Accommodating Employees With and Without Disabilities

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Efforts to recruit and retain employees with disabilities are often tempered by employers' concerns over potential workplace accommodation costs. This study reports on accommodations requested and granted in intensive case studies of eight companies, based on more than 5,000 employee and manager surveys, and interviews and focus groups with 128 managers and employees with disabilities. Two unique contributions are that we analyze accommodations for employees without disabilities as well as for those with disabilities, and compare perspectives on accommodation costs and benefits among employees, their coworkers, and their managers. We find people with disabilities are more likely than those without disabilities to request accommodations, but the types of accommodations requested and the reported costs and benefits are similar for disability and non-disability accommodations. In particular, fears of high accommodation costs and negative reactions of coworkers are not realized; all groups tend to report generally positive coworker reactions. Multilevel models indicate granting accommodations has positive spillover effects on attitudes of coworkers, as well as a positive effect on attitudes of requesting employees, but only when coworkers are supportive. Consistent with recent theorizing and other studies, our results suggest the benefits from a corporate culture of flexibility and attention to the individualized needs of employees.

Keywords: accommodations, disability, work-life balance

Introduction

Faced with the need to make use of all available human resources in an increasingly competitive global environment, many employers are making efforts to recruit people with disabilities. About one-fifth (19 percent) of all employers, and more than half of large companies (53 percent of those with more than 250 employees) knowingly employ at least one person with a disability, and 34 percent of large firms actively recruit applicants with disabilities (Domzal, Houtenville, & Sharma, 2008). Despite the substantial number of firms employing people with disabilities, the employment rate among the 19 million working-age people with disabilities in the United States is only 33 percent, which is half the 73 percent rate for people without disabilities (Rehabilitation, Research, and Training Center on Disability Statistics and Demographics [RRTC], 2011, pp. 26–27). This low employment level contributes to many other economic, social, and political disparities (Schur, Kruse, & Blanck, 2013).

People with disabilities comprise one of the largest underutilized labor pools and can help fill expected labor shortages over the next two decades as baby boomers retire. Among the 11 million non-employed working-age people with disabilities, 80 percent want to work now or in the future, and over 1.6 million have college degrees (Ali, Schur, & Blanck, 2011; Kruse, Schur, & Ali, 2010). A large share of new jobs over the next ten years can be performed by people with disabilities, as shown by the US Bureau of Labor Statistics employment projections matched to occupational ability requirements (Kruse et al., 2010). The potential benefits for employers, government, people with disabilities, and society in general helped motivate the 1990 Americans with Disabilities Act (ADA) and further proposals to decrease employment barriers faced by people with disabilities (e.g., National Council on Disability, 2007).

Their low employment rate can be traced in part to supply-side factors (e.g., transportation difficulties, health problems, disability income disincentives, and skill deficits), but there has been growing attention paid to demand-side factors, including employer uncertainty and lack of information, lingering prejudice and discrimination, and concerns about supervision and accommodations (Domzal et al., 2008; Lee & Newman, 1995; Lengnick-Hall, Gaunt, & Kulkarni, 2008; National Council on Disability, 2007; Peck & Trew Kirkbride, 2001). While employers are generally satisfied with their employees who have disabilities (Graffam, Smith, Shinkfield, & Polzin, 2002b), studies find "employers' expressed willingness to hire applicants with disabilities still exceeds actual hiring" (Luecking, 2008, p. 5). In examining why employers are not taking better advantage of this labor pool, one study found "most employers hold stereotypical beliefs not supported by research evidence" (Lengnick-Hall et al., 2008, p. 255).

Accommodating employees with disabilities is a commonly expressed concern among employers. A 2008 survey found 64 percent of employers reported that not knowing how much an accommodation will cost is a challenge in hiring people with disabilities, and 62 percent cited the actual cost of accommodations as a challenge (Domzal et al., 2008). Title I of the ADA imposes a legal mandate on employers to make reasonable accommodations to qualified employees and job applicants with disabilities, as long as such accommodations would not impose an "undue hardship" (legally defined as "significant difficulty or expense"). There has been substantial debate and discussion over this requirement, and some studies of the costs, but there has been little consideration of the full range of effects on firms. In particular, there has been little consideration of disability accommodations in the context of other types of accommodations made to meet the personal needs of employees, such as in work-family programs (Ryan & Kossek, 2008).

This study focuses on the effects of accommodations on firms, looking not only at direct monetary costs but also more broadly at coworker attitudes and other potential costs and benefits. We provide new and extensive data on accommodations from intensive case studies of eight companies, using more than 5,000 employee surveys, plus data from in-depth interviews and focus groups. Our study is unique in several ways. First, we examine not only accommodations provided, but also requests for accommodations. Second, we study accommodations in a broader context, examining how accommodations are requested and made for employees without disabilities as well as for those with disabilities (basing the disability measure on the six items adopted by the US Census Bureau in 2008, which measure hearing, visual, mobility, and cognitive impairments; difficulty with dressing or bathing; and difficulty getting around outside the home). Third, unlike most prior studies, we examine possible monetary and nonmonetary benefits along with accommodation costs. Fourth, we scrutinize accommodation issues from multiple viewpoints—employees who requested accommodations, their coworkers, and their managers—to obtain a more well-rounded and valid perspective. Finally, we use a multilevel approach to examine how granting and denying accommodations affects important performance-related attitudes, both among employees requesting accommodations, and also among their fellow workers. In addition to shedding light on accommodations, this study contributes more generally to our knowledge of employee engagement, retention, idiosyncratic deals, and understanding of an organization's employee-centered philosophy.

Literature Review and Hypotheses

While there have been several studies of disability accommodations, none have examined requests for accommodation and how the handling of requests affects employee and coworker attitudes. In this literature review, we draw on human resource theory to propose three hypotheses on

the relation between accommodation requests and employee attitudes, including possible spillover effects and the moderating effects of coworker attitudes. Given the importance of accommodation costs and benefits, we supplement the formal hypotheses with a research question, for which we do not have a directional hypothesis.

Estimates of the percentage of employees with disabilities who receive accommodations vary considerably, from 12 percent to 65 percent (Burkhauser, Schmeiser, & Weathers, 2010; Hernandez et al., 2009; Zwerling et al., 2003). Surprisingly, there is little information on how many accommodation requests are made, the percentage that are accepted versus denied, and for those that are denied, why they are denied. To address this critical gap in our knowledge, we focus our research not just on people with disabilities, but also people without disabilities, for a few reasons. First, one avenue for addressing employer concerns about accommodation costs for employees with disabilities (Domzal et al., 2008) is to view them in the broader context of accommodating all employee needs. Although the term "accommodation" may lead people to think specifically about people with disabilities, in reality employees often ask their managers or employers to make special accommodations to suit their personal needs. For example, a 2005 survey found employers provide an average of 14.5 to 16.7 weeks of job-guaranteed family leave; 66 percent have Employee Assistance Programs (EAPs) to help employees deal with personal and family issues; 47 percent provide health/wellness programs; and close to one-third provide assistance in locating child care (32 percent) or elder care (29 percent), while 7 percent provide onsite child care (Bond, Galinsky, Kim, & Bownfield, 2005). In addition, many workers ask their employers for different furniture or computers and/or transfers or modifications in travel expectations in order to better balance work and family demands. One study found almost half (43 percent) of accommodated employees did not have disabilities as defined by a substantial limitation of a major life activity (Schartz, Schartz, Hendricks, & Blanck, 2006). In each of these cases, there may be

costs incurred by the employer; yet having to make accommodations is often not seen as a barrier to hiring these workers. In fact, several studies point toward positive effects of work-life programs on productivity, absenteeism, and other outcomes (e.g., Appelbaum, Bailey, Berg, & Kalleberg, 2004; Corporate Leadership Council, 2000, 2003; Klaus, 1997). Thus, to the extent employers and coworkers view accommodation requests as normal or common within a broader culture of flexibility, there may be fewer perceived costs associated with asking for needed accommodations. This may help curb the tendency for employers to see people with disabilities as particularly expensive, and may also help reduce the possibility that coworkers will think of a disability-related accommodation as being unfair.

A second reason to focus on accommodation requests of employees without disabilities is that the overall percentage of accommodation requests, particularly those that are granted, can serve as a barometer of the culture of an organization. Put differently, accommodations provide important information about the extent to which the organization values employees. From social exchange theory (Blau, 1964), we know employees' perceptions about their value to the organization influence their willingness to "give back" to the organization through strengthened emotional bonds and identification with the organization.

Finally, examining employee requests for accommodations is timely given the growing need for organizations to innovate in response to changing employee demographics (for example, the different needs and expectations of the millennial generation compared to baby boomers, workers who are caring for both elderly parents and young children, etc.) and increased complexity in day-to- day jobs. In the face of widespread employee expectations for voice and control, organizations find themselves needing to respond by allowing employees to customize more aspects of their employment than ever before (Rousseau, Ho, & Greenberg, 2006).

For employees with disabilities, accommodations are sometimes necessary for them to perform essential functions of their job, and can help increase employee engagement and retention. Not surprisingly, we expect that compared to employees with disabilities who have their accommodation requests denied, those whose requests are granted will report higher levels of perceived organizational support, satisfaction, and commitment, as well as lower levels of turnover intentions. We draw from the literature on "idiosyncratic deals to make a similar argument for employees without disabilities. Idiosyncratic deals refer to personalized employment arrangements negotiated between an individual and his/her employer (Rousseau, 2001) that may result in employment conditions or accommodations that differ from those of coworkers. The idea behind "i-deals" is that they should benefit both the requester and the employer, in that granting an employee's request for a customized work arrangement will signal the value of that employee to the employer. Hence, it is an important mechanism for attracting, motivating, and retaining valued employees (Rousseau et al., 2006). Studies indicate employees in flexible work-family programs are more engaged and have higher job satisfaction, less stress, better mental health, and lower likelihood of turnover (Aumann & Galinsky, 2008; Galinsky, Bond, & Sakai, 2008). We therefore expect employees who have their accommodation requests granted will also report higher levels of perceived organizational support, satisfaction, and commitment, and lower turnover intentions. This leads to the following:

> *Hypothesis 1: Employees with and without disabilities who have accommodations granted report higher perceptions of perceived organizational support, satisfaction, commitment, and lower turnover intentions.*

Earlier, we indicated that assessing accommodation rates in general—that is, for both employees with and without disabilities—is important because it serves as a barometer for the accommodation culture of an organization. Here, we re-introduce this idea for our second hypothesis. In addition to social

exchange theory, other areas of research have suggested employees pay careful attention to their organization's HR practices to ascertain the organization's basic philosophy about the employment relationship (Gaertner & Nollen, 1989)—in particular, the extent to which management perceives employees as an asset and is committed to investing in the long-term well-being of employees and placing the importance of employee welfare above revenues and profits (Bamberger & Meshoulam, 2000; Lepak, Taylor, Tekleab, & Marrone, 2002). The alternative is for management to perceive employees as a cost—as replaceable workers from whom they seek to extract maximum productivity at minimum cost. We propose that the extent to which employee accommodation requests are granted within a workgroup will serve as a signal of the employer's employee-oriented philosophy. When a higher proportion of requests are granted, employees are more likely to perceive that management views them as assets. However, when a high proportion of requests are denied, employees may feel that management does not value them and would prefer to replace demanding employees with ones who will not make "costly" or "disruptive" requests for accommodations. In turn, we expect that the more employees feel they are valued and treated as assets by their employers, the greater their commitment, satisfaction, and intentions to stay (Eisenberger, Fasolo, & Davis-LaMastro, 1990; Eisenberger, Huntington, Hutchison, & Sowa, 1986; Nishii, Lepak, & Schneider, 2008; Ostroff & Bowen, 2000; Wayne, Shore, & Liden, 1997). Accordingly:

> *Hypothesis 2: Employees in units where a higher proportion of accommodation requests are granted have higher perceptions of organizational support, satisfaction, commitment, and lower turnover intentions.*

In the first two hypotheses, we proposed that the disposition of an accommodation request—or in other words, whether it has been denied, partially granted, or fully granted—matters for employee attitudes. While we expect the disposition of an accommodation request to be an important predictor of

employee attitudes, we also expect that the attitudes of coworkers are important for the ultimate success of accommodations. It is important to consider coworkers' reactions to an accommodation for several reasons: (1) coworker cooperation and support is needed for the successful implementation of some accommodations; (2) coworker reactions influence whether the requester will feel comfortable making future requests, and possibly also whether other workgroup members will feel comfortable asking for an accommodation if needed; and (3) supervisors often take coworker reactions into account when deciding whether to grant an accommodation; if they expect that coworker reactions will be negative and demoralize the group, they may decide that the risk is not worth it (Baldridge & Veiga, 2001; Colella, 2001) (although lower coworker morale is not considered an undue hardship under the ADA).

Group theory within the broader organizational behavior literature also suggests coworkers represent an important source of social support and validation of one's personal worth (Sherif & Sherif, 1964; Sherony & Green, 2002), and thus whether or not one's coworkers support an accommodation request may reflect the extent to which coworkers support and value the requester. We reason that if an accommodation request made by a person with a disability is granted but coworkers fail to support the accommodation, the granting of the accommodation may be perceived solely as a legal gesture, and not as a symbol of the requester's value to the organization. In such cases, the positive impact of an accommodation on employee attitudes (as hypothesized in Hypothesis 1) may be attenuated or eliminated. However, when coworkers support the accommodation, they help to validate the requester's worth, especially since coworkers are not legally bound to support accommodations in the way that employers are; as a result, the positive impact of an accommodation on employee attitudes should be strengthened.

Indeed, researchers have suggested that the absence of support from coworkers can lead to withdrawal from an organization (Kahn, 1993), since without meaningful support from coworkers, employees feel less embedded within the social fabric of the organization (Mitchell & Lee, 2001). Accordingly, we propose:

> *Hypothesis 3: Support from coworkers will moderate the relationship between having an accommodation request granted and employee attitudes such that the positive relationship between a granted accommodation and perceived organizational support, satisfaction, and commitment will be strengthened when coworkers support the accommodation and attenuated when coworkers do not support the accommodation.*

It's important to note that we see coworker reactions as also being important for people's perceptions of the image costs that might be associated with requesting an accommodation in the future (cf. Baldridge & Veiga, 2001). We build on Baldridge and Veiga's (2006) research that showed hearing impaired individuals strongly consider the normative appropriateness of asking for an accommodation before deciding whether to do so. Although their research examined the impact of people's fears about the social costs of requesting an accommodation on their willingness to request one, we actually know virtually nothing about whether these fears are justified. Do people with disabilities experience fallout associated with their accommodation requests? Do coworkers respond negatively such that they end up wishing they had not asked for an accommodation in the first place? If they perceive coworkers are not supportive of their accommodation needs, then the perceived image or social cost of asking for an accommodation may prevent them from doing so in the future. By asking respondents about coworker reactions to their accommodation requests, we contribute to the disability literature by responding to calls for research that examine whether concerns about the social costs of asking for an accommodation are justified (Colella & Bruyère, 2011).

Finally, we analyze the broader costs and benefits of accommodations. Several surveys have attempted to measure the financial costs, generally finding most accommodations have low costs while a small percentage have high costs of $5,000 or more (Dixon, Kruse, & Van Horn, 2003; Job Accommodation Network, 2013; Schartz et al., 2006; Solovieva, Dowler, & Walls, 2011). Regarding benefits, in one study a majority of employers reported disability accommodations helped them to retain a qualified employee (91 percent), increase the employee's productivity (71 percent), or eliminate the cost of training a new employee (56 percent), with substantial numbers also reporting improved employee attendance (46 percent), interactions with coworkers (40 percent), overall company morale (35 percent), and overall company productivity (30 percent) (Solovieva et al., 2011). A study in Australia found 75 percent of employers making accommodations reported they were cost-neutral, with the remainder evenly split over whether accommodations produced a net benefit or net cost (Graffam, Smith, Shinkfield, & Polzin, 2002a). There have been no formal cost-benefit analyses of disability accommodations, and the ADA in fact does not permit cost-benefit analysis as a means of determining whether an accommodation poses an undue hardship, and is therefore not required. Despite this, an understanding of the possible benefits along with the costs of accommodations can help shape company policy and managerial attitudes, and may lessen resistance toward accommodations. Our research question is:

Research Question: What are the reported costs and benefits of accommodations, and do these differ among employees requesting accommodations, their coworkers, and their managers?

In sum, despite concerns of many employers about accommodations, we still know little about how often accommodations are requested and granted, the effects on employee attitudes, the relative costs, and (especially) the benefits of accommodations, and for all of these questions, how accommodations for employees with disabilities compare to those for employees without disabilities.

Also, existing surveys present primarily employers' views, while employees may have different perceptions. Here, we provide information from multiple perspectives, and add new and unique data on the effects of accommodations on employee attitudes.

Data and Method

Participants and Procedures

In consultation with the US Department of Labor's Office of Disability Employment Policy (ODEP), our research consortium selected case-study participants to ensure variation on important dimensions, including industry sector and size. One major goal was to ensure external validity, so the results from these case studies may be generalized and the research design implemented in other companies. The consortium identified six companies willing to participate in the survey, interviews, and focus groups, and two additional companies that participated in only interviews and focus groups. The eight employers comprise a pharmaceutical company, a hospital, a disability service organization, a financial services company, a consumer products manufacturer, a supermarket chain, a restaurant, and an infrastructure services company.

The organizations studied vary in size from 38 to 38,000 employees nationwide, although some of the companies are local or regional organizations. Data collection was limited to interviews in the two smallest organizations, while invitations to take the online survey were extended to all employees in four organizations (two with between 1,000 and 5,000 employees, and two with more than 5,000 employees) and to a sample of employees in two organizations (both with more than 5,000 employees). All respondents were given strict assurances of confidentiality; the online survey was provided at a

secure university site rather than in the company, thus ensuring a good rate of voluntary participation (response rates of 73 percent, 42 percent, 31 percent, 15 percent, 12 percent, and 5 percent, averaging 30 percent). The total number of survey respondents answering the accommodations questions is 5,303, of whom 5.5 percent are identified with a disability. This is close to the 5.7 percent of employees nationally who are estimated to have disabilities (based on a special analysis of 2008 American Community Survey [ACS] data for this project). Mobility impairments are the most common (n = 125, or 2.3 percent of overall sample), followed by mental impairments (n = 100, or 1.9 percent), hearing impairments (n = 79, or 1.5 percent), and vision impairments (n = 33, or 0.6 percent). The average age of all respondents is 41.1 (SD = 10.1); 56 percent are female; 39.3 percent have worked at their companies for more than 10 years, 29.7 percent for 5–10 years, 24.5 percent for 1–5 years, and 6.6 percent for less than 1 year.

While we focus on the survey responses, we also summarize insights gained from the employee focus groups and in-depth interviews with managers and employees. Across the companies, 49 people participated in individual interviews and 79 others participated in focus groups, for a total of 128 participants. The interview and focus-group protocols were semi-structured, providing the opportunity for interviewers to follow up on answers. Employee volunteers were solicited directly by researchers at smaller companies, and by a question at the end of the online survey asking for volunteers at larger companies. Managerial respondents were solicited by company contacts. All participants read and signed a document of informed consent approved by the Institutional Review Board. The interviews were transcribed and analyzed using Ethnograph version 6, with coding done by independent raters. The interviews with CEOs and senior HR managers were designed to determine overall company values, policies, and practices, particularly on disability accommodations and initiatives. Interviews with other managers and supervisors were designed to obtain perceptions of the company's values, climate, and

culture; how the company's disability policies are understood and implemented; and experiences with hiring persons with disabilities and making accommodations. The interviews and focus groups with employees with disabilities were designed to obtain perceptions of the company's values, climate, and culture; experiences working for the company, including how accommodation requests were handled; perceptions of attitudinal, policy-related, technology-related, or other barriers; and how these barriers may be reduced or eliminated. Codes for the accommodations material were grouped into four basic categories: provision of accommodations, coworker attitudes toward disability accommodations,

INSERT TABLE 1 HERE

and management attitudes toward accommodations, and policies that encourage and support accommodations. The interview and focus-group protocols, and the codes and sample responses for the accommodations material, are available on request.

Measures

Descriptive information about the measures used in this research is provided in the Appendix. The six questions identifying disability status are used by the US Census Bureau in the Current Population Survey and American Community Survey. These questions measure four broad types of impairments (hearing, visual, mobility, and cognitive) and two types of activity limitations (difficulty dressing or bathing, and getting around outside the home). Questions on accommodations requested or granted were developed and pilot-tested for this survey, and questions on accommodation types, costs, and benefits were based on Schartz et al. (2006) and Solovieva et al. (2011). The pilot-testing was done using students in a master's program in human resource management, most of whom have corporate experience. Perceived organizational support was assessed using three items from Wayne et al. (1997), based on the original scale from Eisenberger et al. (1986). Affective organizational commitment was

assessed using three items from Meyer, Allen, and Smith's (1993) widely used scale. The decision to use three items from each scale was based on the need to reduce survey length; items were chosen based on the highest loadings from past research. Alphas for these measures are provided in the Appendix. Finally, based on the employers' requests to collect satisfaction and turnover intention data that enable comparisons to national norms, we assessed job satisfaction and turnover using single items from the General Social Survey (www.gss.org). Contrary to popular thought in our field, that single-item measures are undesirable due to poor reliability, Wanous, Reichers, and Hudy (1997) conducted a metaanalysis in which they utilized the correction for attenuation formula to conclude that, at a minimum, the estimated reliability for single item measures of satisfaction is close to .70.

Results

Tables I to III provide descriptive information on frequency, type, and disposition of accommodation requests in our sample. All tests of significance reported are based on t-tests. All employees were asked: "Have you ever requested from this company any change or accommodation in your job or workplace to better meet your personal needs?" As shown in Table I, employees with disabilities are about twice as likely as employees without disabilities to have ever requested an accommodation (62 percent compared to 28 percent, $p < .01$). Such a request was made for a health or disability reason by 43 percent of employees with disabilities and 6 percent of employees without disabilities ($p < .01$), while about one-fifth of employees in both groups (19 percent and 23 percent, respectively, difference not significant) did so for another reason. Among employees with disabilities, requests were highest among those with mobility impairments (74 percent) and lowest among those with hearing impairments (54 percent).

A substantial number of coworkers and managers have experience with disability accommodations. About half of all non-managerial employees (46 percent) have knowingly worked with an employee with a disability, and among those about one-third (32 percent) report that a coworker with a disability received an accommodation. Among managers, two-fifths (40 percent) report they have supervised employees with disabilities, and among those, half (49 percent) had at least one employee with a disability who requested an accommodation.

Changes in work schedules (e.g., flextime) are the most commonly requested accommodation reported by employees both with and without disabilities (35 percent and 38 percent, respectively, difference not significant), followed by working from home (24 percent and 18 percent, $p < .10$), as shown in Table II (limited to those who requested accommodations). Among people with disabilities, the next most common requests are for modifying the individual work environment (21 percent compared to 8 percent for those without disabilities, $p < .01$), and using a new or different type of computer equipment or information technology (8 percent for both groups, difference not significant).

The distribution of commonly requested accommodations is similar between employees with and without disabilities, except that employees with disabilities are more likely to request modifications in the individual work environment ($p < .01$), working from home ($p < .10$), and several less common accommodations (providing written job instructions or information in an alternative format, $p < .01$, using new or different types of equipment, $p < .10$, and modifying the worksite in general, $p < .05$).

The distribution of requested accommodations does not differ substantially among employees with different types of impairment. Changes to work schedule are the most common across all impairments (columns 3 to 6), while not surprisingly, requests to modify the work environment are most common among those with vision and mobility impairments (columns 4 and 6).

Table II also presents the types of accommodations reported by managers who said that an employee with a disability reporting to them had requested an accommodation (column 7).

INSERT TABLE II HERE

INSERT TABLE III HERE

As with employee-reported requests, the most commonly reported request is changes to a work schedule (42 percent), but unlike the employee-reported requests, the second most common one reported by managers is modifying the individual work environment (31 percent), followed by restructuring the job (27 percent). These differences in reports of requested modifications help explain reported differences in estimated costs of modifications, as will be seen.

Most employees requesting accommodations say the request was fully granted, although the rate is lower for employees with disabilities. As shown in Table III, about three-fourths (73 percent) of employees with disabilities report their most recent requests were fully granted, compared to about four-fifths (79 percent) of employees without disabilities ($p < .05$). This indicates that employers are somewhat more hesitant to grant disability-related accommodation requests. Employees with disabilities also are slightly more likely to say their requests were partly granted (20 percent compared to 15 percent, $p < .10$), with less than one-tenth saying it was completely denied (8 percent compared to 6 percent, difference not significant). Managers report a higher rate of granting accommodations to employees with disabilities: 91 percent say the most recent request was fully granted, 7 percent only partly granted, and 2 percent not granted (column 3).

There is a discrepancy between employees and managers in reported reasons for accommodations not being fully granted. Among employees with disabilities, about one-fourth said they

"don't know" (26 percent), while one-fifth (22 percent) said they were told it was too much of a burden or inconvenience for the organization, and one-sixth (17 percent) were told it was "not necessary." Only 13 percent were told it was not appropriate for the specific job or task, while this was the most common reason given by managers (52 percent) for denying accommodations (e.g., possibly using a legally based rationale that the accommodation did not relate to ADA-covered essential job functions). This discrepancy also may reflect a difference in the requests being considered by the respondents: to maintain respondent anonymity, we were not able to link employee-manager data to get alternative perspectives on the same specific requests, and this would be a fruitful area for future study. The lower rate of denials reported by managers suggests either that they had a different perspective on the same requests (i.e., viewing some as "fully granted" when the employees did not see it that way), or they were thinking of a narrower group of requests (e.g., perhaps considering only those formal requests where the employee presented a stronger case).

In the manager interviews, when asked about accommodations for employees with disabilities, perhaps not surprisingly all of the managers said the companies are supportive and they try to accommodate every request. One manager went further and said the company tries to make accommodations regardless of whether or not you have a disability. Managers at another company stressed that the employer is concerned about work-life balance—for example, employees were given the option of telecommuting to meet personal needs or family obligations. One manager of a large company said the organization is "proactive" in providing accommodations, with supervisors checking with employees every month about their employment needs, although the company does not have a formal accommodation process. A manager at another large company said that how accommodation requests are handled depends on the individual supervisor, and it would be better to have clear internal pathways and a designated advocate for employees with disabilities.

In the employee interviews and focus groups, most of the employees with disabilities reported their accommodations were granted without difficulty and their managers and coworkers were supportive. The exception was one employee with a degenerative physical condition whose request for job restructuring was refused. This employee said his supervisor did not understand the fatigue and limitations caused by his condition and unfairly gave him a negative performance evaluation. He added that he felt he is being penalized for his disability.

As a prelude to assessing Hypothesis 3, Table IV presents descriptive information on coworker reactions to accommodations. A majority of coworkers are aware of most accommodations, according to coworkers, managers, and employees granted accommodations. Just over half of those who were granted accommodations say that most or all coworkers were aware of the accommodation. Similarly, over half of coworkers and managers report that most or all coworkers were aware of disability accommodations. Most coworkers had positive reactions to accommodations, according to all of the groups: a majority in each group (61 percent of employees with disabilities, 69 percent of coworkers, and 68 percent of managers, differences not significant) reported that no coworkers were negative and resentful, and most or all employees were positive and supportive (reported by 63 percent of employees with disabilities, 81 percent of coworkers, $p < .01$, and 70 percent of managers, $p < .10$). However, between 10 percent and 15 percent in the three groups reported that at least some coworkers were resentful of disability accommodations (combining the “some,” “most,” and “all” categories in columns 1, 3, and 4 of Table IV). Almost all (95 percent) coworkers approved of the accommodations made for employees with disabilities. Almost one-fourth (24 percent) said the disability accommodation had a desirable impact on their own job, while 7 percent said it had a negative impact on their job.

In the interviews and focus groups, none of the managers identified coworker attitudes as a major barrier to providing accommodations; in fact, most said coworkers were supportive of employees

with disabilities when accommodations were made. In addition, none of the coworkers said there had been problems working with people who received accommodations. While these reports are encouraging, the employees and managers who volunteered for interviews or focus groups may not be representative, and participants may have been reluctant to report negative experiences. Nevertheless, they are consistent with the survey data, indicating that fears of negative coworker reactions generally

INSERT TABLE IV HERE

are not realized.

Turning to the hypotheses, we examine the disposition of accommodation requests as a predictor of perceived organizational support organizational commitment, job satisfaction, and likely turnover. The key independent variables are whether a request was granted (dummies for fully, partly, and not granted), alone and interacted with disability status, with controls for occupation and length of tenure. Two types of regressions are run: standard ordinary least squares (OLS) regressions using the full sample, and multilevel regressions using hierarchical linear modeling based on the 2,384 employees (excluding managers and supervisors) who could be matched to one of 134 departments or units.[1] Table V presents descriptive statistics, and Table VI presents regression results. To check for common method variance among affective commitment, job satisfaction, turnover intentions, and perceived organizational support, we conducted Harman's one-factor test and found that the single-factor solution does not fit the data ($\chi^2_{(20)}$ = 2,402.80; CFI = .85, RMSEA = .18, SRMR = .05), and is indeed significantly worse ($\chi^2\Delta_{(1)}$ = 1,072.70) than a four-factor solution ($\chi^2_{(21)}$ = 1,330.16; CFI = .92, RMSEA = .13, SRMR = .17). We also examined the fit of a two-factor model, including the affective commitment and perceived organizational support factors. Not surprisingly, after excluding the uncorrelated single items from the model, the fit was even better ($\chi^2_{(8)}$ = 45.55; CFI = .99, RMSEA = .04, SRMR = .01), and this model was significantly better ($\chi 2\Delta$ (1) = 2,274.57) than a model in which the three affective commitment and three

perceived organizational support items were forced on to one factor ($\chi^2_{(9)}$ = 2,320.12; CFI = .85, RMSEA = .27, SRMR = .07). Thus, we conclude that there is at least some evidence that a single method-driven factor does not adequately represent our data.

As expected, individuals whose accommodation requests were fully granted had better attitudes on important workplace measures. The positive coefficients on "accommodation request fully granted" in Table VI indicate that, relative to those who never made a request, those employees without disabilities who had a request fully granted had higher perceptions of organizational support (B = .147, p < .01), commitment (B = .091, p < .01), and job satisfaction (B = .097. p < .05). Those who had their requests denied or only partly granted had significantly worse perceptions on these measures (B = –.744, p < .01; B = –.656, p < .01; B = –.724, p < .01) and higher turnover likelihood (B = .681, p < .01). This supports Hypothesis 1.

The results described here are base effects, showing the relationship for employees without disabilities. To test if the relationship is similar for employees with disabilities, an interaction between disability status and accommodation disposition is included in each regression. None of the interaction coefficients is statistically significant, so we cannot reject the possibility that the relationships are the same for employees with and without disabilities. The base effect on disability indicates generally lower perceived organizational support, commitment, and job satisfaction among employees with disabilities, which recent research shows is true only in some workplaces and not in those with more inclusive climates (Nishii & Bruyere, 2009; Schur, Kruse, Blasi, & Blanck, 2009).

While it is not surprising that employees have negative reactions to having their accommodation requests denied or only partly granted, there is still the intriguing question of a spillover or "ripple" effect (positive or negative) to other employees. This is tested in columns 2, 5, 8, and 11 in Table VI, which add the unit-level averages of accommodation requests fully granted, partly granted, and not

granted as predictors in a multilevel model. These regressions show whether, holding constant the disposition of one's own accommodation request, there is an apparent effect of the aggregate disposition of accommodation requests on the attitudes of coworkers in the employee's work unit.

The results in Table VI support Hypothesis 2 for three of the four measures. There appears to be positive spillover on perceived organizational support from fully granted accommodations (B = –.383, p < .10) and negative spillover from only partly granted accommodations (B = –1.605, p < .05), and negative spillovers from denying accommodation requests (B = –1.629, p < .01), commitment

INSERT TABLE 5 HERE

(B = –1.34, p < .01), and turnover (B = .533, p < .10, interpreting higher turnover likelihood as a negative spillover) (columns 2, 5, and 11).

Table VI also provides regressions testing Hypothesis 3, that coworker reactions moderate the attitudinal effects of accommodations. This hypothesis receives strong support in all four regressions (columns 3, 6, 9, and 12), where there is a strongly significant effect of coworker reactions when accommodation requests are fully granted (B = .177, p < .01; B = .18, p < .01; B = .135, p < .05; B = –.964, p < .05). Positive coworker reactions are linked to more positive effects of an accommodation on the accommodated employee's attitudes, while the main effect of having a request fully granted (row 1) turns strongly negative in columns 3 (B = –.382, p < .01) and 6 (B = –.413, p < .01), indicating that

INSERT TABLE V (CONTINUED) HERE

negative coworker reactions to an accommodation are linked to more negative perceived organizational support and organizational commitment.

Finally, we turn to our research question regarding the reported costs and benefits of accommodations, and whether these differ among employees requesting accommodations, their coworkers, and their managers. Consistent with previous studies, we found most disability accommodations have zero or small monetary costs, according to both employees and managers. As shown in Table VII, the estimated one-time costs of disability accommodations were reported to be zero by 44 percent of employees with disabilities and 37 percent of managers (columns 1 and 3, difference not significant), and to be less than $500 by another one-quarter of respondents (27 percent and 23 percent, respectively, difference not significant).

INSERT TABLE VI HERE

INSERT TABLE VII HERE

As in earlier surveys, less than one-tenth (3 percent and 6 percent, respectively) report one-time costs of more than $5,000 (difference not significant). The estimated annual ongoing costs of disability accommodations were reported to be zero by 71 percent of employees with disabilities and 54 percent of managers ($p < .01$). Small percentages report ongoing costs of more than $5,000 per year (2 percent and 7 percent, respectively; $p < .05$). Except for these latter two comparisons, the pattern of results for disability accommodations is similar between employees with disabilities and managers. Since managers generally have better cost information, their estimates may be more accurate, yet many employees with disabilities themselves often are the best judges of accommodation effectiveness and related costs and benefits. As with the reasons for denials, however, the discrepancy also may reflect a difference in types of accommodations: in responding to the survey, managers may have focused on larger accommodations, while employees reported more minor accommodations. The monetary costs of

accommodations reported by employees without disabilities show a similar pattern, although they are slightly more likely than employees with disabilities to report a zero one-time cost (54 percent did so, compared to 44 percent of employees with disabilities, $p < .05$). The fact that managers and employees report different information reinforces the value of better organizational tracking and communication on accommodations.

Turning to the potential benefits, Table VIII shows that a majority of employees who received accommodations, and the coworkers and managers of accommodated employees with disabilities, said the accommodation had a variety of positive impacts.

INSERT TABLE VIII HERE

For example, 72 percent of employees with disabilities reported the accommodation made it more likely the employee will stay at the company, compared to 81 percent of coworkers ($p < .05$) and 68 percent of managers (difference not significant). There was also strong agreement that accommodations increased the employee's morale or job satisfaction (71 percent, 76 percent, and 72 percent, respectively, differences not significant) and decreased the employee's stress at work (65 percent, 67 percent, and 62 percent, respectively, differences not significant). Where there were differences, managers were somewhat less positive. For example, 59 percent of managers said the accommodation increased the productivity of the employee with a disability, compared to 73 percent of coworkers and 77 percent of employees with disabilities ($p < .01$). Strong majorities of all three groups (71 percent of workers with and without disabilities reporting on own accommodations, and 81 percent of coworkers and 68 percent of managers reporting on disability accommodations) reported that the accommodation made it more likely the employee would stay with the company, which is noteworthy given the high cost of turnover for many organizations (one estimate is that the average cost to replace an employee is $13,996) (O'Connell & Kung, 2007).

Employees without disabilities who received accommodations reported the same pattern of benefits as employees with disabilities (Table VIII, columns 1 and 2). There were no significant differences in the percentages reporting each of the benefits, except that employees without disabilities were slightly more likely to say that the accommodation increased their ability to acquire training and new skills (31 percent compared to 22 percent, $p < .10$).

Finally, employees and managers were asked to put a dollar value on the benefits of the accommodation. Over two-fifths in each group said "don't know," while between one-fifth and one-fourth reported zero monetary benefits. The pattern of responses was similar among employees with disabilities, employees without disabilities, and managers, except that managers were twice as likely as employees with disabilities to say that the benefits exceeded $5,000 (15 percent compared to 8 percent, $p < .10$). Combined with the results from Table VII, managers were therefore more likely than employees with disabilities to report both costs and benefits exceeding $5,000.

Do the benefits outweigh the costs? As noted, such a calculation cannot be used to determine whether an accommodation meets the ADA standard of undue hardship, but it is nonetheless of interest to employers and policymakers. We cannot provide a firm answer to this question because we have categorical rather than exact values, but we can determine whether the benefits are likely to outweigh the costs in most cases. Using the managerial assessments of monetary benefits, one-time costs, and annual costs (assuming 10 years of further service), we find that: reported benefits approximately equal reported costs in 40.1 percent of cases (i.e., the same dollar value categories were checked for benefits and onetime costs, and there were no annual costs); benefits exceeded costs in 29.2 percent of cases; costs exceeded benefits in 19.0 percent of cases; and the remaining 11.7 percent of cases were indeterminate (in particular, where both the benefits and costs were reported to be $5,000+). While these data are rough, they indicate that there was no net cost in over two-thirds of the cases (at least 69

percent). It should be kept in mind that benefits can be hard to quantify (e.g., the value of higher employee morale or workplace safety), and 43 percent of the managers were not able to estimate the monetary benefits.

Discussion

The finding that many employees without disabilities receive accommodations suggests disability accommodations should be framed in the context of accommodations for all employees. This is consistent with earlier studies finding employers provide accommodations to many of employees who do not meet the ADA's definition of disability (Schartz et al., 2006). In fact, there appears to be growing recognition of the generalized benefits of workplace accommodation among leading companies (National Council on Disability, 2007). As noted by an IBM executive:

> What we do is accommodate any employee, whether they are disabled or not. Every employee gets what they need. When it comes to people with disabilities, it may be assistive technology or services. Even if you're not disabled—if there is something you need in order to make your job more productive, you would get it. (National Council on Disability, 2007, p. 8)

Our results also are consistent with prior evidence that most accommodations are inexpensive. Large majorities of employees, coworkers, and managers report accommodations yield direct and indirect benefits, particularly in improving employee productivity, morale, and retention. The reported monetary benefits equal or exceed the costs in over two-thirds of cases, although it is difficult to quantify many of the benefits, particularly when there may be multiplier effects on other employees, managers, or work units.

Such multiplier effects are indicated by our results showing the provision or denial of accommodations affects the attitudes not only of those who requested accommodations, but also of other employees in the department. This dovetails with other research on the broader benefits of hiring people with disabilities (Graffam et al., 2002a), pointing to the generalized benefits of flexible and supportive workplaces for employees and the importance of corporate culture in examining disability and accommodations (Stone & Colella, 1996; Schur, Kruse, & Blanck, 2005; Schur, Kruse, Blasi, & Blanck, 2009). We also find the effects of accommodations on employee attitudes are conditioned by coworker support (Baldridge & Veiga, 2006), further indicating the importance of corporate culture and attitudes. This result suggests the value of devising effective strategies to increase awareness of accommodation benefits, which can increase coworker knowledge and support for their provision.

Our findings on the value of accommodations should help address potential employer concerns about accommodation costs, which historically has been one of the perceived barriers to the employment of individuals with disabilities. Further research could examine how employers effectively develop and manage internal organizational structures to facilitate accommodation protocols across units and managers. Improved consistency, accountability, and information on the accommodations process would help mitigate the heavy dependence of accommodation decisions on the individual supervisor or manager who responds to the request.

Vocational agencies and community employment-focused disability organizations are valuable partners in helping identify and implement appropriate accommodations (Graffam et al., 2002a, 2002b; Luecking, 2008). Many provide no- or low-cost consultation services to employers and employees with disabilities to assist in identifying appropriate accommodations, as well as providing guidance on the rights and responsibilities of each party in the accommodation process. The use of external

organizations plus the maintenance of confidential records of prior accommodations can significantly reduce disputes and facilitate timely interventions when requests occur.

Consistent with other studies, our findings suggest the importance of understanding workplace culture as a facilitator of successful accommodations. Thus, we find an effect of the aggregate disposition of accommodation requests on coworker attitudes in the employee's unit. In addition, unit managers exert substantial influence over the accommodation requests of employees with disabilities. The quality of these workplace relationships has important implications for the access that employees with disabilities have to job opportunities and career advancement, training resources, career and psychological support, and their perceived status relative to others without disabilities (Gerstner & Day, 1997).

Managers likewise influence the inclusive climate of their units, the skill fit with employee jobs, satisfaction with accommodation processes, and overall workplace engagement (Nishii & Bruyere, 2009). Improving manager and coworker awareness of the benefits of accommodations for all employees, through training and other informal channels, may be a useful approach to proactively enhance workplace culture. The importance of workplace inclusiveness may be imbedded in existing supervisors' training more generally, as well as in companywide diversity training.

There are several limitations to this study. It is based on eight companies that may not be representative of employers in general. Some of the survey measures are subject to social desirability bias, in which respondents tend to express socially acceptable views. To keep the survey length manageable, we use single-item rather than multi-item measures of several concepts. As noted, many managers could not estimate the monetary value of benefits, and our data are not detailed enough to provide strong conclusions on monetary costs and benefits (such detail, however, may be difficult for managers to generate). In addition, the data are cross-sectional, making it difficult to establish causality

between accommodations and individual attitudes. For example, managers may be more likely to deny requests of employees who have negative attitudes (or who are perceived as "troublemakers"), or denial of accommodation requests may be a symptom rather than a cause of a negative employee climate within a unit. Our complementary data from the interviews and focus groups, however, also argue against the view that granting accommodations necessarily creates tension and feelings of inequity among coworkers, and support the idea that accommodating employees with and without disabilities has broader and measurable positive benefits for organizational attitudes and culture. This is a rich area for further research, and we are organizing studies to assess these attitudes longitudinally for employees at different companies.

Conclusion

This is the first study to examine systematically workplace accommodations from multiple perspectives— those of employees, coworkers, and managers—and to compare accommodation requests, costs, and benefits between employees with and without disabilities. The findings suggest disability accommodations need to be viewed in the context of accommodations for the personal needs of all employees, and that accommodations may not only maximize the inclusion of people with disabilities but may have positive spillovers on other employees that foster overall workplace productivity.

Future research across a variety of large and small work settings is needed to shed more light on the benefits and costs of accommodations, their effects on organizational culture and employee and employer needs, and how they increase employment opportunities for individuals with disabilities. The findings on a positive spillover effect from accommodations require further research to examine the

mechanisms by which this occurs. Multilevel data and techniques tying individual- level attitudes and outcomes to unit-level policies, attitudes, and outcomes are highly valuable to examine this. More also remains to be learned about individual managerial styles and leadership qualities that create and maintain workplace climates that maximize productivity and engagement, especially for employees with disabilities. Future research will need to uncover how characteristics of managers, work environments, and accountability mechanisms can enhance employment outcomes for people with disabilities.

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Note

1. The ICCs are .088 for organizational commitment, .114 for perceived organizational support, .017 for job satisfaction, and .042 for likely turnover. These indicate significant within-group and between group variance (the F-statistics for between-group variance are significant at $p < .0001$ for all measures except $p = .0145$ for job satisfaction), justifying the use of multilevel methods.

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Appendix: Disability, Accommodation, and Attitude Question Wordings

Disability: positive answer to one of the following questions (yes/no)

a. Are you deaf or do you have serious difficulty hearing?

b. Are you blind or do you have serious difficulty seeing even when wearing glasses?

c. Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?

d. Do you have serious difficulty walking or climbing stairs?

e. Do you have difficulty dressing or bathing?

f. Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone, such as visiting a doctor's office or shopping?

Accommodation requested: Have you ever requested from this company any change or accommodation in your job or workplace to better meet your personal needs? (yes/no) Accommodation granted: Was the change or accommodation made? 1 = Yes, all requested changes were made (or other changes were made that were just as good); 2 = Only some of my requested changes were made (not as good as what was requested); 3 = No, none of my requested changes were made.

Perceived organizational support: average of following items (1–5 scale, 1 = strongly disagree, 5 = strongly agree), alpha = .899

a. The organization really cares about my well-being.

b. The organization takes pride in my accomplishments at work.

c. The organization cares about my opinions.

Organizational commitment: average of following items (1–5 scale, 1 = strongly disagree, 5 = strongly agree), alpha = .907

a. I feel a strong sense of "belonging" to my organization.

b. I feel like "part of the family" at my organization.

c. My organization has a great deal of personal meaning for me.

Job satisfaction: How satisfied are you in your job? (7 = completely satisfied / 6 = very satisfied / 5 = fairly satisfied / 4 = neither satisfied nor dissatisfied / 3 = fairly dissatisfied / 2 = very dissatisfied / 1 = completely dissatisfied)

Likely turnover: Taking everything into consideration, how likely is it that you will make a genuine effort to find a new job with another employer within the next year? (1 = not at all likely, 2 = somewhat likely, 3 = very likely)

TABLE 1 Prevalence of Accommodation Requests

	Disability	No Disability
All employees		
Requested accommodations		
All employees	62.1%***	28.1%
For health or disability reason	43.2%***	5.6%
For other reason	18.9%	22.5%
If hearing impairment	54.4%	
If visual impairment	57.6%	
If mobility impairment	74.2%	
If mental/cognitive impairment	62.0%	
n	293	5,010
Nonmanagers/supervisors		
Have worked with person with disability	46.5%	
N	3,456	
If worked with any employees w/disabilities, at least one was granted an accommodation		
Yes	31.9%	
No	10.3%	
Don't know	57.9%	
n	1,599	
Managers/supervisors		
Have supervised employee with disability	39.9%	
N	1,783	
If supervised any employees w/disabilities:		
At least one employee requested accommodations	49.0%	
Percentage of employees w/disabilities who requested accommodations	32.5%	
n	706	

*$p < .10$, **$p < .05$, ***$p < .01$; based on *t*-test.

TABLE II Types of Accommodations Requested

	Employee Reports		Type of Disability				Manager Reports on Disability Accommodations
	Disability (1)	No Disability (2)	Hearing (3)	Vision (4)	Cognitive (5)	Mobility (6)	(7)
All requests	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
New or Modified Equipment							
Using a new or different type of computer equipment or information technology	8.2%	8.4%	2.5%	21.1%	7.1%	11.4%	9.0%
Modifying a type of computer equipment or information technology	4.1%	3.0%	7.5%	21.1%	1.8%	5.7%	9.6%
Using a new or different type of other equipment	5.9%*	3.3%	10.0%	5.3%	3.6%	4.5%	16.1%
Modifying another type of equipment	2.4%	1.6%	5.0%	0.0%	1.8%	1.1%	7.3%
Physical Changes to Workplace							
Modifying the worksite (such as changes in parking, bathrooms, or break areas, or adding ramps, lighting, or mirrors)	6.5%**	3.2%	2.5%	0.0%	3.6%	10.2%	13.0%
Modifying the individual work environment (orthopedic chair, lower desk, etc.)	20.5%***	8.1%	7.5%	31.6%	10.7%	29.5%	31.4%
Changes in Work Tasks, or Job Structure or Schedule							
Changes to a work schedule (such as flex time, shift change, part time)	35.3%	38.0%	32.5%	36.8%	41.1%	36.4%	42.4%
Restructuring the job (changing or sharing job duties)	6.5%	5.8%	5.0%	0.0%	10.7%	5.7%	26.8%
Working from home or telework	23.5%*	18.0%	20.0%	26.3%	26.8%	22.7%	14.4%

TABLE II Types of Accommodations Requested (Continued)

	Employee Reports		Type of Disability				Manager Reports on Disability Accommodations
	Disability (1)	No Disability (2)	Hearing (3)	Vision (4)	Cognitive (5)	Mobility (6)	(7)
Moving to another job (or reassignment)	7.6%	8.1%	5.0%	15.8%	7.1%	8.0%	7.1%
Moving to another location	7.1%	6.7%	7.5%	10.5%	8.9%	3.4%	3.7%
Changes in Communication or Information Sharing							
Modifying examination/testing approaches or training materials	1.2%	1.3%	0.0%	0.0%	0.0%	1.1%	4.8%
Using of an interpreter, reader, job coach, service animal, or personal assistance	1.2%	0.4%	0.0%	0.0%	0.0%	2.3%	11.0%
Providing information in an alternative format or allowing more time to complete tasks (such as large print, taped text, Braille, etc.)	2.9%***	0.5%	2.5%	15.8%	0.0%	2.3%	7.1%
Providing written job instructions	4.7%***	1.1%	2.5%	5.3%	3.6%	5.7%	7.3%
Other Changes							
Changes in workplace policy	7.7%***	1.3%	7.5%	10.5%	7.1%	10.2%	5.4%
Formal or company education of coworkers	2.4%	1.9%	0.0%	5.3%	1.8%	3.4%	4.0%
Making transportation accommodations	2.9%	2.6%	0.0%	5.3%	1.8%	3.4%	8.5%
Changing supervisor methods	4.7%***	1.7%	7.5%	5.3%	1.8%	4.5%	5.6%
Other	6.5%***	2.7%	10.0%	5.3%	7.1%	6.8%	6.8%
n	170	1,351	40	19	56	88	354

*Significant difference between disability and non-disability figures at $p < .10$, **$p < .05$, ***$p < .01$; based on t-test.
Figures reflect most recent accommodation request (total may exceed 100% since more than one type may be requested).

TABLE III **Accommodation Requests Granted and Reasons for Denials**

	Perceptions of Own Accommodations		Perceptions of Disability Accommodations
	Disability	No Disability	Managers/Supervisors
	(1)	(2)	(3)
Most recently requested accommodation was			
Totally granted	72.6%	79.3%**	90.5%
Only partly granted	19.6%	14.7%*	7.2%
Not granted	7.7%	6.0%	2.3%
n	168	1,306	349
Reported reason for not granting accommodation			
Too expensive	13.0%	13.8%	3.0%
Not necessary	17.4%	11.9%	9.1%
Too much of a burden or inconvenience for organization	21.7%	24.4%	12.1%
Too much of a burden or inconvenience for other employees	10.9%	10.7%	9.1%
Not appropriate for the specific job or task	13.0%	13.3%	51.5%***
Don't know	26.1%	25.2%	6.1%**
n	46	270	33

*Significant difference from column 1 at $p < .10$, **$p < .05$, ***$p < .01$; based on *t*-test.

TABLE IV Coworker Reactions to Accommodations

	Perceptions of Own Accommodations		Perceptions of Disability Accommodations	
	Disability (1)	No Disability (2)	Coworkers (3)	Managers/ Supervisors (4)
Coworkers were aware of accommodations				
None	8.8%	5.6%	0.9%***	6.9%
Only a few	21.9%***	10.9%	6.0%***	13.1%**
Some	12.4%	14.9%	13.2%	18.8%*
Most	21.2%	20.0%	29.9%**	22.1%
All	30.7%**	41.0%	47.3%***	37.0%
Don't know	5.1%	7.6%	2.8%	2.1%*
n	137	1,121	469	335
Coworkers were negative and resentful				
None	61.3%	60.5%	68.9%	68.0%
Only a few	7.3%	11.4%	12.0%	16.6%***
Some	8.8%	5.9%	10.1%	8.6%
Most	1.5%	1.0%	3.4%	2.8%
All	0.0%	0.6%	1.2%	0.9%
Don't know	21.2%	20.6%	4.6%***	3.1%***
n	137	1,120	418	325
Coworkers were positive and supportive				
None	6.6%	4.9%	1.8%***	5.3%
Only a few	4.4%	3.2%	3.7%	6.9%
Some	10.2%	8.7%	10.5%	14.4%
Most	21.2%**	31.6%	33.2%***	29.4%*
All	41.6%	38.3%	47.6%	40.3%
Don't know	16.1%	13.3%	3.2%***	3.8%***
n	137	1,119	437	320
Coworker agrees accommodation should have been made			94.6%	
Perceived impact on coworker's job				
Extremely undesirable			1.2%	
Undesirable			5.7%	
None			68.8%	
Desirable			15.3%	
Extremely desirable			9.0%	

*Significant difference from column 1 at $p < .10$, **$p < .05$, ***$p < .01$; based on *t*-test.

TABLE V Descriptive Statistics and Correlations for Regressions

				Correlations			
		Mean	SD	1	2	3	4
1	Perceived organizational support	3.397	(0.939)				
2	Organizational commitment	3.580	(0.934)	0.685*			
3	Job satisfaction	4.960	(1.340)	0.392*	0.494*		
4	Likely turnover	1.365	(0.601)	–0.394*	–0.405*	–0.331*	
5	Disability	0.055	(0.228)	–0.063*	–0.050*	–0.045*	0.022
6	Accommodation request fully granted	0.218	(0.413)	0.079*	0.058*	0.044*	–0.043*
7	Disability × accommodation request fully granted	0.023	(0.150)	0.020	–0.007	0.009	–0.007
8	Accommodation request partly granted	0.017	(0.130)	–0.073*	–0.073*	–0.062*	0.074*
9	Disability × accommodation request partly granted	0.002	(0.049)	–0.043*	–0.045*	–0.043*	0.053*
10	Accommodation request not granted	0.042	(0.202)	–0.180*	–0.159*	–0.111*	0.131*
11	Disability × accommodation request not granted	0.006	(0.079)	–0.080*	–0.083*	–0.052*	0.040*
	Unit–level average of						
12	Requests fully granted	0.214	(0.108)	0.031	0.006	–0.035	0.022
13	Requests partly granted	0.023	(0.038)	–0.052*	–0.027	–0.021	0.017
14	Requests not granted	0.051	(0.056)	–0.144*	–0.105*	–0.040	0.090*
	Occupation						
15	Production	0.075	(0.264)	–0.177*	–0.161*	–0.091*	0.051*
16	Administrative support	0.095	(0.294)	0.076*	0.049*	0.011	–0.024*
17	Professional/technical	0.417	(0.493)	–0.059*	–0.104*	–0.024	0.050*
18	Sales	0.137	(0.344)	–0.027	0.015	0.044*	0.023
19	Customer service	0.058	(0.234)	0.012	0.058*	0.015	–0.026
20	Low management	0.134	(0.341)	0.087*	0.086*	0.004	–0.034*
21	Middle management	0.106	(0.306)	0.077*	0.094*	0.022	–0.035*
22	Upper management	0.032	(0.176)	0.069*	0.064*	0.026	–0.026
	Tenure in unit						
23	Less than 1 year	0.142	(0.349)	0.113*	0.037*	0.068*	–0.043*
24	1–5 years	0.472	(0.499)	–0.045*	–0.052*	–0.049*	0.107*
25	6–10 years	0.218	(0.413)	–0.046*	–0.002	–0.011	–0.005
26	11–20 years	0.126	(0.332)	–0.006	0.020	0.016	–0.076*
27	20 years or more	0.043	(0.202)	0.021	0.037*	–0.001	–0.055*

*$p < .05$.

TABLE V Descriptive Statistics and Correlations for Regressions (Continued)

				Correlations					
5	6	7	8	9	10	11	12	13	14
0.114*									
0.635*	0.286*								
0.056*	–0.069*	–0.020							
0.209*	–0.027	–0.008	0.386*						
0.081*	–0.112*	–0.032*	–0.027	–0.011					
0.324*	–0.041*	–0.012	–0.010	–0.004	0.369*				
0.069*	0.263*	–0.013	0.006*	0.067*	0.018	0.045*			
0.071*	–0.017	0.254*	–0.042*	0.058*	0.095*	–0.009	–0.053*		
0.014	0.003	–0.039*	0.255*	–0.016	–0.016	0.054*	–0.001	–0.164*	
–0.014	–0.067*	–0.034*	–0.002	0.000	0.097*	0.054*	–0.080*	0.057*	0.179*
0.089*	0.037*	0.062*	0.052*	0.050*	–0.032*	–0.017	0.085*	0.009	–0.098*
0.010	0.024	0.000	0.018	–0.011	–0.020	0.000	0.146*	–0.050*	–0.152*
–0.031*	–0.049*	–0.023	–0.025	–0.009	0.031*	–0.002	–0.243*	0.001	0.214*
0.015	–0.015	–0.004	–0.005	0.004	0.003	0.003	0.037*	0.017	–0.035*
0.008	0.020	0.013	–0.010	0.014	–0.029*	–0.009	0.008	0.053*	–0.083*
–0.012	0.017	0.003	–0.024	–0.017	–0.028*	–0.010	0.011	0.036*	–0.075*
0.014	0.020	0.009	–0.015	–0.009	–0.017	0.000	0.002	0.000	–0.039*
0.004	–0.034*	0.006	–0.008	–0.009	–0.019	–0.010	–0.005	–0.061*	–0.031
–0.030*	–0.041*	–0.043*	0.001	0.007	0.007	–0.003	–0.044*	–0.023	0.001
0.020	0.036*	0.021	0.011	0.002	0.014	0.014	0.058*	0.061*	–0.006
0.007	0.044*	0.020	–0.003	0.004	0.001	0.008	0.008	0.031	0.032
0.018	0.014	0.020*	–0.004	–0.011	–0.016	–0.016	–0.020	0.001	0.031

TABLE VI Accommodations and Employee Attitudes

Dependent Variable	Perceived Organizational Support						Organizational Commitment					
	(1)		(2)		(3)		(4)		(5)		(6)	
Accommodation request fully granted	0.147	(0.03)***	0.143	(0.05)***	−0.382	(0.13)***	0.091	(0.03)***	0.126	(0.05)***	−0.413	(0.13)***
Accommodation request partly granted	−0.471	(0.11)***	−0.231	(0.14)	−0.607	(0.30)**	−0.458	(0.11)***	−0.280	(0.14)**	0.740	(0.30)**
Accommodation request not granted	−0.744	(0.07)***	−0.549	(0.09)***	−0.549	(0.09)***	−0.656	(0.07)***	−0.435	(0.09)***	−0.441	(0.09)***
No accommodation request (excluded)												
Disability	−0.178	(0.08)**	−0.419	(0.14)***	−0.42	(0.13)***	−0.114	(0.08)	−0.311	(0.13)**	−0.313	(0.12)**
Disability × accommodation fully granted	−0.164	(0.12)	−0.206	(0.19)	−0.156	(0.20)	−0.092	(0.12)	−0.082	(0.19)	−0.003	(0.30)
Disability × accommodation partly granted	−0.218	(0.28)	−0.252	(0.39)	−0.200	(0.42)	−0.314	(0.29)	−0.588	(0.38)	−0.460	(0.41)
Disability × accommodation not granted	−0.036	(0.19)	−0.060	(0.30)	0.067	(0.29)	−0.242	(0.19)	−0.254	(0.29)	−0.247	(0.29)
Unit average of requests fully granted			0.383	(0.23)*	0.432	(0.23)*			0.185	(0.25)	0.249	(0.26)
Unit average of requests partly granted			−1.506	(0.62)**	−1.607	(0.63)**			−0.788	(0.67)	−1.078	(0.69)
Unit average of requests not granted			−1.629	(0.45)***	−1.606	(0.46)***			−1.340	(0.49)***	−1.236	(0.50)**
Coworker support of fully granted accommodation					0.177	(0.04)***					0.180	(0.04)***
Coworker support of partly granted accommodation					0.143	(0.10)					0.154	(0.10)
n	5,219		2,345		2,259		5,223		2,347		2,260	
R^2, within			0.070		0.081				0.043		0.056	
R^2, between			0.343		0.332				0.191		0.175	
R^2, overall	0.087		0.123		0.133		0.069		0.072		0.084	

TABLE VI Accommodations and Employee Attitudes (Continued)

Job Satisfaction						Likely Turnover					
(7)		(8)		(9)		(10)		(11)		(12)	
0.097	(0.05)**	0.17	(0.07)**	−0.217	(0.20)	−0.056	(0.05)	−0.054	(0.03)	0.128	(0.09)
−0.564	(0.16)**	−0.366	(0.21)	−1.022	(0.46)**	0.584	(0.14)***	0.144	(0.09)	0.325	(0.20)
−0.724	(0.10)**	−0.672	(0.14)**	−0.668	(0.14)***	0.681	(0.09)***	0.328	(0.06)***	0.331	(0.06)***
−0.356	(0.13)**	−0.405	(0.38)	−0.412	(0.21)**	0.113	(0.12)	0.039	(0.09)	0.039	(0.09)
0.288	(0.18)	0.234	(0.29)	0.386	(0.31)	0.026	(0.17)	0.016	(0.12)	−0.006	(0.12)
−0.288	(0.43)	−0.615	(0.59)	0.292	(0.65)	0.482	(0.36)	0.384	(0.26)	0.414	(0.28)
0.152	(0.29)	0.277	(0.45)	−0.268	(0.45)	−0.215	(0.25)	−0.008	(0.20)	−0.005	(0.17)
		−0.340	(0.31)	−0.249	(0.32)			0.134	(0.15)	0.121	(0.16)
		−0.285	(0.84)	−0.384	(0.87)			0.372	(0.41)	0.355	(0.42)
		−0.545	(0.61)	−0.594	(0.90)			0.533	(0.30)*	0.504	(0.30)*
				0.135	(0.06)**					−0.964	(0.39)**
				0.242	(0.16)					−0.048	(0.07)
5,197		2,334		2,248		5,183		2,329		2,242	
		0.034		0.037				0.046		0.054	
		0.074		0.077				0.082		0.078	
0.03		0.04		0.05		0.031		0.054		0.062	

*Significant at $p < .10$, **$p < .05$, ***$p < .01$. Standard errors in parentheses. Control variables include occupation (seven dummies) and length of tenure (four dummies).

TABLE VII Monetary Costs of Accommodations

	Report on Own Accommodations		Report on Disability Accommodations
	Disability	No Disability	Managers/Supervisors
	(1)	(2)	(3)
Estimated dollar costs			
One-time cost			
$0	44.4%**	53.5%	36.9%
$1–100	12.6%***	5.9%	8.5%
$101–500	14.8%**	9.1%	14.0%
$501–1,000	7.4%	6.4%	10.7%
$1,001–5,000	5.9%	3.6%	7.6%
More than $5,000	3.0%	1.9%	5.5%
Don't know	11.9%**	19.6%	16.8%
n	135	1051	328
Annual ongoing cost			
$0	70.9%	64.6%	53.8%***
$1–100	6.0%**	2.2%	4.3%
$101–500	5.1%*	2.2%	3.6%
$501–1,000	2.6%	2.3%	5.3%
$1,001–5,000	1.7%	3.0%	3.6%
More than $5,000	1.7%	3.0%	6.6%**
Don't know	12.0%***	22.7%	22.8%**
n	117	958	303

*Significant difference from column 1 at $p < .10$, **$p < .05$, ***$p < .01$.

TABLE VIII Benefits of Accommodations

	Report on Own Accommodations		Report on Disability Accommodations	
	Disability	No Disability	Coworkers	Managers/Supervisors
	(1)	(2)	(3)	(4)
The accommodation has "very much" or "completely":				
Improved the employee's productivity	76.7%	77.2%	72.9%	58.7%***
Made it more likely the employee will stay at the company	71.9%	71.9%	81.3%**	68.1%
Improved the employee's morale or job satisfaction	70.5%	81.7%	75.6%	71.8%
Made it possible for the employee to work at this company	66.7%	61.9%	78.8%***	69.9%
Decreased the employee's stress at work	65.2%	66.4%	66.9%	61.7%
Improved the employee's attendance of hours or work	60.5%	60.9%	63.1%	46.2%***
Improved the employee's interactions with coworkers	45.0%	42.2%	55.5%*	36.0%
Improved workplace safety	43.8%	35.6%	63.2%***	43.6%
Improved the employee's ability to acquire training and new skills	22.4%*	30.5%	50.0%***	32.1%*
Enabled the company to promote a qualified employee	13.8%	18.4%	48.5%***	26.8%**
n	135	1,088	467	332
Estimated dollar benefits				
$0	27.1%	29.2%		20.3%
$1–100	5.6%	3.1%		3.4%
$101–500	4.7%	3.6%		6.1%
$501–1,000	6.5%	5.3%		4.3%
$1,001–5,000	5.6%	5.4%		8.3%
More than $5,000	7.5%	8.5%		14.7%*
Don't know	43.0%	44.7%		42.9%
n	107	937		326

*Significant difference from column 1 at $p < .10$, **$p < .05$, ***$p < .01$.