

Who's helping whom? Layers of culture and workplace behavior

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Summary

This paper describes an in-depth, qualitative exploration of helping behavior among software engineers doing the same type of work in the U.S. and India. Consistent with research describing American culture as more individualist and Indian culture as more collectivist, we find that engineers at the American site provide help only to those from whom they expect to need help in the future, whereas engineers at the Indian site are more willing to help whoever needs help. However, we further find that the differences are not due to the influence of individualistic or collectivist norms *per se* but rather to the ways in which helping is framed in the two contexts. At the American site, the act of helping is framed as an unwanted interruption. In contrast, helping at the Indian site is framed as a desirable opportunity for skill development. These different framings reflect the combined influence of national, occupational, and organizational layers of culture in the two settings. In each case, we find that engineers help others when doing so is framed in such a way as to be perceived as helpful in achieving their career goals. Our findings have important implications for better understanding helping behavior itself and also the mechanisms through which culture influences work behavior. Copyright © 2002 John Wiley & Sons, Ltd.

Introduction

Why do people help each other at work? That is, what makes people willing to take time away from their own tasks to assist others with work-related problems? This is not a new question. As early as 1938, Barnard identified the importance of helping behaviors in organizations and, almost 30 years later, Katz and Kahn went further to argue that:

Within every work group in a factory, within any division in a government bureau, or within any department of a university are countless acts of cooperation without which the system would break down. We take these everyday acts for granted, and few of them are included in the formal role prescriptions for any job (Katz & Kahn, 1966: 339).

In the new workplace of knowledge workers, we no longer have the luxury of taking these acts of helping for granted. They are central to the work and often problematic.

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Knowledge workers are a rapidly growing sector of the global labor force (Silvestri & Lukasiewicz, 1991). Their work is open-ended, creative, individually styled, and cannot be standardized or fully planned out in advance (Bell, 1973). Thus tasks and responsibilities cannot be cleanly divided up amongst individuals ahead of time. Knowledge work consists of complex, analytic, and abstract processing of information and knowledge (Barley & Orr, 1997; Savage, 1990; Stehr, 1994; Zuboff, 1988) raising the constant possibility of mismatches between the division of roles and the division of skills and knowledge. As a result, knowledge work is highly interdependent, with individuals frequently consulting each other and exchanging information about their tasks. In such circumstances the help of others is needed by individuals to make progress on their own work; helping is needed within groups to ensure that outputs produced by one person are consistent with inputs required by another; and helping is needed within organizations for efficiency, flexibility, learning, and innovation (see, e.g., Malone & Rockart, 1991; Nickerson, 1992; Sproull & Kiesler, 1991; Walton, 1989). Therefore, it has never been more important for us to understand why people help each other at work—and why they don't.

Though there has been considerable research on helping in both social psychology and sociology, much of this literature has been structured around a debate over whether helping behaviors are a form of altruism or a form of egoism. In other words: Do we help in the expectation only of increasing another person's welfare, or in the expectation that we also increase our own welfare (see, e.g., Batson, 1998; Berkowitz & Daniels, 1963; Latané & Darley, 1970; MacIntyre, 1991)? This is a straightforward question theoretically, but empirically it has proven slippery. The benefits of helping others can include non-material rewards such as increased self-esteem or liking, and studies have found that we are more likely to give help when the rewards for doing so are more salient (Batson, 1987; Batson *et al.*, 1988; Cialdini *et al.*, 1987; Karylowski, 1984; Lerner & Meindl, 1981; McGuire, 1994). It seems that almost any helping behavior can be framed as being somewhat egoistic. Yet, the expected rewards for helping are often uncertain and lie in the future, so even self-centered helping behavior can typically be framed as being partially altruistic. For instance, to the extent that there is a universal norm of reciprocity, we may help others as a form of insurance against our own future need for help. The sociology of help suggests that the more help one gives, the more others will be in debt and, therefore, the easier it will be to call on them for help in the future (Blau, 1964; Goffman, 1967; Gouldner, 1960). Yet there is no certainty that we will actually need that help, and no guarantee that if we do it will necessarily be forthcoming. Taken together, therefore, these studies suggest that the interesting question may not be whether helping is objectively altruistic or egoistic but rather how it comes to be framed; in other words, how the perceived costs and rewards of helping come to be defined in a given situation.

Within the domain of organizational studies, research suggests that additional factors influencing decisions about whether to help include mood, attributions of why the help is required, job satisfaction, and the perceived fairness of organizational rewards (Bateman & Organ, 1983; Brief & Motowidlo, 1986; Lepine & Van Dyne, 2001; Organ, 1988; Smith, Organ, & Near, 1983). Organ and Konovsky (1989), for example, found that the level of organizational citizenship behavior was more a factor of the perceived fairness of the organization's reward system than a factor of mood. McNeely and Meglino (1994) found that the particular antecedents that shape prosocial organizational behavior depend on the intended beneficiaries of that behavior. When an act of helping is thought to benefit only specific individuals, concern for others and empathy are significant predictors; whereas when the helping is seen as benefiting the organization as a whole, reward equity is significant. Studies such as these suggest that the relationship between rewards, fairness, and helping is subtle and complex, and further point to the fact that what is needed is a deeper understanding of how helping behaviors get framed in the workplace.

A related stream of research by Joan Miller, David Bersoff and colleagues comparing the perceptions of American and Indian subjects in a variety of helping situations has shown that cultural differences influence the way in which helping is framed (Miller & Luthar, 1989; Miller, Bersoff, &

Harwood, 1990; Miller & Bersoff, 1994; Miller & Bersoff, 1998). Their studies indicate that Americans are more likely to frame the decision about whether to help as one of personal choice—Do I want to help this person?—whereas Indians are more likely to frame it as an matter of moral responsibility—It is my duty to help (Miller & Luthar, 1989). They found, for example, that Americans are more likely to invoke *liking* as a consideration and to give it more weight when deciding whether to help (Miller & Bersoff, 1998). Their studies, though done in a laboratory setting, suggest that culture shapes how the situation is framed and matters considerably in whether, and why, helping occurs in particular situations.

The purpose of our study is to further investigate the role culture plays in shaping how helping behavior is framed and thus when it is performed in a given context. We also use groups of Americans and Indians as a point of comparison of national culture. As Miller, Bersoff, and colleagues describe, these two cultures form a useful contrast for studies of helping behavior because of the pronounced differences between the general Indian cultural emphasis on interdependence and mutual aid and the American cultural emphasis on individual liberty (Miller, Bersoff, & Harwood, 1990: 34). American culture is highly individualist whereas Indian culture is more collectivist. According to Hofstede's (1980) cross-cultural comparison of individualism–collectivism, the United States ranks as the most individualist with an index of 91, while India's index is 48. (As a point of reference, Japan has an index of 46; Venezuela, with an index of 12, ranks the most collectivist of the 39 countries surveyed.) Individualistic cultures are characterized as emphasizing the importance of individuals maintaining their independence and differentiating themselves from other people, whereas collectivist cultures are characterized as emphasizing the importance of the interdependence between people and the way in which individual identity is defined by one's relationship to others (Erez & Earley, 1993; Fiske *et al.*, 1998; Markus & Kitayama, 1991; Triandis, 1995).

Workers in the U.S. grow up in a society built on hierarchy, specialization, and individual contribution (Bellah *et al.*, 1985; DeTocqueville, 1835). From an early age, American children see that reward and recognition come to those who display an ability to make it on their own (Sennett & Cobb, 1973). In contrast, individuals in India are more predisposed to be communitarian and to view individual performance as less important than group performance (Chen, 1995). During childhood, Indians learn to subordinate their needs to the requirements of their family, a sensitivity that extends to other in-groups later in life (Roland, 1984). In the U.S., an individualized identity is highly prized; in India, there is a lack of regard for, and at times a discouragement of, separation and autonomy. As a result, in-groups in India have priority over individual needs, desires, beliefs, and values (Roland, 1988). Research suggests that the location along the individualism–collectivism dimension influences the behaviors viewed as legitimate, acceptable, and effective in a particular culture (e.g., Fiske *et al.*, 1998; Hofstede, 1980). More specifically, the level of individualism–collectivism has been shown to predict the willingness of individuals to cooperate with others (Cox *et al.*, 1991; Wagner, 1995).

Consistent with research on the influence of national culture we found these differences to matter in understanding helping behavior in the workplace. However, instead of directly influencing helping behavior, we found that they intertwined with the influences of other layers of culture—occupational and organizational culture—and that it was the combination of these layers together that shaped how helping was framed by the engineers we studied. We found that at a purely behavioral level the two groups seemed to play out their cultural stereotypes: the individualistic Americans displayed a more restricted pattern of helping than did the collectivist Indians who provided help on a more generalized basis to any person who needed it. However, when we examined in detail *why* helping behavior occurred or did not occur in the two groups—the accounts the engineers gave for their decisions about whether to help and the way in which they framed that decision—we found no evidence that internalized norms of communitarianism or of duties or desires to subordinate personal needs to the needs of others or the group as a whole explain the observed behavioral differences. The influence of culture is

revealed to be more subtle, shaping the perceived costs and rewards of providing help and whether helping is framed as more altruistic or egotistic.

Our study was exploratory in nature. The two small work groups examined here cannot be said to stand in for American and Indian culture writ large or for the occupational culture of software engineers. The groups were not chosen to be representative of their national, occupational, or organizational contexts—it is not safe to generalize from these groups to the broader cultures in which they are set. Indeed, the point of the study is to examine how these broader cultures themselves overlap and intersect in their influence on work place behavior. What the inductive analysis of this study can provide is a more nuanced understanding of the general mechanisms through which culture shapes helping behavior. In particular, our findings highlight two things: 1) the importance of recognizing the multiple layers of cultural influence, and 2) that framing and sensemaking are key mechanisms through which culture's influence is made manifest.

We describe below how the data about the two groups were gathered and analysed. We then present a thick description (Geertz, 1973) of the perceptions and behaviors of helping in the two settings. Finally, we discuss our finding that the observed differences of helping behavior are better explained by differences of framing and sensemaking in the two contexts than by reference to different norms of individualism and collectivism. We argue that, by complicating our understanding of how culture operates in this way, we contribute to a richer explanation of why people help each other at work, one that has implications for future research and theory building and also for practice.

Data and Methods

The data were collected by the first author and grow out of her work with a group of American software engineers at the pseudonymously named company, Ditto (Perlow, 1999). Having been struck by the individualistic framing by the Ditto engineers of work interactions as interruptions, even when these interactions were widely recognized as beneficial to the group as a whole, she decided to study a group of Indian software engineers performing a highly similar task as a contrasting case. India provides a useful comparison to the U.S. in this instance because of the difference, noted above, in cultural orientation and because of the similarity in the strength of their software industries. The Indian software industry has been one of the fastest-growing sectors of the Indian economy and has been ranked number one by U.S. vendors for offshore software development (NASSCOM, 1997).

Organizational Context

The Organizations

The U.S. data, reported more fully in Perlow (1999), come from a nine-month field study of software engineers at a high-tech, American Fortune 500 company we call Ditto. The India data come from a two-month study of software engineers in Bangalore, an area known as the Silicon Valley of India. The Indian engineers work for a high-tech, joint venture between a prominent Indian company—which we will refer to here as Ico—and an American Fortune 500 company.

The Engineers

The research focuses on two groups of software engineers. The Ditto group contains one female engineer and three male engineers who all report to a project leader. All four engineers have bachelor degrees in a scientific or engineering field from well-regarded American universities. All the engineers consider working at Ditto a highly desirable job. The group of software engineers at Ico is similar in size, consisting of one female engineer and four male engineers who, again, report to a project leader. All of the Ico engineers have four-year college degrees in engineering from well-regarded Indian universities. As with Ditto, Ico is highly regarded by the engineers. The engineers often mention the positive images they associate with the names of both the American and Indian partners in the Ico joint venture.

The Work Environments

In terms of work environment, Ditto and Ico engineers are situated in similar work spaces. Engineers sit in cubicles in wide open rooms, with managers in closed offices around the perimeter. The offices are clean, well-lit, and air-conditioned. The tasks performed by the two groups during the period of observation were also similar. The Ditto group was developing code to operate a color laser printer. The group had purchased a basic 'operating system'—the software to make a printer operate—from a vendor. The engineers' responsibility was to add all the 'extras' to make the printer actually print. The Ico group was working for a company in Germany that had developed a home banking system for the Internet. The engineers' responsibility was to develop Internet security plugins that checked for viruses.

Data sources

In studying these two groups of engineers, three methods of data collection were used to capture the way members of the group helped each other and the context in which they worked: observation, interviews, and tracking logs.

Observation

Software groups were observed on a daily basis. From early morning until late night, engineers were observed at work in their cubicles, meetings, and hallway conversations. When on site, field notes were typed during the day, as time permitted, and for several hours each night. As mentioned previously, the first author was on site at Ditto for nine months; three years later, she was on site at Ico for two months.¹

In both countries, she had an office located on the perimeter of the engineers' work space. This arrangement provided her a work space within their context and also afforded privacy for confidential conversations with the engineers. Often, engineers would come into the office, shut the door, sit down, and start updating her on some event that had occurred.

Interviews

At each location, each member of the software group was formally interviewed for one to two hours. These interviews provided background information about the group members and allowed us to understand their perceptions of work and work goals. The engineers were asked questions about their work history, work at the present company, and future goals.

¹All data were collected by the first author. However, for ease of exposition, we use the term 'we' throughout.

Additional interviews were conducted with individuals at both companies, including other engineers as well as managers. These interviews provided information on their backgrounds and their perceptions of their own work, work groups, and company. Also, as part of these interviews, interviewees were asked about their relationships with members of the software groups being studied as well as perceptions of how these groups' ways of working compared with ways of working within the broader organization. At Ditto, an additional 40 engineers, 20 managers, and 10 senior managers were interviewed. At Ico, an additional 18 engineers, 14 managers, and 7 senior managers were interviewed.

Tracking logs and debriefing interviews

Because we wanted extensive data on the engineers' interactions at work, they were asked to keep logs of what they did all day. On randomly chosen days, engineers tracked their activities from when they woke up until they went to bed. Each engineer wore a digital watch that beeped on the hour and, at each beep, wrote down all interactions during the previous hour. They were encouraged to write down interactions as they occurred and to use the beeps as an extra reminder to keep track of their activities. After each day on which the engineers tracked their activities, a debriefing interview was conducted in which they were asked to talk through their log sheets, reviewing all interactions, who had been involved, why they had been involved, and how they perceived each interaction. The tracking logs were then annotated to record this information.

The Ditto engineers each tracked their activities on three randomly chosen days, resulting in data from 12 people days. In India, because the period of fieldwork was shorter, the engineers each tracked their activities on one randomly chosen day, yielding data from 5 people days.

Data analysis

The data were analyzed using an approach influenced by Glaser and Strauss (1967) and consistent with the 'textual approach' described by Gephart (1993). This means treating the fieldnotes, interview transcripts, and annotated tracking logs as texts and then analyzing them with an integrated combination of three methods: theoretical sampling, coding, and expansion analysis. As Gephart (1993) notes, these methods involve disassembling the texts to extract key passages identified as being of theoretical interest and then recontextualizing and interpreting those passages to render them meaningful to the reader. Together, when applied to texts containing data about both behaviors and perceptions of those behaviors, they form a tool especially appropriate for developing insights into organizational sensemaking.

Theoretical sampling

Theoretical sampling is the process of selecting on analytic grounds which of the collected data to analyze and, in later stages of the fieldwork, what further data to collect. From the research in Ditto, the theme of work interruptions—including interrupting one's own work to help others—was identified as a key issue of interest (see Perlow, 1999). This influenced the focus of observations and interviews at Ico and sharpened the questions asked. The differences in the ways in which requests for help were framed by the Ditto and Ico engineers were immediately apparent. The same helping behaviors that were viewed as disruptive interruptions in Ditto were seen as learning opportunities in Ico. To study these differences in detail, additional data were gathered at Ico about when help was given and how the costs and rewards of helping were perceived.

Coding

Once the fieldwork had been completed and the textual database had been created, the texts were manually coded and those passages relating to helping behavior were extracted for further analysis.

This subset of the data contained information about the details of the help engineers gave to each other, the accounts they gave for why they accepted or refused particular requests for help, and how they framed the act of giving help. Specifically, the passages were coded as to whether help was given or not, how the engineers referred to the time spent helping—e.g., as an interruption, as an annoyance, as an opportunity to reciprocate, as an opportunity to learn—and whether any mention was made of the behavior being encouraged or discouraged by management. Clear patterns of difference emerged between the two groups in when helping was given and how helping was framed.

Reviewing these passages, the number of references made to the issues of rewards and the prerequisites for career progression were striking and made it clear that helping behaviors could not be understood independent of those other issues. The data were therefore recoded and passages relating to incentives, rewards, and careers were extracted and appended to the data subset. Next, a textual portrait of the career goals and the behaviors believed to be required for achieving those goals was drawn for each of the engineers based on the passages in which those engineers, or their manager, expressed opinions on this issue. These portraits proved to be highly consistent in-group and contrasting across-group. We describe them in detail in the next section, but in summary: at Ditto, engineers strive to complete high visibility individual work; at Ico, engineers seek to continually develop their areas of expertise. In order to draw out the connections between career goals, the framing of helping, and actual helping behaviors, the textual passages about helping were then more carefully coded to distinguish among the accounts engineers gave about helping. The final step of the analysis was to reconnect the issues of career achievement and helping and examine the relationship between them.

Expansion analysis

The next section presents the results of this analysis with direct quotes and general descriptions of the context of specific helping situations to illustrate the patterns we describe of when help is given, how helping is framed, the career goals of the engineers, and the connections between these three elements. The examples provided have been expanded to include sufficient context and supporting explanation so that they can be understood by the reader. They are not always quotes from the fieldnotes or transcripts but are often reconstructed descriptions and accounts of particular helping situations drawn from the fieldnotes. Where informants are quoted directly in the text, those quotes are reported verbatim but with accompanying explanation where necessary.

Summary of Findings

When help is given

The pattern of responses to requests for help varies across the two sites. At Ditto, engineers are most responsive to requests for help from those individuals from whom they expect to need help in the future. In contrast, Ico engineers provide help with less attention to their relationship with the person asking for help. Ico engineers respond whenever asked a question related to an area of expertise they possess or wish to develop.

Ditto: restricted reciprocity

Ditto engineers recognize that they may need help from certain people in the future, and thus willingly help those individuals when asked. For example, Max willingly helped Andy. Sometimes Max would make suggestions, whereas other times he would work with Andy to figure out the answer. In contrast,

with Stan, Max was less responsive to requests for help. At one point when Stan needed help, Max agreed to listen but continued to solve a different problem on his own computer at the same time. Because his concentration was elsewhere, Max took several minutes to respond to each of Stan's questions. Stan, consequently, had to stand around for over half an hour just to get Max to respond to five minutes' worth of questions. Max's relationships with Andy and Stan exemplify the Ditto engineers' tendency to be more responsive to those from whom they expect to need help in the future. Max stated explicitly that he holds Andy in high regard: 'Andy is an expert in solving problems.' Max indicated further that, given Andy's expertise, he frequently seeks help from Andy. In contrast, Max expressed little respect for Stan. According to Max, 'Stan is too slow . . . he does not give me the information I need quickly enough.' Moreover, when asked about the possibility of needing help from Stan in the future, Max indicated that, though he would ask Andy frequently, Stan would never be able to help him.

At Ditto, then, engineers appear to help most willingly when they perceive a reciprocal benefit to themselves. For example, Sarah's approach to helping those from whom she does not expect reciprocity is as follows: 'If they have a problem, they should write it down and tell me about it at a mutually convenient time.' She notes, 'I am careful not to establish a reputation for being helpful, because they will come to me all of the time. I want them to think twice before they approach me.' In contrast, when asked for help by someone she routinely asks for help herself, her response is strikingly different: 'I will always try to help; he is so helpful to me, I will do whatever I can.'

Ico: generalized willingness

In contrast to the restricted reciprocity of helping at Ditto, the Ico data do not indicate that engineers provide differential help to those they expect to need help from in the future. Rather, engineers willingly provide help to whoever needs it. For example, when one Ico engineer needed help on a UNIX problem, he turned to the engineer who had a reputation for being the group's expert on UNIX and readily received the help he needed, even though the UNIX expert did not perceive this engineer to be a potential helper for his own work. Moreover, Ico engineers depend on a larger range of people—not only those on their immediate project team. As one engineer explained: 'When I get stuck, I turn to other engineers on the team, friends at the company or, as a last resort, surf the net.' It is common for the Ico engineers to call a batchmate—one who entered Ico at the same time but is somewhere else in the company—or even a classmate from university who might work at a competitor company. As one engineer explained his own responsiveness to requests for help: 'People depend on me . . . I am the office expert. I help as needed.' A deep-seated system of mutual dependence appears to have developed such that, instead of building individual helping credits in dyadic relationships, the engineers, as members of a community, share an understanding that they will help each other as needed. As an expert, one will provide help to whoever needs help in that area. In turn, each engineer perceives that experts in the area will reciprocate when he or she needs help.

At first glance, it appears that Ditto engineers provide help based on exchange relationships and Ico engineers provide help based on communal relationships. According to Clark and Mills (1979, 1993), benefits in exchange relationships are given with the expectation of receiving a comparable benefit in return or as repayment for a benefit received previously. In contrast, in communal relationships benefits are given to demonstrate general concern for the others in the group. Indeed, at Ditto, engineers do appear to have exchange relationships. However, at Ico, we find that the ways in which the engineers frame requests for help do not suggest that engineers merely have communal relationships. Though we find Ico engineers generally more willing to provide help, we further find that Ico engineers perceive the act of providing help to be a learning opportunity. Moreover, we find that learning opportunities are highly valued by Ico engineers because of their association with achieving their own career goals. We therefore find Ico engineers help not simply because of a general concern for

the community, but because helping helps them pursue their own career goals. In the next section, we describe how both Ditto and Ico engineers frame the act of giving help. Then, in the following section, we will describe their perceptions of what is valued in terms of their career goals.

How help is framed

Ditto engineers frame requests for help as unwanted interruptions, responding only when they feel it is necessary. In contrast, Ico engineers frame requests for help as an opportunity to learn and actively seek out such opportunities.

Ditto: interruptions

Giving help at Ditto is perceived by the engineers as an interruption of their 'real work' of technical problem solving. The engineers make a clear distinction between their real work and helping others. Moreover, they complain bitterly about not having enough time to focus on their real work. As one engineer explained, 'The biggest frustration of my job is always having to help others and not getting my own work done.' According to another engineer, 'Working on Saturdays is much more productive . . . I can sit down and work without always worrying that someone is about to sidetrack me.'

Still, some engineers provide help beyond that which they expect to need in terms of future helping 'credits.' These engineers gain a reputation as willing to accept others' requests for help and find themselves inundated with such requests. In the end, even these engineers feel that they must draw the line, or they will 'waste' all of their time. As one Ditto engineer described the situation:

You have to be rude sometimes. You have to speak up and be rude, otherwise people will walk all over you . . . because you are not going to say 'Go to hell, that's not my job,' because you're polite they will try to get away with stuff. It's like a three-year-old testing, day after day after day to see just what they can get away with. And finally you have to turn around and snap at them to set some boundary; to say this is as far as I will go.

According to another engineer with a reputation as a supportive helper, people come to him whenever there is a problem because so few people willingly provide help. He recognizes that people need help to work effectively. However, he recounted event after event where he 'wasted time' helping others. This engineer's generosity, perceived as valuable to those seeking help, attracts a disproportionate share of people's problems. He summed it up: 'The problem with my work style is that responsiveness breeds more need for responsiveness, and I am so busy responding, I cannot get my own work done.' Though one's willingness to help (and, likely, the quality of one's help) may vary with the person's motivation for providing the help (e.g., a helping account, personal reasons), all acts of giving help at Ditto are framed as interruptions.

Ico: learning opportunities

In contrast to the framing of the act of helping at Ditto, helping others at Ico is considered a desirable opportunity to develop expertise. Indeed, engineers often seek out opportunities to provide help on a challenging problem that can be an interesting learning experience. If someone has a difficult problem, engineers are eager to get involved because of the chance to develop their skills. One engineer explained: 'Helping colleagues in need opens up more opportunities to learn and develop my own skills.' Another engineer emphasized that 'continually reading books and helping others is the best way to stay current.' A third engineer described another's work, 'his work is more challenging than mine at this point. I can learn more by helping him.' When one engineer was asked during a debriefing interview why he had helped another engineer so willingly, he explained, 'It helps me. I learn from

helping him. I develop my own expertise in the process.’ Clearly, not all requests for help involve learning, but engineers explained that in the best case they do, and often they cannot tell ahead of time. Moreover, Ico engineers do not appear to perceive a risk associated with spending time helping and then finding out that it was not a problem from which they could learn much. Either they can quickly answer the question (which they indicate does interrupt them from what they were doing but which they do not appear to perceive to be of consequence for them and their ability to succeed), or they find the problem to be more difficult and then, though it will take them longer to solve and therefore have a larger impact on their ability to complete their own work, it will also provide them the greatest opportunity to learn. It is these latter, more challenging, problems on which Ico engineers are most eager to help.

Example: quiet time

The contrast between how Ditto and Ico engineers frame time spent helping others can be seen in their respective reactions to the concept of ‘quiet time.’ Only Ditto engineers mention the need for quiet time for task completion. A Ditto engineer who worked from home one day a week during the preceding year stated the benefits: ‘I could get more than two days’ worth of work done in one, and still have time left over for educational advancement, reading manuals, and more.’ By contrast, Ico engineers suggest that interactions motivate them to come to work. They explained that they would not want to work from home—if such an option existed—because of the missed opportunity to interact. Of course, these attitudes about working from home may reflect differences in home environments as well as different perceptions of the role of interaction.

Nonetheless, Ditto and Ico engineers exhibit similar variation in responses regarding the possibility of ‘quiet time’ at work. At both Ditto and Ico, we suggested implementing blocks of ‘quiet time’—periods during which no one could interrupt any one else—within the normal work day. Ditto engineers were unanimously in favor of the proposal. At Ico, on the other hand, there was no receptiveness to this idea. Both Ditto and Ico engineers had a set of individual deliverables to complete. However, Ico engineers expressed no desire for uninterrupted work time; the idea of too many disruptive interruptions did not resonate as a problem for them. When it was explained to Ico engineers how effective quiet time had been at Ditto (where, as a result of Ditto engineers’ enthusiasm, it was successfully implemented), they were intrigued as to why Ditto engineers would want such a thing. The Ico engineers were not troubled by requests for help. As one Ico engineer stated, ‘We don’t have a need for that here. The interactions are not a problem.’ Moreover, Ico engineers continually stressed the value of the time spent helping for further developing their own skills. As one engineer summed it up, ‘I look for opportunities to help. I want whatever opportunity I can find to develop myself.’

Achieving career goals

Career goals themselves differ between Ditto and Ico engineers, and recognizing this difference is central to understanding how helping is understood in the two contexts. Ditto engineers are most concerned with moving up within their company whereas Ico engineers are more concerned with movement to more challenging and rewarding jobs, whether at Ico, elsewhere in India, or abroad. Ico engineers do not express concern about whether they succeed at Ico in particular. Rather, they focus on skills rewarded by the external labor market.

Ditto: succeeding internal to the organization

Ditto engineers strive to succeed internal to their organization. They perceive recognition and reward at Ditto to depend on doing high-visibility work and accommodating work demands. Moreover, they perceive a willingness to help as a hindrance to their organizational reward and recognition.

Doing high-visibility work. According to Ditto engineers, managers consider 'high-visibility' work crucial to their own success. Managers are therefore more concerned with engineers' progress when they are engaged in high-visibility work. When managers are more concerned they constantly check on engineers to make sure that the work is progressing as quickly as possible. They become familiar with the engineers' work and recognize the engineers positively for stellar accomplishments. One engineer summed it up as follows: 'I want visibility. Visibility is critical to move up in this company . . . My work is not providing me an opportunity to shine. I don't want to be in the background any more.' However, the professional 'risk' of working on a high-visibility project is that any 'failure' can damage one's reputation.

High-visibility work is vital at Ditto, not only for individual recognition, but also for access to necessary resources. As one project team leader explained:

My team's work is less critical to the project, and therefore we get much less attention. This is good, because it enables us to work along at our own pace, but we lack that extra push. We can never get the resources we need. It makes it all the harder to succeed . . . Management will pay attention if we succeed in the end. But that makes it nearly impossible to shine. It is all or nothing. We have no visibility along the way. And we lack the support to make sure that we'll make it in the end.

Thus, visibility increases the likelihood of individual success by increasing both resource availability and managerial recognition. Moreover, visibility is self-reinforcing. To attain a visible position, it helps to have succeeded in the past.

Accommodating work. Beyond successfully performing high-visibility work, engineers believe that they have to be perceived as willing to do 'whatever it takes' to accomplish their work. One engineer commented, 'I never disagree, although sometimes I complain later on. But, when I am first told, I always agree. I am the employee, and I am supposed to agree.' Another engineer explained, 'You can only say 'no' so many times. You need to think carefully before you say the word 'no.' And when you do, it had better be for a good reason.'

One engineer's responsiveness to his manager's request for work to be completed the next morning exemplifies this expected willingness to accommodate. The manager called the engineer at home to know what time the engineer would be in the next morning. The engineer recounted:

I would not have gone in until probably close to 9 a.m., but after Zeth called, I made sure to be there by 7 a.m. What he said to me last night was: 'I want to make sure we have our release ready for Sunrise [the daily project update meeting] in the morning,' which is at eight-thirty, 'because I want to be able to go in and say 'you're wrong, we have our release ready.' 'Zeth always assumes that everything is going to go OK. And nothing ever goes perfectly smoothly, especially when you try to rush something and get it done really quick. Then you always f—it up and have to do it again. I don't think he realized that. So he just assumed that if I came in real early, gave the code to John, and he made the PROMs, and we plugged them into the machine, they would be ready to go, and he could go to Sunrise at eight-thirty and say, 'Here's the release.' But, it turns out that we didn't have it working until when? Eleven-thirty or something like that. I knew it would never be ready by eight-thirty—that would have taken a miracle.

This engineer never mentioned his well-founded doubts to his manager. He simply agreed to arrive early and give his best effort. Such willingness to be present and to work diligently, regardless of whether the task is feasible, is perceived by the engineers as critical to how they are evaluated.

Helping other engineers. In contrast to doing high-visibility work and accommodating work demands, Ditto engineers do not perceive helping others as a factor in receiving raises and promotions. In fact, the system of reward discourages those who do help. For example, only one member of the Ditto group had previous experience with the new type of technology his group had to use. It so happened that this engineer was extremely helpful. However, instead of recognizing his contribution to the group, he felt his managers viewed his helping as a hindrance to his own work. At one point, this engineer told his manager that he was having trouble balancing all the requests for his help with his own work. According to the engineer, his impression was confirmed. He was told by his manager, 'Do your own work first, and then, if you want to help others, that is your choice, but do it on your own time.'

Ultimately, Ditto engineers perceive that their career success depends on their managers' perceptions of their individual heroics, as demonstrated by doing whatever it takes to solve high-visibility crises at work; willingness to help others matters only to the extent that it hinders engineers from completing their own deliverables.

Ico: succeeding in the external labor market

Whereas Ditto engineers focus on visible work that enables them to stand out from their peers and succeed within their company, Ico engineers are more concerned with work that will further develop their opportunities in the external labor market. Because of the labor shortage for software engineers in India, Ico engineers perceive that they can best achieve their career goals by developing highly marketable areas of expertise and switching jobs to increase their opportunities. The general attitude is that if Ico undervalues an engineer's skills, the engineer will simply leave the company. According to one engineer, 'I am well aware of other companies' efforts to recruit me. I have many opportunities both here and in the U.S.' Another Ico engineer reported, 'I get calls as much as once per week for other jobs outside Ico from people who have found out that I have a specialty in Lotus Notes.' As a result, engineers continually switch to jobs that offer better opportunities to learn and develop. One Ico engineer explained, 'There is no loyalty. It is very different from my parents' generation where you worked at one company until retirement. I have already worked at four companies [she is 26 years old]. What is most important is my growth as an individual.'

Developing expertise. Ico engineers seek out opportunities at work to develop their expertise and therefore make themselves more desirable on the external labor market. One engineer explained, 'If I felt I wasn't being utilized fully, I would leave the company.' Ico engineers want to learn. One simply stated: 'I will stay as long as I have challenging work. My first priority is not financial aspects, but what comes first to me is the work itself—it must be a good opportunity.' The engineers want the best opportunities, or they fear they will fall behind in their technical skills and thus hurt their career prospects. After all, jobs are offered to them based on the reputations they accrue for expertise they develop in specific areas.

Engineers with skills in areas that are critical and in-demand (whether at the company or elsewhere) feel strongly about continuing to work in those areas to further develop their expertise. For example, one engineer came to Ico specifically to work with a programming language called 'Small Talk.' She explained:

I invested a great amount in learning Small Talk and now I want to use those skills rather than starting all over developing new ones . . . I came here because they promised me that I would have Small Talk opportunities.

This woman was interested in developing her expertise in Small Talk because of the job opportunities she perceived it would provide, especially abroad. It was her impression that if she could master Small Talk she could land a lucrative job in the U.S.

Engineers who discover their skills are no longer in demand eagerly seek to develop new skills. For example, one Ico engineer was trained in a single area when he first arrived at the company. When his project dried up, his skills were not sufficiently transferable to other projects at the company or elsewhere, so he turned to the Human Resources department to request 'a new and emerging sub-field.' He was interested in finding a job that would enable him to develop a new set of skills that would be of value at Ico and, more importantly, beyond. This engineer was delighted with his next assignment because he believed the new area of specialization would make him highly marketable.

The fact that Ico engineers view their work as a chance to gain technical expertise that will provide opportunities is summed up by one engineer as follows: 'Here, there is a real sense of managing your own career. We want the best opportunities. If we don't get them, we are likely to leave. It makes it hard for managers because they must constantly keep their people happy or they can easily leave.' Simply put, Ico engineers care most about opportunities to develop their expertise, to improve their marketability. They perceive that success depends on their skill set and their ability to learn and stay current. Helping is perceived as an opportunity to further develop this skill set.

Discussion and Implications

In the end, Ico engineers seem to willingly provide help to those who need it and, indeed, often seek out opportunities to provide help. It appears they do so because they perceive their career success to be based on their skill development, and helping others serves as an opportunity for that development. Obviously, every request for help may not be an opportunity to learn and develop skills. Engineers at Ico, however, have generally positive feelings about giving help because they frame these acts as learning opportunities. Moreover, because of a shared belief that helping, in general, benefits the provider in a direct, instrumental way, Ico engineers become more used to giving and receiving help and have a generalized expectation that others will behave in that way as well. In contrast, at Ditto, where helping is framed as an interruption, engineers are predisposed against requests to help because of its effects on the achievement of their own career goals. Moreover, Ditto engineers have typically had negative experiences getting help when they needed it and, therefore, have less trust that people will respond to their requests. Hence, Ditto engineers are more concerned about keeping track of who helps them and making sure to help those people in return. Overall, the contrast between the ways in which helping is framed in Ditto and Ico is perhaps best seen when looking at requests for help that are time-consuming. For Ico engineers, requests to help with big and challenging problems are the most desirable since they offer the best opportunity to learn and develop new skills. To Ditto engineers, the most desirable request for help is one that is short and easy to address, but will also provide them helping credits for the future.

At a purely behavioral level, these findings support the notion that the distinction between the collectivist orientation of India and individualist cultural orientation of America captures the difference in helping patterns observed at Ico and Ditto. Ico engineers provide help to most everyone who needs it; Ditto engineers restrict help to those from whom they expect to need help in the future. When we look beneath the surface, however, and actually observe helping situations and listen to the explanations the engineers give for their helping or not helping, we find that the labels 'collectivist' and 'individualist' hide as much as they reveal. Ico engineers do not invoke communitarian norms, assumptions of interdependence, or moral beliefs about the necessity of subordinating the needs of the individual to the needs of the group in their accounts of why they so readily help others. Just as their counterparts at

Ditto, they claim to help when helping helps them. The cultural differences between the two groups that seem to influence helping are not merely national norms and values that shape the decision-making about how altruistic or egoistic to be given an objectively defined situation. Rather, the influence of culture seems to be manifested in the different assumptions and beliefs held by the two groups about careers and about how success is achieved. It is these assumptions about success—shaped by national culture, but also occupational and organizational culture—that appear to lead to helping being framed in such different ways.

At Ico, helping is framed as a desirable opportunity for skill development. Ico engineers provide help, not within dyadic relationships, but rather more generally among larger collections of individuals, based on whoever needs help. Ico engineers frame helping as a highly-valued opportunity to further develop their own expertise and marketability. In contrast, at Ditto, the act of helping is framed as an unwanted interruption to one's work. Ditto engineers help those from whom they expect to need help in the future because of the opportunity to build helping credits and, therefore, to be able to call on those individuals when they need help.

These framings map to the different assumptions at each site about what behaviors enable one to achieve one's career goals. At Ico, engineers strive to remain marketable on the external labor market. Achieving this goal requires continually developing one's skills. Helping others is perceived as an opportunity to enhance one's skills and one's marketability and, therefore, is framed as a learning opportunity. In contrast, at Ditto, engineers strive to move up within their organization which requires success internal to the organization. Organizational reward at Ditto is perceived as depending on solving high-visibility crises. Helping others conflicts with completing one's own visible work and, therefore, is believed to make it more difficult to succeed. At Ditto, helping is therefore perceived as costly to the attainment of individual work goals, and thus framed as an interruption.

Our cultural explanation of helping behavior among Ico and Ditto engineers is consistent with Van Maanen and Barley's (1984) discussion of an 'occupational community' as an alternative to an organizational frame of reference for understanding why people behave as they do in the workplace. At Ico, engineers are primarily concerned with success as defined by their occupational community, whereas at Ditto engineers are primarily concerned with success internal to their organization. To borrow Gouldner's (1958) labels, we might call the Ico group 'cosmopolitan' because its primary focus is on its occupational community, whereas the Ditto group is more 'local' in terms of its primary focus on the organization. Saxenian (1994) provides a similar example, comparing engineers working in the Silicon Valley and along Route 128 in Boston and finding a contrast between the low commitment and high mobility of engineers in the Silicon Valley and the greater loyalty and concern with organizational advancement among engineers along Route 128.

Our findings, taken together with this additional body of work, suggest that we can't consider the effects of national culture on helping behavior in isolation. Not all cultural influences on helping behavior derive directly from national differences. Rather, organizational and occupational cultures overlay the national culture and make their influences felt. The picture that emerges of helping behavior in these two groups is at once deceptively simple and intricately complex. The engineers help when there are sufficient expected rewards to motivate them to do so. These expectations, however, depend on cultural understandings of the expected career paths—whether career success can be found within a single organization or will likely involve movement between several organizations—and of which behaviors are consistent with advancement along those paths. These cultural understandings reflect occupational and organizational idiosyncrasies. They also reflect national differences. It is important to be clear that we are not arguing that Indian culture is less collectively-oriented than previously believed nor that the engineers we studied in Ico are not collectivist in their orientation. While our data are not well-suited to disentangle the sources of the cultural differences we describe, it seems likely that collectivist tendencies do go some way toward explaining why engineers at Ico seem

predisposed to assume or trust that helping others will almost always benefit them whereas their Ditto counterparts seem more deliberate in deciding whether a request for help will likely pay for itself. However, what our study exposes are the often hidden and subtle ways in which the multiple layers of culture in the workplace shape the framing of helping behavior and thus when and why such behavior is performed.

Our study also suggests a counterintuitive point about the helping behavior of locals and cosmopolitans. It has been noted (e.g., Galunic & Anderson, 2000) that knowledge-intensive firms are increasingly shifting from a psychological contract with their knowledge workers that promises employment in return for loyalty and commitment, to a promise of employability in return for hard work and performance. In so doing, they are shifting workers from a local mindset to a more cosmopolitan one. What is the expected impact on helping behaviors in these firms in which successful completion of the work relies heavily on a willingness of employees to help in order to facilitate the coordination process?

Based on the alignment of locals with the goal of their organization and the greater need of cosmopolitans to develop expertise valued by their occupation, one might expect that helping behavior within a work group would be more common among locals than cosmopolitans. After all, helping behavior facilitates the attainment of the organization's goals and strengthens the ties among organizational members. Yet our findings suggest that in the case of knowledge workers, cosmopolitans may actually be more inclined to help because doing so helps them acquire skills and reputation beneficial in the external labor market. The link, then, between loyalty and helping others may not always be so straightforward. Though locals are characterized by their commitment to succeeding within the organization, this fact doesn't necessarily translate into behaviors that best help the organization. At Ditto, helping behavior is not perceived as valued; indeed, because it takes valuable time away from the tasks for which the engineers are rewarded, it is perceived as essentially punitive.

This suggests that our study has implications not only for understanding the influence of the multiple layers of culture on work behaviors and the specific theories of why people help each other, but also for the practical issue of how organizations can more effectively encourage helping behavior. Taken together, the findings from Ditto and Ico suggest that organizations might be able to increase helping among their employees by designing and managing work such that individuals make sense of helping others as something that will help themselves. Currently, most American workers are not recognized or rewarded for providing help (Fletcher, 1999; Perlow, 1997). Helping others is not considered 'real work' under the Western focus on activities that produce a product for which a wage is granted (e.g., Daniels, 1987; Wadel, 1979). However, once we recognize that the act of helping can be framed either as an opportunity to learn or as a threat to success, we can see that the task for management is to create the material and symbolic conditions such that helping is framed in such a way that there is no conflict between doing good and doing well in the organization.

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