more long-lived in Spanish culture than in the other cultures.

Having generated several independent hypotheses about distinctive features of interaction in the four cultures, now let us turn to our study investigating these hypotheses.

Current Study

Our study was conducted in Citicorp's Global Consumer Bank in the mid 1990s. It focused on the largest regions in the American, Chinese, German, and Spanish divisions. In these regions, products, policies, and formal structures had been largely standardized in a globalization push some years before. In the early 1990s Citicorp had moved to standardize formal structures, policies, produces, and even physical layouts of the branches to foster divisional coordination and continuity of customer experience (Barnet and Cavanaugh 1994, Miller 1993). Uniformity across counties was explicitly embraced: "The Citibank vision of consumer banking entails a seamless integration of products, services, and delivery systems...uniformly delivered around the world" (Citicorp Annual Report 1991). At the same time, the cultural backgrounds of bank branch employees varied greatly across these national divisions. Unlike investment bankers, consumer bank employees are sourced locally to keep the branches embedded in the local communities. The combination of these two policies-variation in culture of employees while holding constant other factors-enables a more controlled test of the role of culture than is usually possible in a field study. We also controlled for the respondent's position in the formal structure—both horizontal (branch size) and vertical dimensions (hierarchical level). Finally, although limited to questions that would preserve respondents' anonymity, we also took some measures to control for differences in human resource policies (employee educational level, turnover intention, etc.).

Method

Organizational Setting

In the countries we studied, the Citicorp Consumer Bank was organized into regional operations, each comprising a dozen or so branches. The categories of permanent jobs across these sites fall into three basic hierarchical levels: first, at the executive level, in private offices, the branch manager and, sometimes a separate operations manager; second, at the middle level, in semiprivate cubicles, associates who handle complex products and services, such as investment advisors and representatives for high-value (Citigold) accounts; third, at the entry level, at open desks, representatives who handle routine transactions, such as opening checking or CD accounts. Subordinate to all of these positions is that of bank tellers, at the counter, who handle deposits and withdrawals. In some countries, tellers include temporary interns; in others, they are all permanent employees.

Despite the structure of branches and jobs, this organization at the time of the study was far from a rigid bureaucracy. The tradition at Citibank was a dynamic structure and reward system that encouraged employees to be entrepreneurial in generating business and meeting customer needs. This encouraged competition, even competition against other Citibank branches and divisions. A manager of a consumer bank branch, for instance, has to guard against losing key customers to neighboring branches or to the private bank. As a former director of human resources put it,

There is a lot of creative tension here over jurisdictions. Things are organized by function, market, or product. Many of these impact on the same customers. No one here has a clear territory, or clear ownership of a total activity.... You're aware that all of your colleagues are nibbling away at opportunities too. (quoted in Pascale 1990)

In this organization, employees rely on their informal relationships to stay "in the know" about new products and systems and about new career opportunities and resources. Although much of the business in a consumer bank is routine, employees do engage entrepreneurially in nonroutine transactions, such as offering more favorable terms to retain a high-worth customer, or trying a different way of scheduling staff to avoid workflow bottlenecks. In this sort of organization, employees rely on

	Cultural setting				
Geographic region Sampled	American SF & NY	Chinese HK	German Rhine	Spanish Madrid	
Language of survey	English	Chinese & English	German & English	Spanish & English	
Response rate (%)	77	88	60	79	
N of branches	52	21	33	42	
Average branch size w/o tellers (branch level)	11.02	9.24	6.85	4.24	
Turnover intention	1.86	2.61	1.46	1.91	
N of respondents N of alters	413 1,686	154 540	154 712	116 458	
Friendship ties Exchange ties	710 976	279 261	334 378	209 249	

informal relationships to learn about emerging products, practices, and opportunities, and to garner support for innovations. Accordingly, informal relations are important to individual career success and organizational functioning. In all of the countries we studied, cultivating a network of coworkers was a salient theme in HR programs for employees. Citibankers were encouraged to continually communicate—face to face, by phone, and by e-mail—with others in the organization to realize the goal of seamlessly integrated processes.

Samples of Employees

Rather than sampling all the employees in a selected country, we selected metropolitan regions that provide a sufficient number of respondents. Within each region, we sought and attained high response rates—see Table 2. Regions were selected to control extracultural variables like population density, affluence, and so forth. With the help of Citibank HR, we chose the following regions:

1. For the American sample, we sampled the region surrounding San Francisco and Silicon Valley, and one of two New York City regions.

2. For a Chinese cultural sample, we selected the region of Hong Kong and Macau. The two areas we sampled comprised all the branches in the territories.

3. For a German sample, we selected three regions in the Rhineland, including Dusseldorf and Essen.

4. For a Spanish cultural sample, we selected the area that comprises Madrid and suburbs.

Given that these are among the most cosmopolitan regions of their respective countries, this sampling provides a relatively conservative test of whether traditional cultural norms shape interaction patterns.

Our sample consisted solely of branch employees, not higher-level executives who run the regional organization. Because tellers are temporary interns in some countries but permanent employees in others, we sampled only employees above the teller rank. That said, it was the case that our respondents' networks included downward ties to tellers and upward ties to regional executives.

Procedure

Our survey was developed from prior measures of employees' egocentric networks (Podolny and Baron 1997). An initial period of observations and interviews at bank branches in the respective countries was used to adjust questions and response options to fit the organizational context. We consulted with HR managers at the firm as well as local social scientists to decenter the instrument (Brislin 1986). A version was constructed in English and then refined through a process of translation and back translation to other languages until discrepancies were resolved (Werner and Campbell 1970).

Respondents in the four countries received a printed version of the survey in their national language (English, Chinese, German, and Spanish, respectively) at the same time as they conducted the survey at the computer. The non-English versions included the English translation below each question, in case respondents wanted to refer to it. Respondents answered on a computerized version of the questionnaire (Simsek and Veiga 2000), which also appeared in the national language (except that in Hong Kong the computer displayed English, which is also an official language and one in which employees were quite proficient). The computer survey was run on a self-booting diskette distributed to employees. Each employee received a self-starting computer diskette, an explanation letter, and an envelope in which to seal their completed diskette before returning it to the appointed coordinator in each office. This person sent the envelope of completed disks directly to our research offices at a U.S. university. The letter stressed that the information would be confidential, and careful measures were taken to communicate that this project was designed for external research rather than internal evaluation. Completing the computer-driven survey took approximately 30 minutes. In each area, the survey was administered within a fixed two-week period. Branch managers and employees were informed about one week beforehand, on average. To explain the study and gain participation, a presentation was made at each branch by one of the authors or by research assistants, who were hired locally (students or temporary workers). This recruitment procedure resulted in generally high response rates, ranging from 88% in Hong Kong to 60% in Germany (Chisquared (3) = 57.11, p < 0.001). In Germany and Spain, where desktop computers were unavailable or incompatible with the disk, laptops were brought to the branches. The lower response rates in Germany may reflect shorter participation periods caused by the schedule of laptop deliveries.

Measures

The survey began by asking respondents to nominate the people in their workplace networks—people with whom

they had communicated at work in the last six months. Nominations of these alters were requested under three general headings, and respondents were not asked to write actual names, but merely initials or nicknames to stand for the people in their network. Up to five names could be recorded for each name-generating question.

First the survey queried for friendships ("Over the past six months, is there anyone that you talk to as a personal friend at work? That is, a person to whom you go for support about a personal matter."). The broad category of information exchange relationships was tapped with two separate questions: a probe for circumscribed technical information and one for broader strategic information ("Over the last six months, is there anyone with whom you talk to learn skills that help you perform effectively at your job? That is, a person to whom you would go for help if you ran into a question or a problem at work." And "Over the last six months, is there anyone with whom you talk in order to learn what's going on inside Citibank? That is, a person who provides news or information about important individuals, changes or events within the company?"). Finally, the survey queried about people who provide political resources ("Over the last six months, has there been anyone whose approval you have needed before undertaking a nonroutine task?"), which is one of the dimensions for instrumental exchange. The wording for this item reflected the discourse in a consumer bank; nonroutine tasks refer to entrepreneurial or innovative actions outside of standard operating procedures. When asking for nominations under a given category, the computer displayed the names already generated so that the respondent could indicate multiple strands of relational content with the contact. Our respondents reported coworker networks relatively small in size-roughly two friendship ties, three information exchange ties, and one and onethird resource exchange ties. There was no indication of ceiling effects created by our survey limit of five relationships of each type.

The next section of the survey probed perceived interconnections among the alters. The name of each alter, in turn, appeared prominently at the top of the screen in the following sentence (in the place of X): "Please highlight those people with whom X is a good friend or consults frequently about work matters" From these responses, we calculated for each respondent the density of their friendship, information exchange, and resource dependence networks as the number of actual interconnections over the number of possible interconnections.

In the next section the computerized survey presented a series of questions about the attributes of each relationship. Some of these involved temporal dimensions. One assessed longevity ("How many years have you known X?"). Another assessed interaction frequency ("How often do you speak with X?"). The eight response options for this question ranged from "1 = at least several times per day" to "8 = less than once a month." Next, we measured the frequency of interaction on topics required as part of the respondents' official job requirements ("How often does the performance of your job require that you speak with X?"). There were nine response options for this question, ranging from "1 =at least several times per day" to "9 = never." Answers were reverse scored for a measure in which higher scores indicate higher interaction frequency. A measure of the frequency of nonrequired interaction was computed through as the difference between the aforementioned two ratings. On all questions about temporal dimensions, "Don't know" was also a response option; it was treated as missing data.

Other questions probed the affective content of relationships. To assess the affective closeness of relationships, we asked the standard question "Do you have a close personal relationship with X?" with response options ranging from 1 = "Especially close—One of your closest personal friends" to 5 = "Not at all close— Only as friendly as needed to work together." To assess the feeling of admiration predicted in Chinese relationships to superordinates, we developed the following question: "Do you have strong admiration and respect for X?" with response options ranging from 1 ="Especially strong—as if the person were an admired member of your family" to 5 = "Not at all strong—only as respectful as needed to work together."

What remained to be asked was whether the respondent was linked to each alter by formal organizational ties. The survey asked whether the alter worked at the same branch as the respondent ("Does X work at the same branch as you? (y/n)"). Respondents also indicated the rank of the alter relative to their own ("Which of the following best describes X?") from the following list: Your direct supervisor, your direct report, one of your supervisor's supervisors, one of your subordinate's subordinates, none of the above, don't know.

Two kinds of multiplexity measures were computed from the covariation of tie types across the alters in each respondent's network. The three types-friendship, information, and resource-are dichotomous variables on which each alter is scored present or absent. The intertwining of a pair of informal ties was examined in the covariation between pairs of these variablesfriendship with information, friendship with resource, and information with resource. The aligning of informal ties with formal structure was examined in the covariation of informal ties with some relevant formal relationships, such as same-branch coworker or superordinate. These covariation measures were calculated as the intersection of sets over their sum. For example, the covariation of friendship and same-branch ties was computed as number of alters who are both friends and same-branch

coworkers divided by the total number of alters who are friends *plus* the number of same-branch coworkers.

To the list of questions, we added several others to control for extracultural factors that differ slightly across countries. Education levels of employees may differ as a by-product of differences in the entry-level position in the consumer bank. In the European countries, teller positions were largely filled with student temporary interns rather than permanent employees who could be promoted upwards. Accordingly, employees lacking university educations are rarer in Europe than elsewhere. To control for the possible effect of this factor on relationships, we measured education level by asking "Which of the following educational degrees have you obtained?" and then listing high school, bachelor's master's and Ph.D. In the course of conducting the survey, we realized that our categories did not serve well for the Spanish university system, where the term bachelor's, in many cases, refers to a degree equivalent to an American master's degree. Because of this ambiguity, and because our concern was primarily in controlling for variation at the lower end of the education spectrum, we collapsed the education variable into three levels: secondary, university (bachelor's or master's), and doctoral. Education level varied across countries (chi-squared = 34.63, df = 6, p < 0.001), primarily reflecting, as anticipated, that fewer lacked university educations in Europe (7.19% in Germany and 6.03% in Spain) than elsewhere (18.64% in the USA and 27.27% in Hong Kong).

Another extracultural factor that could affect dimensions of employee networks is the rate of job turnover. Turnover rates may vary across the countries because of labor market conditions. Turnover might affect employee networks, because employees anticipating a move may be less likely to invest in cultivating strong relationships to coworkers. The literature finds that actual turnover is highly predicted by the anticipatory measure, turnover intention (Cotton and Tuttle 1986). We measured this by asking respondents to answer "How likely is it that you will try hard to find a job with another company in the next year?" on a scale from 1 = "Not at all likely" to 3 = "Very likely" with additional option of 4 = "Don't know." Turnover intention varied significantly across countries (F(3, 832) = 27.24, p < 0.001). As may be seen in Table 2, it was substantially higher in the Chinese sample than elsewhere, consistent with the generally high rate of turnover among Hong Kong workers at the time, which reflected low unemployment and high emigration rates.

Finally, several measures of the organizational structure in which respondents were embedded were collected from the HR office in each region. To capture relevant dimensions of horizontal and vertical structure, we collected the size of branch they work in and their position in the hierarchy of branch jobs. Specifically, size was measured as the number of branch employees other than tellers, because this captures the pool of colleagues with whom an employee is most likely to interact. The horizontal structure variable, branch size, is a function of the neighborhoods in which branches are located, and hence, not surprisingly, differed across countries (F(3, 144) = 18.56, p < 0.001). As shown in Table 2, in Spain and Germany there were fewer very large branches, corresponding to fewer highly dense neighborhoods such as Midtown in New York or Central in Hong Kong.

Job titles were categorized into the executive, managerial, and entry levels delineated in our description of the research setting. This measure showed that the proportion of executive-level employees was slightly higher in the European samples (12.19% in Germany and 16.88% in Spain) than elsewhere (8.23% in the USA and 7.14% in Hong Kong; chi-squared = 42.10, df = 6, p < 0.001). This is related to the previous observation that European branches are smaller; smaller branches have a higher proportion of employees at the top level.

These extracultural variables—education, turnover intention, branch size, and rank—were controlled for when testing for the predicted patterns of cultural differences, in case they contribute to differences in employee relationships or networks across countries.

Analyses

To test our hypotheses about distinctive features of employee networks in each of the four cultures, we conducted planned contrasts to compare whether the focal culture differed from the mean of the other three. Of course, this contrast could be driven by extreme results from one of the other cultures rather than something distinctive about the focal culture, so we followed up with pairwise post hoc comparisons using Tukey's honestly significant difference (HSD) test. Our standard for evidence in support of the hypothesis requires (a) that the planned contrast is supported and (b) that the focal cultural group differs from the majority of other groups.

Many of our hypotheses focus selectively on either expressive ties or on instrumental ties. The former construct was captured with friendship relationships. The latter construct was captured with information and resource exchange relationships. A summary variable for instrumental ties is used when testing hypotheses about attributes of relationships, such as duration. However, for hypotheses about the structure of networks, such as multiplexity or density, the two types of instrumental ties are left disaggregated. To see why this is better, consider that a double-stranded tie (information and resource) would appear to be single-stranded if these two instrumental ties were lumped together.

Table 3 Multiplexity of Networks

	Cultural setting			
	American	Chinese	German	Spanish
Overlap of informal ties				
Information & Friendship	0.29 ^a	0.36 ^{a, b}	0.29 ^a	0.39 ^b
Resource & Friendship	0.13ª	0.24 ^b	0.21 ^b	0.20 ^{a, b}
Information & Resource	0.19 ^a	0.31°	0.24 ^{a, b}	0.27 ^{b, c}
Alignment with formal ties				
Friendship & Same-branch	0.19 ^b	0.17 ^b	0.20 ^b	0.11ª
Information & Same-branch	0.05 ^a	0.05ª	0.06 ^a	0.04 ^a
Resource & Same-branch	0.16 ^a	0.23 ^b	0.20 ^{b, c}	0.19 ^{a, c}
Friendship & Superordinate	0.07 ^b	0.10 ^{a, b}	0.04 ^a	0.07 ^{a, b}
Information & Superordinate	0.18 ^b	0.19 ^b	0.13ª	0.14ª
Resource & Superordinate	0.23ª	0.29 ^b	0.21ª	0.20 ^a

Notes. Cells that do not share the same superscript are significantly different (p < 0.05) by Tukey's HSD test. The numbers are adjusted means (adjusted for branch size without tellers, education, position, and turnover intention).

Results

American Transactionality. From the proposal that the market transaction is a salient template for American coworker interaction norms, we argued that Americans are comparatively less likely to have double-stranded as opposed to single-stranded relationships (H1A). Consistent with this argument, planned contrasts of Americans against the other three groups (Hong Kong, Germany, and Spain) were supported with regard to all possible forms of tie overlap: friendship and informational (F(1, 825) = 9.30, p < 0.001); friendship and resource (F(1, 741) = 4.24, p < 0.05); and information and resource (F(1, 751) = 16.90, p < 0.001). Exploring further with post hoc pairwise contrasts (shown in Table 3), we found that Americans' tie overlap was significantly lower in five of the nine contrasts to other groups.

Based on the premise that Americans decide whether to interact with coworkers based on the utility of the transaction rather the obligations of prior connections, we hypothesized (H1B) that instrumental ties for Americans would be shorter-lived (that is, less likely to be retained beyond their period of greatest utility). A planned contrast found that Americans were lower than the other groups in the duration of instrumental ties (F(1, 2, 773) = 43.23, p < 0.001). Exploring further with post hoc pairwise contrasts (shown in Table 4), we found that Americans were lower than each of the other three groups, which did not differ among themselves.⁶

In sum, the network survey data suggest that American employees form comparatively thin and transitory coworker exchange relationships, consistent with the proposal that their norms for such interactions are shaped in the image of market transactions.

Chinese Filiality. From the proposal that the filial Confucian role is a salient template, we hypothesized (H2A) that Chinese employees' instrumental ties should

Table 4 Longevity of Ties in Years

	Cultural setting			
Туре	American	Chinese	German	Spanish
Friendship ties Instrumental ties Overall	4.23ª (0.15)	5.55 ^b (0.26)	5.76 ^a (0.32) 5.45 ^b (0.23) 5.52 ^b (0.21)	6.07 ^b (0.30)

Notes. The numbers are adjusted means (adjusted for branch size without tellers, education, position, and turnover intention). Numbers in parentheses are standard errors. Cells that do not share the same superscript are significantly different (p < 0.05) by the Tukey HSD test.

be more oriented toward formal superordinates. This prediction was supported in planned contrasts for the alignment of the superordinate relationship with instrumental exchange (F(1, 823) = 8.90, p < 0.01). As may be seen in the post hoc comparisons in Table 3 (lower panel), the alignment of informational ties with formal superordinate relations was significantly greater in the Chinese group than the German or Spanish groups, and the alignment of resource ties was significantly greater in the Chinese group than any of the other groups.

A second hypothesis (H2B) from the filial role proposal was that Chinese employees would feel more affective admiration for their superordinates. The planned contrast did not show support for the hypothesis (F(1, 973) = 0.04, p > 0.10). As Table 5 shows, although the Chinese group was higher than the German group, it was surprisingly lower than the American group. This finding that Americans are distinctively high in admiration for superordinates (and for nonsuperordinates as well) is puzzling, and we shall suggest some possible interpretations in our discussion.

In sum, evidence for the filial role proposal is mixed. Results confirm that Chinese employees direct their informal social exchanges toward superordinates. However, their relationships to superordinates were not comparatively more imbued with admiration as expected.

German Formality. From the proposal that formalized relationships in the political-legal realm have shaped German norms of coworker interaction, we derived several predictions. First, we hypothesized (H3A) that instrumental ties would focus on same-branch colleagues to a greater extent for Germans than for the other groups. Planned contrasts on variables for alignment of the formal same-branch relationship with the informal informational ties (F(1, 822) = 0.84, p > 0.10) and with resource ties (F(1, 822) = 0.03, p > 0.10) failed to support this hypothesis. On the resource and same branch variable, the German group is significantly higher than the American group, and no other groups were higher than the German group (see Table 3). However, the results do not meet our criteria for concluding that Germans are distinctively high in this regard.

Table 5	Affective	Contents
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	Cultural setting					
Туре	American	Chinese	German	Spanish		
Closeness						
Friendship ties	3.56° (0.04)	3.41 ^b (0.07)	3.19 ^a (0.06)	3.58 ^{b,c} (0.08)		
Instrumental ties	2.84 ^b (0.03)	2.82 ^b (0.06)	2.57 ^a (0.05)	2.96 ^b (0.07)		
Overall	2.96 ^b (0.03)	2.93 ^b (0.05)	2.62ª (0.05)	3.08 ^b (0.06)		
Admiration Toward superordinates	4.4C ^b (0.00)	0.018 (0.10)	2.018 (0.10)	0 178 (0 17)		
Friendship ties	4.46⁵ (0.09) 3.91° (0.05)	3.31ª (0.12) 3.22 ^b (0.08)	3.01ª (0.16) 2.82ª (0.10)	3.17 ^a (0.17) 3.06 ^a (0.11)		
Overall	3.91° (0.05) 3.91° (0.05)	3.22° (0.08) 3.22° (0.08)	2.82 ^a (0.10) 2.81 ^a (0.09)	$3.01^{a,b}$ (0.11)		
Toward nonsuperordinates						
Friendship ties	4.04 ^c (0.04)	3.00 ^a (0.07)	2.88 ^a (0.06)	3.31 ^b (0.08)		
Instrumental ties	3.77° (0.04)	3.05 ^b (0.07)	2.78ª (0.05)	2.96 ^b (0.07)		
Overall	3.80° (0.03)	2.96 ^b (0.06)	2.72 ^a (0.05)	2.98 ^b (0.06)		

Hypothesis 3B (H3B) was that Germans would be more diligent in carrying out the interactions (information or resource exchanges) that are formally required for their jobs. A planned contrast found that the frequency of job-required interaction within instrumental ties was higher for Germans than the other groups (F(1, 1, 805) = 15.95, p < 0.001). Pairwise post hoc contrasts (see Table 6) revealed that, in particular, Germans are significantly higher in this form of adherence to formal rules than the American and Spanish groups while not differing significantly from the Chinese group.

Finally, we hypothesized that Germans would feel less affective closeness in these instrumental ties (H3C). The planned contrast supported this hypothesis (F(1, 1, 860) = 25.71, p < 0.001). The pairwise post hoc tests in Table 5 show that the German group is lower than each of the other three groups.

In sum, the evidence is mixed for our hypotheses about distinctive features of German coworker interactions. German employees were not comparatively more constrained by branch categories in their instrumental ties, as we expected. However, they were comparatively higher in frequency of job-required interactions and comparatively lower in affective closeness.

Spanish Sociability. We proposed that the codes of honor in sociability provide a salient template for workplace interactions in Spanish culture, an argument that directed our attention to expressive ties rather than instrumental ties. Hypothesis 4A (H4A) was that communication on non-job-required topics, as a signal of sociability, would be higher in Spanish culture than elsewhere. A planned contrast for friendships found that Spanish employees are comparatively higher than others in non-job-required communication (F(1, 1, 478) = 9.06, p < 0.05). Pairwise post hoc tests (in Table 6) revealed they were significantly higher than the Chinese and German groups. Perhaps the clearest illustration, however, of the Spanish inclination toward sociability rather than task orientation is the ratio of nonrequired to required interaction in friendships. As Table 6 shows, in Spain it is approximately 1:2, 3, whereas everywhere else it is around 1:5.

Content		Cultural setting				
	Туре	American	Chinese	German	Spanish	
Job-required	Friendship ties	4.82 ^b (0.10)	4.58 ^b (0.16)	4.86 ^b (0.15)	3.58 ^a (0.20)	
	Instrumental ties	4.58 ^b (0.07)	4.98 ^c (0.12)	5.10 ^c (0.10)	4.28 ^a (0.14)	
	Overall	4.61 ^b (0.06)	4.85 ^{b,c} (0.11)	5.04 ^c (0.13)	3.94 ^a (0.10)	
Non-job-required	Friendship ties	0.95 ^b (0.07)	0.70 ^a (0.11)	0.92 ^a (0.10)	1.28 ^b (0.13)	
	Instrumental ties	0.77 ^c (0.05)	0.41 ^a (0.07)	0.61 ^{a, b} (0.07)	0.74 ^{b, c} (0.09)	
	Overall	0.79 ^{b.c} (0.04)	0.46 ^a (0.07)	0.66 ^{a, c} (0.06)	0.92 ^b (0.08)	
Overall	Friendship ties	5.76 ^b (0.07)	5.30ª (0.11)	5.79 ^b (0.10)	4.98 ^a (0.13)	
	Instrumental ties	5.32 ^{a,b} (0.08)	5.42 ^b (0.13)	5.73 ^c (0.12)	5.08 ^a (0.15)	

Notes. The numbers are adjusted means (adjusted for branch size without tellers, education, position, and turnover intention). Numbers in parentheses are standard errors. Cells that do not share the same superscript are significantly different (p < 0.05) by the Tukey hsd test.

Hypothesis 4B (H4B) was that the affective closeness of friendship ties would be higher in Spanish culture than elsewhere. The planned contrast supported this hypothesis (F(1, 1, 528) = 5.47, p < 0.05). However, post hoc tests (see Table 5, upper row) show that solely the pairwise contrast of Spanish with Germans is significant. Indeed, the effect comes more from the low affective closeness in Germany than from the high affective closeness in Spain. Hence, the evidence for H4B falls short of our criteria for concluding that Spanish are distinctively higher in affective closeness.

Hypothesis 4C (H4C) was that the longevity of workplace friendships would be higher in Spain than in other cultures. The planned contrast supported this prediction that friendships were more long-lived in the Spanish group than the other three cultural groups (F(1, 1, 528) = 16.88, p < 0.001). As may be seen in Table 4, the longevity of friendships is significantly higher in Spain than in each of the other three groups. Notice that this pattern does not extend to instrumental ties, in which the Spanish are comparable to the German and Chinese groups.

In sum, the results fall largely in support of the proposal that the codes of honorable sociability exert a distinctively strong influence on workplace interactions in Spanish culture. The expressive ties of Spanish employees featured more communication about non-jobrequired topics, and they were more long-lived. They were high although in affective closeness, results with this variable were not conclusive.

Taking stock overall, hypotheses from the four proposed patterns were largely supported. The evidence met our criteria (significance in the planned contrast plus the majority of pairwise comparisons) for 7 of our 10 hypotheses (H1A, H1B, H2A, H3B, H3C, H4A, and H4C).

Discussion

The current study probed hypotheses about cultural differences in interaction norms among American, Chinese, German, and Spanish employees in the Citicorp consumer bank. The results largely support our hypotheses about distinctive features of coworker interactions. These findings demonstrate the merit in theorizing about national culture differences at a richer, if less parsimonious, level than the prevailing approach of hypothesizing differences in very broad value orientations.

To review the findings evenhandedly, it is worth stepping through the cultural differences predicted from each proposal and then the nonpredicted cultural differences. The market transaction orientation in American workplace relationships was evidenced by the comparatively lower tendency toward informal tie overlap in American culture than elsewhere (H1A). Additionally, instrumental ties were comparatively less long-lived for Americans (H1B). Next, the proposed traces of filial responsibility in Chinese norms were supported by a greater tendency for Chinese instrumental exchanges to focus on superordinates (H2A). Further, the accent of political/legal procedure in German workplace relationships was supported, within instrumental ties, by the comparatively higher of frequency of job-required communication (H3B) and also by the comparatively lower level of affective closeness (H3C). Finally, the imprint of friendship codes on Spanish norms was supported, within expressive ties, by the comparatively more frequent communication on *non*-job-required topics (H4A) and the greater longevity of these ties (H4C).

It is also worth reviewing the few cultural differences in employee interaction patterns that were not predicted. The only cultural difference observed that was opposite to the predicted direction involved the affective admiration variable. Contrary to H2B, American employees were higher than Chinese employees (as well as Spanish and German employees) in affective admiration. This held across superordinate and nonsuperordinate ties (see Table 5). We can speculate about two possible interpretations for this pattern. First, American employees may actually feel higher admiration for the others in their networks. Perhaps their networks are more selected; only the respected are retained. Or, the finding may reflect a methodological artifact. The survey question asked respondents to rate "admiration and respect" for each alter on a scale anchored by "especially strong-as if the person were an admired member of your family." This reference point, an admired family member, may not be as high a hurdle for American employees as for Chinese employees, given the reverence for elders in Confucian cultures. Hence, what appears to be greater American admiration of coworkers may be a by-product of their lower admiration of family members. Future research with different scale formats would be useful in sorting out these possible interpretations (Heine et al. 2002).

The results showed several cultural differences that were unpredicted, although not directly opposite to predictions. First, the size of two types of networks (friendship and instrumental exchange) was greater in the German group than some of the other groups. Perhaps the slightly lower response rate in Germany meant that there were proportionally fewer unmotivated respondents (who would generate fewer alters)—if so, this would account for why the average number of alters is higher. This would affect name generation only (which permits a way of slacking off), and not other survey questions.

Second, the interaction frequency of Spanish employees was comparatively low, which may be seen in Table 6. This seems unlikely to reflect a reference point effect because the question "How often do you speak with [the other person]?" was labeled in terms of objective rates (e.g., "once per day"). It is particularly striking that Spanish employees interact less frequently even in their expressive ties (friendships) because they showed signs of sociability in these ties, such as frequent communication about nonrequired topics. It is possible that the tempo of interaction in the Spanish workplace makes for less frequent but more substantial interactions. In future research to check this account, it would be valuable to query respondents about the average length of conversations as well as their frequency.

Finally, there were a couple of unexpected results in which a cultural difference was broader in scope than predicted. The orientation of Chinese employees toward superordinates (H2A) ranged beyond instrumental to expressive ties. The lower affective closeness of German employees (H3C) extended beyond instrumental ties to expressive ties as well. It will take more studies assessing a wider range of tie types before the precise contours of these culturally distinctive patterns can be pinned down. A limitation of the current research is that we test our hypotheses within the two conventional categories of expressive versus instrumental ties, yet we should not expect that all cultural patterns will fall neatly into one of these two types.

Contributions to Cultural Research

In addition to contributing novel empirical findings, the current study contributes by demonstrating the study of cultural differences in relationship patterns. To our knowledge, it is the first extensive use of social network methods to explore effects of national culture on workplace behavior. Network methods have the potential to enrich the literature on national culture just as they have that on gender and race (Brass 1985; Ibarra 1993, 1995, 1997). First, network data provide a multifaceted map of a manager's social context (e.g., Chua et al. forthcoming). It captures attributes of relationships such as their longevity, intensity, and affectivity, as well as attributes of networks such as multiplexity. Secondly, aside from their descriptive richness, network surveys may prove particularly useful in cross-cultural research because they involve less subjective interpretation. A network survey poses questions that refer to concrete particulars of one's social life (e.g., "How many years have you known Joe?") rather than generalities (e.g., "How important to you is the happiness of your coworkers?"). This reduces noise due to interpretation of the question as well as biases stemming from demand characteristics, self-presentational concerns, or self-sterotypes. Overall, the descriptive richness of network methods may enable a more fine-grained picture of the relationship patterns that characterize different kinds of collectivistic cultural traditions.

All that said, there are methodological limitations of this study. In terms of the evidence for our argument, we do not offer measures of the relational templates that have shaped the cultural patterns. The network data provide evidence for the hypothesized relationship patterns, but not their sources. One approach may be to query people's cognitive models of interactions in the coworker domain and in the four source domains, as has been done in research on Fiske's relational modes (Sheppard and Sherman 1988, Sondak 1998). Another approach that could be tried is content-analyzing employees' openended conversations about coworker relationships in each setting. Americans may use more rhetoric or lexicon reflecting an economic conception ("my relationship with Ted has really paid off") and fewer terms that reflect familial, political, or affiliative conceptions. In other words, signs of the relational models that have shaped these patterns of coworker interactions may be evident in the words used to describe these interactions in each cultural discourse.

Beyond the empirical and methodological contributions, the current research presents a first cut at theorizing cultural patterns at the interpersonal level of analysis. Admittedly, the relational templates proposed herein are but a provisional list, not a comprehensive framework. We have intended, more than anything else, to demonstrate a research strategy for identifying distinctive cultural patterns. It begins by examining the ethnographic literature for relationship roles that are particularly salient in a culture (e.g., the filial role in Chinese culture). Hypotheses are drawn about the type of workplace interactions for which the given relationship role could plausibly serve as a template (i.e., instrumental exchange in superordinate relationships). Then network surveys test whether this type of ties is distinctive in the culture, through comparing it to others.

Our emphasis on interpersonal patterns, rather than personal values, echoes other calls for conceptualizing cultural influence on behavior in terms of drivers external to the focal actor rather than in terms of internal values or beliefs (Morris et al. 2001). It takes two to tango, and hence the interaction patterns we have described are held in place by the other person's values and habits as much as by one's own. The views of third-party witnesses, whether expressed or merely anticipated by the focal actor, are another factor driving culturally typical behavior. However, there is much more to explore in future research about the external drivers of these interaction patterns. Practices and institutions in the environment may reinforce these patterns of interaction (Kitayama 2002).

Finally, the current approach may shed light on other coworker variables known to differ across cultures. Follow-on research has used the egocentric network approach to investigating cultural differences in trust, finding that affective and cognitive trust are fostered by different kinds of ties for Chinese and American managers, and the two kinds of trust are more intertwined for Chinese managers (Chua et al. forthcoming). This network approach could complement the experimental method in exploring the contingencies of important workplace social judgments, such as trust, obligation, and fairness.

As a final example, consider the judgment of interactional justice-the sense of fairness that hinges on respectful treatment (Morris and Leung 2000). For an American employee, interactional justice depends on behaviors such as active listening, through which a superordinate demonstrates recognition of the employee's goals. This may reflect a market transaction approach. looking for signs that the boss will help them instrumentally. However, for Chinese employees, interactional justice may be more sensitive to a superordinate's intimations of paternal protection. (Of course, this may only be true if the manager is older than the employees, and male, thereby fitting the filial script—an interesting empirical question.) For German employees, interactional justice may hinge on adherence to formally prescribed rights and duties. For Spanish employees, it may be more sensitive to signs of sociability.

Practical Implications

The current findings also have implications for practical issues faced by global firms. The current cultural differences may appear small in magnitude, yet these differences appear despite many forces pushing toward uniformity, such as standardized organizational structure and organizational culture. Our findings suggest that, given that cultural diversity in interaction patterns persists after standardization, some aspirations for uniformity within global firms may be elusive. Multinationals may have to accept that local employees bring local interaction norms, an inevitable result of being the ties to the local community that these firms also value.

Further, the present findings may help us understand why expatriate managers are prone to misunderstanding, and being misunderstood by, their local staffs (Watanabe and Yamaguchi 1995). An American manager in Hong Kong may misread the employees' favor-doing as scheming, an American in Germany may misread the employees' formality as inflexibility, and in Spain may misread employees' sociability as a lack of professionalism.

Likewise, the current findings may point to likely misperceptions among employees on culturally heterogeneous global teams. For example, Spanish employees may judge that their American colleagues are disloyal friends, that their Chinese colleagues are overly ingratiating toward superordinates, and that their German peers are aloof and rule oriented. Future research can test these predictions about the negative judgments to which employees on global teams will be prone.

Aside from these issues in intercultural interactions, the current approach to cultural norms may provide valuable insights to any firm trying to change aspects of its

organizational culture. Many assume that culture exists primarily in the form of abstract values, such as those that might be listed in a "mission statement," but changes to these statements often fail to change behavior (Kunda 1992). There is too much of a gap between the verbal abstractions people espouse (e.g., "excellence") and their concrete daily social behaviors and trade-offs (e.g., how to treat customers graciously while also being efficient). The present view of culture as existing in relational patterns suggests that the firm might do better to model desired relationships and interactions. One way might be to inculcate psychological contracts defining what branch employees should expect to give and receive from each other (Rousseau 1995). Another would be for leaders to enact the desired behaviors in their public interactions with the employees, such as employee meetings at the start of the workday.

Acknowledgments

The authors would like to thank the Citicorp Behavioral Sciences Research Council, and Mr. John Reed in particular, for their generous support for this project. They would also like to thank the participants at the University of Chicago GSB Social Structure Workshop for their helpful comments.

Endnotes

¹Parsons's proposed that elements of society at many different levels of analysis (personal value orientations, interpersonal norms, economic and political institutions, etc.) function together in tightly integrated homeostatic systems. This view, which seemed to limit the change and variation of societies, has been soundly critiqued by subsequent sociologists (Wrong 1961). To be sure, by invoking Parsons, we do not wish to imply an endorsement of his functionalist assumptions. However, conversely, we do not believe the objectional features of his metatheory should render invalid all of his many specific conjectures about patterns. In particular, his account of interpersonal norms provides a valuable point of departure for analyzing cultural patterns at this level.

 2 A canonical example of norm evolution in this way is the QWERTY keyboard layout on computers. This layout pattern was appropriated from the design of manual typewriters, where it originally served to prevent the keys from entangling. Though this original function no longer applies, the pattern persists because so many people are accustomed to it, and thus it is hard for any innovator to introduce a new layout and have it succeed.

³Of course, the workplace interaction norms in any culture draw on many role structures, and no two workplaces in the same culture have exactly the same norms. However, for simplicity's sake, we propose one relational template that is distinctively salient for each national culture.

⁴Of course, another reason that people form expressive and instrumental ties to the same others is that friendship can protect them against defection in exchange relationships (DiMaggio and Louch 1988).

⁵The hypotheses for each successive culture focus on different aspects of networks, so no trend in the data can contribute to the confirmation of multiple hypotheses.

⁶Cross-sectional data tells us the average age of relationships that exist at a given point in time. This is not equivalent to the average length of relationships because of survival bias. However, survival bias should not change the direction of the differences.

⁷We thank an anonymous reviewer for reminding us that a small set of network dimensions may be no more capable than a small set of value dimensions in capturing the important differences among these cultures.

References

- Alvarez, J. L., C. M. Cantos. 1994. From escapism to resented conformity: Market economies and modern organizations in Spanish literature. B. Czarniawska-Joerges, P. G. de Monthoux, eds. Good Novels, Better Management: Reading Organizational Realities. Harwood, Chur, Switzerland.
- Barnet, R. J., J. Cavanaugh. 1994. Global Dreams: Imperial Corporations and the New World Order. Simon and Shuster, New York.
- Bellah, R. N., R. Madsen, W. M. Sullivan, A. Swidler, S. M. Tipton. 1985. Habits of the Heart: Individualism and Commitment in American Life. University of California Press, Berkeley, CA.
- Bendix, R. 1977. Max Weber: An Intellectual Portrait. University of California Press, Berkeley, CA.
- Blau, P. M. 1955. The Dynamics of Bureaucracy: A Study of Interpersonal Relationships in Two Government Agencies Chicago. University of Chicago Press, Chicago.
- Borneman, J. 1992. *Belonging in the Two Berlins: Kin, State, Nation.* Cambridge University Press, London, UK.
- Brass, D. J. 1985. Men's and women's networks: A study of interaction patterns and influence in an organization. Acad. Management J. 28 327–343.
- Brislin, R. W. 1986. The wording and translation of research instruments. W. J. Lonner, J. W. Berry, eds. *Field Methods in Cross-Cultural Research*. Sage, Newbury Park, CA, 137–164.
- Brodbeck, F. C., M. Frese, M. Javidan. 2002. Leadership made in Germany: Low on compassion, high on performance. Acad. Management Executive 16 16–29.
- Burt, R. 1992. *Structural Holes: The Social Structure of Competition*. Harvard University Press, Cambridge, MA.
- Chen, C. C., J. R. Meindl, R. G. Hunt. 1997. Testing the effects of vertical and horizontal collectivism: A study of reward allocation preferences in China. J. Cross-Cultural Psych. 28(1) 44–70.
- Chua, R. Y. J., P. Ingram, M. Morris. From the head and the heart: Locating cognition- and affect-based trust in managers' professional networks. Acad. Management J. Forthcoming.
- Chua, R. Y. J., M. Morris, P. Ingram. Guanxi versus networking: Different configurations of affect- and cognition-based trust in the networks of Chinese and American managers. *J. Internat. Bus. Stud.* Forthcoming.
- Clark, M. S., H. T. Reis. 1988. Interpersonal processes in close relationships. Annual Rev. Psych. 39 609–672.
- Cohen, D. 2001. Cultural variation: Considerations and implications. *Psych. Bull.* **127** 451–471.
- Cohen, D. 2007. Methods in cultural psychology. S. Kitayama, D. Cohen, eds. *Handbook of Cultural Psychology*. Guilford, New York, 196–236.
- Cotton, J. L., J. M. Tuttle. 1986. Employee turnover: A metaanalysis and review with implications for research. Acad. Management Rev. 18 621-656.

Dalton, M. 1959. Men Who Manage. John Wiley, New York.

- de Tocqueville, A. 1969 [1835]. Democracy in America. Anchor Press, Garden City, NY.
- Diaz-Guerrero, R. 1967. Psychology of the Mexican. University of Texas Press, Austin, TX.
- DiMaggio, P., H. Louch. 1998. Socially embedded consumer transactions: For what kinds of purchases do people most often use networks? Amer. Sociol. Rev. 63 619-637.
- Dore, R. 1983. Goodwill and the spirit of market capitalism. Brit. J. Sociol. 34 459-482.
- Durkheim, E. 1933 [1893]. *The Division of Labor in Society*. Free Press, New York.
- Durkheim, E. 1951 [1897]. Suicide. Free Press, New York.
- Emerson, R. M. 1962. Power-dependence relations. *Amer. Sociol. Rev.* 27 31–40.
- Fiske, A. P. 1991. Structures of Social Life: The Four Elementary Forms of Human Relations. Free Press, New York.
- Geertz, C. 1975. On the nature of anthropological understanding. Amer. Scientist 63 47-53.
- Gluckman, M. 1967. The judicial process among the Barotse. P. Bohannan, ed. Law and Warfare: Studies in the Anthropology of Conflict. The Natural History Press, New York, 59–92.
- Gouldner, A. W. 1960. The norm of reciprocity: A preliminary statement. Amer. Sociol. Rev. 25(2) 161–178.
- Granovetter, M. S. 1973. The strength of weak ties. Amer. J. Sociol. 78 1360–1380.
- Hall, E. T. 1990. Understanding Cultural Differences. Intercultural Press, Yarmouth, ME.
- He, W., C. C. Chen, L. Zhang. 2004. Rewards-allocation preferences of Chinese employees in the new millennium: The effects of ownership reform, collectivism, and goal priority. *Organ. Sci.* 15(2) 221–231.
- Heine, S. J., D. R. Lehman, K. Peng, J. Greenholtz. 2002. What's wrong with cross-cultural comparisons of subjective Likert scales: The reference-group problem. J. Personality Soc. Psych. 82 903–918.
- Ho, D. Y., C. Y. Chiu. 1994. Component ideas of individualism, collectivism, and social organization: An application in the study of Chinese culture. M. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, G. Yoon, eds. *Individualism and Collectivism: Theory, Method, and Application*. Sage, Thousand Oaks, CA.
- Hofstede, G. 1980. Culture's Consequences: International Differences in Work-Related Values. Sage, Beverly Hills, CA.
- Homans, G. C. 1950. The Human Group. Brace, Harcourt, New York.
- Hong, Y-Y., M. W. Morris, C-Y. Chiu, V. Benet-Martinez. 2000. Multicultural minds: A dynamic constructivist approach to culture and cognition. *Amer. Psychologist* 55(7) 709–720.
- House, R. J. 2004. Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies. Sage Publications, Thousand Oaks, CA.
- Hsu, F. L. K. 1953. Americans and Chinese: Two Ways of Life. Abelard-Schuman, New York.
- Hsu, F. L. K. 1971. A hypothesis on kinship and culture. F. L. K. Hsu, ed. *Kinship and Culture*. Aldine, Chicago.
- Ibarra, H. 1993. Personal networks of women and minorities in management: A conceptual framework. Acad. Management Rev. 18 56–87.
- Ibarra, H. 1995. Race, opportunity and diversity of social circles in managerial managers' networks. Acad. Management J. 38(3) 673-703.

- Ibarra, H. 1997. Paving an alternative route: Gender differences in managerial networks. Soc. Psych. Quart. 60 91–102.
- Kitayama, S. 2002. Culture and basic psychological processes: Toward a system view of culture. *Psych. Bull.* **128** 189-196.
- Kitayama, S., H. R. Markus, H. Matsumoto, V. Norasakkunkit. 1997. Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. J. Personality Soc. Psych. 72 1245–1267.
- Kunda, K. 1992. Engineering Culture: Control and Commitment in a High-Tech Corporation. Temple University Press, Philadelphia.
- Lindsley, S. L., C. A. Braithwaite. 1996. You should "wear a mask:" Facework norms in cultural and intercultural conflict in Maguiladoras. *Internat. J. Intercultural Relations* 20(2) 199–225.
- Miller, R. B. 1993. *Citicorp: The Story of a Bank in Crisis*. McGraw-Hill, New York.
- Morris, M. W., K. Leung. 2000. Justice for all? Progress in research on cultural variation in the psychology of distributive and procedural. Appl. Psych.: An Internat. Rev. 49 100–132.
- Morris, M. W., T. Menon, D. Ames. 2001. Culturally conferred conceptions of agency: A key to the social perceptions of persons, groups, and other actors. *Personality Soc. Psych. Rev.* 5(2) 169–182.
- Murphy, M. 1983. Coming of age in Seville. J. Anthro. Res. 39 376-392.
- Oyserman, D., H. Coon, M. Kemmelmeier. 2002. Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psych. Bull.* **128** 3–73.
- Parsons, T. 1951. The Social System. Free Press, New York.
- Pascale, R. 1990. Managing on the Edge: How Successful Companies Use Conflict to Stay Ahead. Simon and Schuster, New York.
- Podolny, J. M., J. N. Baron. 1997. Resources and relationships: Social networks and mobility in the workplace. *Amer. Sociol. Rev.* 62 673–693.
- Portes, A. 1995. Children of immigrants: Segmented assimilation and its determinants. A. Portes, ed. *The Economic Sociology of Immigration*. Russell Sage, New York, 248–280.
- Redding, G., G. Y. Y. Wong. 1986. The psychology of Chinese organizational behavior. M. H. Bond, ed. *The Psychology of the Chinese People*. Oxford University Press, Hong Kong, 213–266.
- Roethlisberger, F. J., W. Dickson. 1948. *Management and the Worker*. Harvard University Press, Cambridge, MA.
- Rousseau, D. M. 1995. Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements. Sage Publications, Thousand Oaks, CA.
- Sanchez-Burks, J., R. E. Nisbett, O. Ybarra. 1998. Relational schemas, cultural styles, and prejudice against outgroups. J. Personality Soc. Psych. 79 174–189.
- Schein, E. 1993. Organizational culture and leadership. J. Shafritz, J. S. Ott, eds. 2001. *Classics of Organization Theory*. Harcourt College Publishers, Fort Worth, TX.

- Sheppard, B. H., D. M. Sherman. 1988. The grammars of trust: A model and general implications. Acad. Management Rev. 23 422–437.
- Silin, R. F. 1976. *Leadership and Values*. Harvard University Press, Cambridge, MA.
- Simsek, Z., J. and Veiga. 2000. The electronic survey technique: An integration and assessment. Organ. Res. Methods 3 92–114.
- Sondak, H. 1998. Relational models and organizational studies: Applications to resource allocation and group process. C. L. Cooper, D. M. Rousseau, eds. *Trends in Organizational Behavior*, Vol. 5. John Wiley and Sons, New York, 83–126.
- Sperber, D. 1994. The modularity of thought and the epidemiology of representations. L. A. Hirschfeld, S. A. Gelman, eds. *Domain Specificity in Cognition and Culture*. Cambridge University Press, UK, 39–67.
- Takano, Y., E. Osaka. 1999. An unsupported common view: Comparing Japan and the U.S. on individualism/collectivism. Asian J. Soc. Psych. 2 311–341.
- Tonnies, F. 1957 [1887]. Community and Society. Transaction Books, New Brunswick, NJ.
- Triandis, H. C. 1995. Individualism and Collectivism. Westview Press, Boulder, CO.
- Triandis, H. C., M. J. Gelfand. 1998. Converging measurement of horizontal and vertical individualism and collectivism. J. Personality Soc. Psych. 74(1) 118–128.
- Triandis, H. C., G. Marin, J. Lisansky, H. Betancourt. 1984. Simpatia as a cultural script of Hispanics. J. Personality Soc. Psych. 47(6) 1363–1375.
- Umphress, E. E., G. Labianca, D. J. Brass, E. Kass, L. Scholten. 2003. The role of instrumental and expressive social ties in organizational justice perceptions. *Organ. Sci.* 14 738–753.
- Watanabe, S., R. Yamaguchi. 1995. Intercultural perceptions at the workplace: The case of the British subsidiaries of Japanese firms. *Human Relations* 48 581–607.
- Weber, M. 1947. The Theory of Social and Economic Organization. Oxford University Press, New York.
- Weber, M. 1958. *The Protestant Ethic and Spirit of Capitalism*. Scribner's, New York.
- Weber, M. 1964. The Religion of China. Free Press, New York.
- Werner, O., D. T. Campbell. 1970. Translating, working through interpreters, and the problem of decentering. R. Narroll, R. Cohen, eds. A Handbook of Method in Cultural Anthropology. American Museum of Natural History Press, New York, 398–420.
- Windolf, P. 1986. Recruitment, selection, and internal labour markets in Britain and Germany. Organ. Stud. 7 235–254.
- Wrong, D. H. 1961. The oversocialized conception of man in modern sociology. Amer. Sociol. Rev. 42 32–56.
- Yang, L. S. 1957. The concept of *pao* as a basis for social relations in China. J. K. Fairbank, ed. *Chinese Thought and Institutions*. University of Chicago Press, Chicago, 291–309.