The Impact of Business Size on Employer ADA Response

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More than 10 years have passed since the employment provisions of the Americans with Disabilities Act of 1990 (ADA) came into effect for employers of 15 or more employees. Americans with disabilities continue to be more unemployed and underemployed than their nondisabled peers. Small businesses, with fewer than 500 employees, continue to be the most rapidly growing part of our national economy and therefore a potential source of employment for American job seekers with disabilities. A Cornell University survey of human resource professionals examined how employers of different sizes are complying with the ADA. The authors point to needed ADA and accommodation services that rehabilitation counselors can provide to employers.

The work described in this paper is a part of 8 years of study by Cornell University on employment nondiscrimination policies and practices in the private and federal sectors. The original survey was conducted in the late 1990s on the topic of workplace accommodations in response to the Americans with Disabilities Act (ADA; Brannick & Bruyère, 1999; Bruyère 2000a; Bruyère, 2002; Bruyère 2002–2003; Bruyère, Erickson, & VanLooy, 2000). Parallel surveys were conducted in the federal sector (Bruyère, 2000b; Bruyère, Erickson, & Ferrentino, 2003; Bruyère, Erickson, & Horne, 2002; Bruyère, Erickson, Wilson, & Somerville, 2004) and in the U.K. in response to their Disability Discrimination Act (Bruyère, 2000c; Bruyère, Erickson, & VanLooy, 2004). A follow-up survey was conducted of the Society for Human Resource Management (SHRM) informants regarding workplace accommodations in the area of Web-based human resource processes and information technology (Bruyère, Erickson, & Schramm, 2003; Bruyère, Erickson, & VanLooy, 2005). The analysis described in this article is an effort to discover where the experiences of small employers differ from those of larger employers regarding the ADA and to make recommendations to rehabilitation counselors regarding the best ways to assist people with disabilities to gain employment.

Small businesses are a vital sector of the economy, especially as potential employers of people with disabilities. According to the Small Business Administration (SBA) Office of Advocacy's figures (2004), America's 25 million small businesses (those with fewer than 500 employees) represent 99.7% of all employers. They employ more than half (53%) of the private workforce, generate more than half of the nation's gross domestic product, and are the principal source of new jobs in the U.S. economy, providing approximately 75% of the net new jobs added each year. Small businesses also account for more than half (51%) of private-sector output and represent 96% of all U.S. exporters (Small Business Administration, 2003).
Of potential interest to those providing job development and placement services for persons with disabilities, small businesses hire a larger proportion of employees who are younger, older, women, or prefer to work part-time (Small Business Administration, 2003). They also provide 67% of workers with their first job and with initial on-the-job training in basic skills. This points to an excellent opportunity to provide job training, if not career-building opportunities, to youth with disabilities and older workers with disabilities who would like to work part-time to conserve strength and energy to sustain their employment well into their later working years.

Other evidence suggests this is an important segment of the workforce for providers of rehabilitation services to examine. Small businesses pay 44% of the total U.S. private payroll and also account for one quarter (more than 23%) of federal prime contract dollars. Thirty-nine percent of jobs in high-technology sectors are in small businesses, and they produce 13 to 14 times more patents per employee than large firms (Small Business Administration Office of Advocacy, 2004).

These facts reinforce the importance of rehabilitation specialists becoming familiar with the needs and interests of this sector of the U.S. labor force and economy. As employers with 15 or more employees are covered by the provisions of the ADA and its requirement to accommodate applicants and employees with disabilities, this is an area where rehabilitation specialists might be of assistance. The purpose of this article is to offer information from the literature and research conducted by Cornell University about how rehabilitation practitioners can contribute to the information and technical assistance needs of small employers. This information will allow practitioners to more effectively position themselves to find employment for individuals with disabilities in this segment of the U.S. economy. We start with a brief review of the literature and then discuss findings from a Cornell University study of small and large employers and their experiences with the ADA and accommodation practices.

Our review of the literature on small business practice and workplace accommodations for applicants and employees with disabilities was conducted for the time period of the ADA’s inception to the present day, a period of almost 15 years. A selective review of articles on employer practices, focusing on small businesses when possible, was conducted across several different sources and disciplines.

**OVERVIEW OF THE PROBLEM**

The earliest literature on employer behavior in response to the ADA, published around the time of the passage of the ADA, evidences apprehension by small businesses about possible litigation and compliance costs of the ADA. Business magazines and journals such as Nation’s Business, Small Business Reports, Denver and Austin county business journals, and others (Dibattista, 1997; Litvan, 1994; Maurer & Zugelder, 1998; McKee, 1993; Nichols, 1992; Olson, 1997; Winkle, 1994), as well as legal reviews of the ADA in the Kansas Law Review and the Notre Dame Law Review (Harger, 1993; Lavelle, 1991) reflected this apprehension. Many of the sources, however, are dated before July 1994, when the law was expanded to cover businesses first with 25 employees or more, and subsequently with 15 or more employees.

Other articles suggest that small businesses were relatively uninformed with regard to the ADA. A September 1992 survey conducted by a small business research group (the Kessler Exchange) found that 40% of small business owners were unaware of the ADA, and 30% said they knew about the law but could not afford to make structural adaptations (McKee, 1993). Even employers who expressed positive attitudes about the ADA indicated that they needed more information about it (Moore and Crimando, 1995). Several years after the passage of the
ADA, small businesses were still less likely than larger employers to have hired or retained individuals with disabilities and less likely to believe that those individuals could be accommodated without excessive cost (Lee, 1996).

While these articles focusing on employer concerns about the ADA were predominantly published before and during its first implementation, these concerns are brought up recurrently as ways to explain the continuing employment disparity for people with disabilities. Fear of costs, additional supervision, productivity loss, and being “stuck” with a substandard employee are all listed as issues a rehabilitation counselor will have to address with employers (Peck and Kirkbride, 2001).

Unfortunately, business schools may not be educating their students on ADA issues to address this lack of knowledge. A survey of professors teaching employment communication courses and the textbooks used found that fewer than half (45%) of the professors who included employment communication in class discussed disability disclosure (Parry, Rutherford, & Merrier, 1996). Additionally, only 6 of the 13 business communication texts evaluated (all published after 1991) included any mention of nondiscriminatory language appropriate to people with disabilities.

We found few articles that examined employer behaviors directly. Much of the employer research that exists focuses on employer attitudes toward applicants and workers with disabilities and toward disability itself. These studies have shown that employer attitudes toward disabilities vary with the disability; more positive views were expressed about people with physical or sensory disabilities than about people with psychiatric or cognitive disabilities (Gouvier, Sytsma-Jordan, & Mayville, 2003; Hernandez, Keys, & Balcazar, 2000; Unger, 2002). This hierarchy of attitudes was found in a literature review conducted in 1987 by Greenwood and Johnson (Greenwood and Johnson, 1987) and continues to be found in post-ADA studies (Callahan, 1994; Scheid, 1999). A similar tendency to rank disabilities exists about the cause of the disability—about whether the disability is perceived to be caused by factors under the control of the person with a disability. When an individual is believed to be responsible for his or her disability, that “onset controllability” has been found to produce negative attitudes in employers (Florey & Harrison, 2000; Gouvier et al., 2003; Lee, 1996).

Research that looked at attitudes as they relate to business size has been inconsistent. Unger (2002) found in a review of the literature that research conducted prior to the implementation of the ADA reported small businesses as having less favorable attitudes toward people with disabilities in the workplace. However, studies of post-ADA implementation failed to identify a relationship between employer size and attitude. Thakker and Solomon (1999) found a negative correlation between manager attitudes toward people with disabilities and their adherence to the ADA. A survey of Florida businesses in 2003 found a strong relationship between positive attitudes and business size (Able Trust, 2003).

The attitude research that exists is based on the assumption that success of ADA employment provisions depends on the attitudes of employers (Hernandez et al., 2000). Yet studies have failed to show a strong correlation between positive attitudes and actual willingness to hire (Scheid, 1999; Thakker & Solomon, 1999).

As attitudes do not necessarily become active practices, we need quantitative data on employer behaviors. Although a good deal of research since the implementation of the ADA has focused on employer attitudes and how to change them, less has been done to discover what employers are actually doing. Furthermore, few articles on employer attitudes discuss business size as a factor in employer response to disability.
Hernandez et al. (2000) found no studies conducted between 1987 and 1999 that directly observed employers' actual hiring practices. Scheid (1998) surveyed 117 businesses in a metropolitan area of the southern United States on their response to the ADA, with a specific focus on the employment of people with mental disabilities. That survey found that larger employers were significantly more likely to be in compliance with the ADA.

Thakker and Solomon (1999) studied factors influencing adherence to the ADA among managers. Only 17% of managers surveyed had recruited, interviewed, or hired a person with a psychiatric disability in the past 2 years, while 42% had recruited, interviewed, or hired people with physical disabilities. The researchers did not break down their results by organization size. The most influential factor in determining adherence in their study was the managers’ perception of organizational adherence. Managers who believed their organization was adhering to the ADA and favorable toward individuals with disabilities were themselves more adherent to it; the managers’ personal attitudes toward disabilities, in fact, had a negative correlation with adherence.

Gilbride, Stensrud, Ehlers, Evans, and Peterson (2000) surveyed 123 employers who had hired clients from vocational rehabilitation (VR) offices during 1997. The employers reported almost unanimously that they were glad they had hired a person with a disability, and 72% of midwestern employers and 38% of southeastern employers reported that they had provided accommodations for their employees with disabilities.

A 2002 survey conducted by SHRM to assess employers’ familiarity with and use of government incentives for hiring people with disabilities found that the HR department is most often responsible for deciding to use such incentives, yet their knowledge level varies widely about them. Employers most often reported using tax credits that were not disability-specific, such as the Work Opportunity Tax Credit, the Welfare-to-Work Act, and the Veterans Job Training Act. Very few respondents said their organization used the incentive programs for hiring individuals with disabilities, and they were much less familiar with these programs. Over 40% of respondents indicated their organization makes no effort, or very little effort, to proactively recruit employees with disabilities. This report did look at organization size as a factor in responses, but did not include information as to the statistical significance of any differences, probably because of the small sample and low response rate for their survey. Without information on significance, it is difficult to draw conclusions, but it appears from the observed data that small businesses included in their sample were less likely to have a formal policy for hiring people with disabilities, less likely to have had an increase in the percentage of their workforce with disabilities in the last five years, and less likely to have had an ADA complaint filed against them in the last 12 months. (Lengnick-Hall, Gaunt, & Collison, 2003).

A survey of the human resources (HR) representatives of 43 businesses (Unger, Wehman, Yasuda, Campbell, & Green, 2002) reported that most felt their organization was doing an adequate job of creating a more inclusive work culture. Areas in which respondents felt their organization was doing well included returning employees who become disabled to work and retaining existing employees with disabilities; recruiting new applicants with disabilities and providing workers with disabilities with advancement opportunities were not perceived to be as high a priority. Attitudes toward people with disabilities were not felt to be a significant barrier, and neither were costs associated with accommodation. No examination of results by size of organization was performed.

Unger and Kregel (2003) report that HR staff was the first recommended contact for supervisors with concerns or questions about the ADA in more than three quarters of the
organizations they surveyed—even when occupational health, safety, or ergonomic; disability management; or benefits staff were also available. Most of the ADA resources identified by supervisors as sources of information on accommodation were within their organizations rather than outside. Again, no breakdown by organization size was offered.

A 2003 survey of Florida businesses (Able Trust, 2003) found that the majority (56%) had some kind of formal policy for hiring people with disabilities. However, only 30% included a formal commitment to active recruitment. Over two thirds reported attempting to hire people with disabilities in the past. Over half of the businesses had made some accommodations for employees with disabilities, but most of those consisted of modifications to existing facilities or restructuring of job requirements. The majority had not modified equipment or devices, adjusted examinations, modified training materials, or provided interpreters. The only results broken down by organization size in this study were those of organizational attitudes. A strong relationship was found between positive perceptions of people with disabilities and business size, whereas a moderate relationship existed between negative attitudes and business size. Respondents of smaller businesses (fewer than 200 employees in this study) expressed both more positive and more negative attitudes than did those of larger businesses.

An individual smaller firm is far less likely than a larger firm to incur the expense of an accommodation by virtue of having fewer employees. The Federal Register (56 FR 8,578, February 28, 1991) stated that 50% of disabled workers require no accommodations and calculated that the smallest firms covered by the ADA, those with 15 to 25 employees, would rarely need to make an accommodation (calculated at 0.015 accommodations per firm per year), with larger firms being more than 30 times as likely to make an accommodation.

Not only are small businesses far less likely to be asked to make an accommodation, but research on the actual costs of accommodating workers with disabilities has found that most accommodations are quite inexpensive. The Job Accommodation Network (1994) reported that most accommodations cost less than $500, and research by Blanck (1996) bears that out. Lee (1996) found that 52% of employers reported that their most expensive accommodation cost less than $500; 63% of employers said their least expensive accommodation cost them nothing at all.

**METHOD**

**Survey Development**

A survey covering issues dealing with the employment provisions of the ADA was conducted with private-sector employers. The survey instrument was designed in a collaborative iterative process over a 6-month period between fall 1997 and spring 1998 between Cornell University staff of the Employment and Disability Institute and the Survey Research Institute, both located within the School of Industrial and Labor Relations; staff of the National Institute on Disability and Rehabilitation Research (NIDRR); and staff and selected member representatives from SHRM and the National Business Group on Health (NBGH). SHRM is the world’s largest association devoted to HR management, representing more than 170,000 individual members. NBGH (called the Washington Business Group on Health [WBGH] at the time of the collaboration) is the national voice of large employers dedicated to finding innovative and forward-thinking solutions to the nation's most important health issues. SHRM and NBGH were selected both to contribute to survey design and to provide the needed survey sample of informants because of their access to a representative sample of HR professionals and their knowledge of disability and accommodation issues.
HR professionals were selected as the informants for this study, as they are the workplace professionals who often oversee all facets of the employment process. In the United States, there is on average one HR professional for every 100 employees, and most employment settings of 100 employees or more have an HR professional (Bruyère, 1999).

Cornell University staff first generated a list of possible accommodations and issues of concern across each phase of the employment process and then refined the items for survey format. Four NBGH member representatives who were senior-level HR professionals were brought to Washington, D.C., in the spring of 1998 for a half-day in-person meeting with NBGH and Cornell staff to review the final survey instrument and research design. In the same time period, members of two SHRM committees did a similar review using e-mail and telephone communication. The final instrument was then piloted by telephone on a sample of approximately 12 SHRM representatives. In the survey design, great care was taken to develop items that would not necessarily elicit socially acceptable responses. Items were constructed on a Likert scale and presented informational questions about familiarity with ADA requirements and level of experience with different kinds of accommodations.

The survey included items covering the reasonable accommodation process; recruitment, preemployment screening, testing, and new employee orientation; health and other benefits of employment; opportunities for promotion and training; the dispute resolution process and disability claims experience; interaction with labor relations, collective bargaining issues, and other employment legislation; personnel training on the ADA; helpfulness of resources used for handling ADA disputes; and the role of disability management and return-to-work programs in contributing to the accommodation process and workplace acceptance of employees with disabilities.

Sample Selection
The private-sector employer groups surveyed were a sample of the membership of SHRM and the entire membership of the Washington Business Group on Health. Both groups were sampled because each one offered specific needed information. SHRM membership provided a sample of HR professionals across the business organization size spectrum. NBGH membership is made up of all larger employers, who are most likely to have disability management programs and greater experience with accommodation issues. NBGH staff also contributed significant expertise in the survey design phase.

A stratified sample by employer size was drawn from the total population of the SHRM membership of approximately 100,000 professional (nonstudent) members. Based on the distribution of members by organization size, a random sample was drawn proportional to the population within size strata. The goal was to have a random sample of individuals from small, medium, and large organizations, and it resulted in an initial sample of 1,402 member names, telephone numbers, and addresses. The survey was not limited to companies that had employees with disabilities, as we were interested in companies with and without experience with employees with disabilities.

Procedure
Interviews with the SHRM members were conducted over the telephone between July and November of 1998, using a computer-assisted telephone interviewing (CATI) system. The telephone survey took approximately 20 to 30 min to complete; 813 (73%) of the 1,116 eligible SHRM respondents participated. The rate of incomplete survey questions was extremely low.
The data collection for NBGH membership was conducted primarily by mail. This approach was used because NBGH preferred to keep the survey process in house. A 10-page survey, identical to the CATI survey, was mailed to all 164 NBGH member companies in the fall of 1998. Follow-up telephone calls were made to all nonrespondents offering the option of returning a mail questionnaire, faxing a questionnaire, or completing the survey by telephone. A 32% response rate was obtained from the NBGH membership. The lower response rate for the NBGH sample appeared to be a function of using a mailed survey rather than a telephone survey as the first approach.

For this article the 31 respondents from SHRM and NBGH who identified their industry type as “public administration” were excluded, to limit the analysis to private-sector companies. Company size was given by the participating organizations (SHRM and NBGH). The U.S. Small Business Administration’s basic definition of a small business is one with fewer than 500 employees (Small Business Administration, 2003, and that was the definition used in the analysis for this article. Comparisons were also made between companies with fewer than 100 employees and those with 100 to 499 employees. Surprisingly, few significant differences were found. The most interesting of those analyses are included in this article.

The analyses presented in this article used primarily chi-square tests and t tests as appropriate. In cases where low expected cell counts were encountered, Fisher’s exact test was used in place of the chi-square test. The $p < .05$ significance level was used throughout, applying Bonferroni’s adjustment procedure for multiple statistical tests within issue categories where required to control for compounding comparison-wise Type 1 error rates.

**RESULTS**

*Respondent Characteristics*

Forty-one percent ($n = 345$) of this sample was identified as being from small companies with fewer than 500 employees; the remainder ($59\%, n = 489$) had 500 or more employees. Most of the large businesses had 1,000 or more employees; 11% had 500 to 999 employees; 12% had 1,000 to 2,499; 7% had 2,500 to 4,999; and 29% reported 5,000 or more employees. Of the smaller employers (of under 500 employees), 15% of respondents were from organizations of fewer than 100 employees, and 26% had 100 to 499 employees.

Nearly half (47%) of the small companies were in the service industry, compared to about a third (32%) of the larger companies. Approximately 16% in each group were in durable goods manufacturing, with 10% in nondurable manufacturing, 9% in finance, and 8% in high-tech/computer/telecom industries. The remainder of the firms were in a variety of other areas (agriculture, utilities, construction, insurance, transportation, etc.). The small-firm respondents were significantly more likely to be “HR generalists” (75 percent compared to 61 percent, $\chi^2 (1, N=832) = 18.45, p<0.0001$) and to be reporting for the “corporate level” (rather than a division, department, plant, or facility) of the company than the large respondents (70% compared to 56%, $\chi^2 (1, N = 829) = 16.23, p < 0.0001$). The breakdown of the respondents by title was very similar between the small and large companies, with the majority falling into one of three main categories: managers (36%), directors (26%), and vice presidents (10%). Respondents of both large and small firms had been with the company several years on average, but those with smaller companies had a significantly shorter tenure ($6.8 SD = 6.3$ compared to $9.7 SD = 8.1$, $t(803) = -5.73, p < 0.0001$).
Reasonable Accommodation Process

The survey asked where the final decision regarding accommodations within a company is made. The HR staff was mentioned by almost a quarter of smaller and nearly a third of larger firms (24% and 31%, respectively). Smaller firms seem to be more likely to defer to the upper echelons of management, with the president or CEO or other manager or director (not direct supervisor) accounting for 40% of the smaller firms’ final-decision makers (see Table 1). Large firms appear to be more decentralized, with nearly a quarter (23%) saying there was no single responsible party for making such decisions.

<table>
<thead>
<tr>
<th>Decisionmaker</th>
<th>Small (&lt;500)</th>
<th>Large (500+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources (HR) staff</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>Combination HR &amp; other staff</td>
<td>5%</td>
<td>13%</td>
</tr>
<tr>
<td>Other manager/director</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>President/CEO</td>
<td>16%</td>
<td>1%</td>
</tr>
<tr>
<td>No single responsible party</td>
<td>11%</td>
<td>23%</td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

As can be seen in Table 2, smaller companies are significantly less likely than larger companies to have made accommodations for employees with disabilities. All of the differences shown in Table 2 are due to respondents from the smaller companies being more likely to say that they “never needed to make accommodations.” Sixty-seven percent of the larger companies made at least 7 of the 12 accommodations, compared to only 27% of small businesses. However, when faced with “a need,” smaller companies were as likely as the larger ones to make the accommodation, doing so between 95% and 100% of the time. Table 2 shows how much better prepared or more experienced larger businesses are than smaller businesses in providing a wide variety of accommodations. An issue that may be related to the “need” for an accommodation is that small businesses are significantly less likely to proactively recruit persons with disabilities than larger firms (39% as opposed to 60%, $\chi^2 (1, N = 789) = 33.26, p < 0.0001)$.
Table 2. Accommodations Made to Meet the Needs of Employees With Disabilities

<table>
<thead>
<tr>
<th>Accommodation</th>
<th>Small companies (&lt;500)</th>
<th>Large companies (500+)</th>
<th>Chi-square&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Needed</td>
<td>No need</td>
<td>Needed</td>
</tr>
<tr>
<td></td>
<td>Made</td>
<td>Not made</td>
<td>Made</td>
</tr>
<tr>
<td>Made existing facilities accessible</td>
<td>69%</td>
<td>1%</td>
<td>30%</td>
</tr>
<tr>
<td>Restructured jobs or modified work hours</td>
<td>51%</td>
<td>1%</td>
<td>49%</td>
</tr>
<tr>
<td>Made reassignment to vacant positions</td>
<td>29%</td>
<td>0%</td>
<td>71%</td>
</tr>
<tr>
<td>Acquired/modified equipment or devices</td>
<td>37%</td>
<td>0%</td>
<td>63%</td>
</tr>
<tr>
<td>Acquired/modified examination or training materials</td>
<td>16%</td>
<td>0%</td>
<td>84%</td>
</tr>
<tr>
<td>Provided qualified readers/interpreters</td>
<td>19%</td>
<td>0%</td>
<td>81%</td>
</tr>
<tr>
<td>Was flexible w/ HR policies</td>
<td>72%</td>
<td>0%</td>
<td>28%</td>
</tr>
<tr>
<td>Changed supervisory methods</td>
<td>28%</td>
<td>1%</td>
<td>70%</td>
</tr>
<tr>
<td>Made parking or transportation accommodations</td>
<td>51%</td>
<td>0%</td>
<td>49%</td>
</tr>
<tr>
<td>Provided written job instructions</td>
<td>54%</td>
<td>0%</td>
<td>46%</td>
</tr>
<tr>
<td>Modified work environment</td>
<td>42%</td>
<td>0%</td>
<td>57%</td>
</tr>
</tbody>
</table>

Note. Percentage breakdown of employers who report meeting the needs of employees by making accommodations, being unable to make a requested accommodation, or never needing to make an accommodation.

<sup>a</sup>Chi-square calculated for Accommodation Needed categories (combines Made and Not made categories) and Not needed, based on 2×2 accommodation needed/not needed, corrected for multiple statistical tests using Bonferroni’s adjustment procedure.

* \( p < 0.0001 \).

Employment Process

Respondents were asked if they had needed to make any of 10 specific ADA-related changes regarding recruitment, preemployment screening, testing, and orientation, and if so, if they had made the change, and how difficult it was to make. Smaller employers were less likely to “need” to make any individual change, with 46% saying they had to make fewer than 2 of the 10 changes asked about, compared to only 26% of the larger employers. Of all respondents who
made changes, less than 5% reported the following 5 changes as difficult: doing medical testing post-offer, making employee orientation accessible, making recruiting locations accessible, changing the wording of job applications, and making interview locations accessible. Three other changes were reported as difficult by less than 15% of all respondents: changing interview questions, modifying preemployment testing, and making restrooms accessible.

The two most difficult changes to make were making information accessible for people with visual or learning disabilities (33% of large and 43% of small organizations found this difficult [ns]) and making information accessible for people with hearing impairments, found difficult by 21% of large and 34% of small firms ($\chi^2 (2, N = 477) = 10.85, p = 0.0044$).

Staff responsible for interviewing job applicants were asked questions regarding their familiarity with ADA-related issues. Across eight topics, organizations clearly showed much more familiarity with four: framing questions about job tasks, restrictions on eliciting medical information, when during an interview to ask about job tasks, and restrictions on obtaining medical information. More than three quarters of respondents reported being familiar or very familiar with these four issues. Familiarity with issues related to visual and hearing disabilities was much lower: Less than 40% felt familiar with accessing sign language interpreters, using a reader to assist a person with a learning disability or vision impairment, adapting print materials for applicants with visual disabilities, or using a text telephone (TTY) to set up interviews.

Small firms were less familiar than larger firms with each of the eight issues. This difference was significant by organization size in the following three areas: framing questions about job tasks ($84\%$ compared to $93\%, \chi^2 (2, N = 825) = 18.53, p < 0.0001$), restrictions on obtaining medical information ($73\%$ compared to $86\%, \chi^2 (2, N = 782) = 21.82, p < 0.0001$), and using a TTY to set up interviews ($19\%$ compared to $29\%, \chi^2 (2, N = 751) = 14.16, p = 0.0008$).

**Barriers to Employment or Advancement for Persons with Disabilities**

The three most common barriers to employment or advancement of a person with a disability, noted by more than 3 out of 10 respondents, were lack of related experience in the job candidate with a disability, lack of requisite skills and training on the part of the individual with a disability, and supervisor lack of knowledge of which accommodation to make (see Figure 1). Surprisingly, there were no significant differences in small and large firms regarding their perceptions of the barriers.
It was interesting to find that large and small businesses have almost identical views of how to reduce barriers within their organizations. Visible top management commitment was viewed as having the greatest impact, with more than four out of five respondents rating it as being effective or very effective. Staff training, on-site consultation/technical assistance, and mentoring were rated by three out of five as being effective or very effective. Two out of five rated short-term assistance (e.g., an outside job coach) as effective. Surprisingly, less than one third viewed employer tax incentives as effective, with over a third rating that as either ineffective or very ineffective. No significant differences were found between large and small organizations.

**Difficulty Making Organizational Changes**

Respondents were asked about the need to make six specific organizational changes to accommodate the needs of disabled employees, and if so, how easy or difficult it was to make those changes. Smaller companies were significantly less likely than larger companies to have needed to change the following: medical policies (72% compared to 83%, $\chi^2(1, N = 814) = 11.85, p = 0.0006$), and co-worker/supervisor attitudes toward disabled employees (84% compared to 93%, $\chi^2(1, N = 819) = 14.62, p = 0.0001$).

Those respondents whose companies had made changes were most likely to view changing supervisor and co-worker attitudes toward employees with disabilities as the most difficult (see Table 3). Large employers were more likely than smaller businesses to report changing attitudes as difficult. In fact, 43% of the smaller business respondents rated that as very easy or easy, compared to only 27% of large business respondents. Approximately one in six of all respondents who made changes reported difficulty in creating flexibility with performance management systems and modifying return-to-work or transitional employment policies.
Table 3. Organizational Changes Made With Degree of Difficulty of Change

<table>
<thead>
<tr>
<th>Changes made</th>
<th>Change needed (%)</th>
<th>Difficult or Very Difficulta (%)</th>
<th>Chi-square</th>
<th>Chi-squareb</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small (&lt; 500)</td>
<td>Large (500+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensuring equal pay &amp; benefits</td>
<td>83</td>
<td>87</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Adjusting medical policies</td>
<td>72</td>
<td>83</td>
<td>χ²(1, N = 814) = 11.85*</td>
<td>NS</td>
</tr>
<tr>
<td>Change in leave policy</td>
<td>74</td>
<td>81</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Creating flexible management system</td>
<td>84</td>
<td>86</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Changing co-worker/supervisor attitudes</td>
<td>84</td>
<td>93</td>
<td>χ²(1, N = 819) = 14.62*</td>
<td>χ²(2, N = 725) = 19.92*</td>
</tr>
<tr>
<td>Modifying return-to-work policy</td>
<td>81</td>
<td>84</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

Note. NS = not significant.

aIncludes only those who needed to make a change. Changes ranked on a 5-point scale from very easy to very difficult. bChi-square test corrected for multiple statistical tests using Bonferroni’s adjustment procedure.

*p < 0.001.

**Instruction to Composition: align data in rows**

Respondents were queried regarding five specific accommodations that would allow employees with disabilities access to meetings, promotional and social opportunities, or training (see Table 4). Small businesses were significantly less likely to have provided those accommodations, with 21% saying they never needed to provide any of the five, compared to only 5% of the larger businesses (χ² (5, N = 747) = 92.54, p < 0.0001) saying that. As with the other accommodations, over 90% of all companies, when faced with a “need,” provided for it regardless of their size. Wheelchair access was the most common accommodation, provided by over 9 out of 10 larger businesses and almost 7 out of 10 small businesses. Large businesses were more than twice as likely as smaller businesses to provide communication access for visually impaired (50% compared to 22%) or hearing or learning impaired (56% compared to 25%) employees. All of these differences were statistically significant.
Table 4. Adaptations Made to Ensure Access to Company Events

<table>
<thead>
<tr>
<th>Organizational adaptation</th>
<th>Small companies (&lt; 500)</th>
<th>Large companies (500+)</th>
<th>Chi-square(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Needed</td>
<td>No need</td>
<td>Needed</td>
</tr>
<tr>
<td></td>
<td>Made</td>
<td>Not made</td>
<td>Made</td>
</tr>
<tr>
<td>Wheelchair access</td>
<td>69%</td>
<td>1%</td>
<td>30%</td>
</tr>
<tr>
<td>Communication access for hearing impaired</td>
<td>25</td>
<td>1</td>
<td>74</td>
</tr>
<tr>
<td>Communication access for visually or learning impaired</td>
<td>22</td>
<td>1</td>
<td>77</td>
</tr>
<tr>
<td>Time flexibility in test taking</td>
<td>35</td>
<td>0</td>
<td>65</td>
</tr>
<tr>
<td>Removing volatile/scented substances</td>
<td>26</td>
<td>1</td>
<td>72</td>
</tr>
</tbody>
</table>

*Note.* "Company events" include meetings, promotional and social opportunities, and training. \(^a\)Chi-square calculated for Adaptation Needed categories (combines Made and Not made categories) and Not needed, based on 2×2 accommodation needed/not needed, corrected for multiple statistical tests using Bonferroni’s adjustment procedure. *p < 0.0001.

Staff Training in ADA Areas

Larger firms were significantly more likely to have trained their staff in all of the 12 areas asked about in the survey (see Figure 2). However, small and large companies have similar profiles, with 6% to 24% fewer smaller companies training in each area. Overall, 44% of the larger companies trained in at least 10 of the 12 areas, compared to 29% of the smaller companies (\(\chi^2(1, N = 834) = 18.82, p < 0.0001\)). More than three quarters of the companies trained in the following areas: nondiscriminatory recruiting, confidentiality requirements, nondiscriminatory discipline, and defining job functions. The areas trained in least often included mental health problems and written resources on accommodations. The bulk of the training done by the company (96%) was given to HR personnel. Management personnel were the second most often trained, receiving training in 61% of the areas in which companies train.
Respondents were asked if they would be interested in more information in these areas. Smaller companies were more likely to be interested in more information than larger companies in each area. Interestingly, the companies with fewer than 100 employees were less interested in information than the companies with 100 to 499 employees, but both were still significantly more interested than those with 500 or more employees. This might be a reflection of the higher level of ADA-related training and perhaps more experience and internal resources in those companies. The areas in which there was the most interest in more information included accommodation for mental health problems (75% small firms, 57% larger firms; \( \chi^2 (1, N = 834) = 28.43, p < 0.0001 \)), nondiscriminatory recruitment and hiring processes (70% small firms, 52% large firms; \( \chi^2 (1, N = 834) = 27.81, p < 0.0001 \)), available print or organizational resources to assist in the accommodation process (66% small firms, 51% large firms; \( \chi^2 (1, N = 834) = 20.02, p < 0.0001 \)), equal access in promotional opportunities and training (65% small firms, 47% large firms; \( \chi^2 (1, N = 834) = 28.18, p < 0.0001 \)), and confidentiality requirements for medical information (53% small firms, 36% large firms; \( \chi^2 (1, N = 834) = 24.20, p < 0.0001 \)).

**Return-to-Work and Disability Management Programs**

HR professionals surveyed were asked if they had a formal or informal return-to-work or disability management program, and if so, how that program contributed to a number of areas related to the ADA and employees with disabilities. A significantly higher number of large employers had some type of return-to-work or disability management program (70% small firms, 88% large firms; \( \chi^2 (1, N = 819) = 41.48, p < 0.0001 \)). Of those with programs, larger firms were more likely to have formal than informal programs (63% large firms, 37% small firms; \( \chi^2 (1, N = 656) = 17.71, p < 0.0001 \)). The majority of those who had programs said they contributed either somewhat or a great deal to the following: supervisor awareness of the accommodation process (77%), recognition of the importance of medical information confidentiality (86%), raising the
acceptance of employees with disabilities by other employees (76%), and an organizational structure for providing accommodations (73%).

Analysis was performed to determine whether there were differences in the effects of formal and informal return-to-work or disability management programs. Formal programs were found significantly more likely to be judged as contributing “a great deal” than informal programs in three of the four topics: supervisor awareness of the accommodation process (33% formal compared to 19% informal programs; \( \chi^2 (3, N = 641) = 35.23, p < 0.0001 \)), organizational structure for providing accommodations (31% formal compared to 12% informal programs; \( \chi^2 (3, N = 638) = 40.23, p < 0.0001 \)), recognition of the importance of medical information confidentiality (64% formal compared to 44% informal programs; \( \chi^2 (3, N = 645) = 28.28, p < 0.0001 \)).

DISCUSSION

Limitations
This study has some limitations that should be noted. While SHRM is the largest HR professional organization in the world, it is unknown whether the opinions of SHRM members are representative of all HR professionals or of U.S. businesses in general.

The environment has changed significantly in the years since this survey was conducted. This survey did inquire about Web-based sources used in addressing workplace disability issues, but the tremendous growth of the Web over the past 5 years makes it likely that it has become an even more important source of information regarding disability and ADA-related information. Also, the Supreme Court has issued a series of important decisions relating to workplace accommodation and the ADA since this survey was conducted. Businesses may have changed their disability policies and practices as a result of those decisions. It would be interesting to perform a follow-up survey to see how business policy and practices have changed over the past several years. A small-scale Florida study conducted by Unger and Kregel in 2003 used some questions similar to those used in this survey and found parallel results in accommodation experiences and organizational policies.

Implications for Rehabilitation Professionals
Results of the Cornell University study suggest that businesses of varying sizes have different experiences with ADA implementation. These differences suggest that rehabilitation professionals should consider alternate approaches dependent upon business size for gaining entry and delivering their services. We will discuss three areas that appear to be the most promising: accommodations, barriers to hiring and retaining employees with disabilities, and resources used to address ADA-related issues.

Accommodations
Results of this study indicate that smaller companies are significantly less likely than larger companies to have made accommodations. Nearly all of the differences found were due to respondents from the smaller companies being more likely to say they “never needed to make accommodations.” This is consistent with government reports prior to ADA implementation predicting that smaller firms would rarely need to make accommodations (56 FR 8,578, February 28, 1991). With fewer employees per firm, any individual firm has a much lower probability of experience with accommodation. Or perhaps fewer people with disabilities are able to gain entry to smaller employers, although the concentration of people with disabilities in the small-business
The workforce (3.0%) is similar to that in the large-business workforce (2.6%), based on calculations from the 2004 Current Population Survey.

Another factor behind this finding might be that the accommodation process is more informal in smaller businesses, so the accommodations that were made might be less likely to be reported in the survey. This disparity could also be related to larger businesses being better prepared and more experienced and having more resources to respond to a variety of accommodation requests than smaller businesses.

It is important to note that small businesses were both less likely to proactively recruit persons with disabilities and more likely to say there was “no need to accommodate” regarding the career promotion and advancement questions of the survey than larger firms. The reason for this difference is unclear. Possibly, fewer people apply or are hired into small businesses due to employer concern about the cost of accommodation or insurance premiums. Rehabilitation counselors may want to provide information to small businesses on accommodation and tax breaks to offset accommodation costs through Chambers of Commerce and local business networks.

The survey results also suggest to whom rehabilitation professionals might want to provide services regarding accommodations. HR staff makes the final decision regarding accommodations in almost a quarter of smaller and nearly a third of larger firms. Smaller firms seem more likely to defer to the upper echelons of management, with the president or CEO or other manager or director (not the direct supervisor) accounting for 40% of the smaller firms’ final-decision makers. Smaller firms are also less likely to have formal return-to-work or disability management programs, which our research indicates can support supervisor awareness about accommodation and other ADA-related considerations. Rehabilitation professionals should keep these differences in view when marketing accommodation services, targeting their services to different agents depending on the size of the company. Also, in response to findings from the literature that business communication classes are unlikely to adequately address hiring practices and persons with disabilities (Parry et al., 1996), rehabilitation counselors and educators who are proximate to university-based business schools might want to consider providing information about disability nondiscriminatory hiring practices in business classes.

Literature points to differing attitudes toward persons with specific disabilities (Gouvier, Sytsma-Jordan, & Mayville, 2003; Hernandez et al., 2000; Unger, 2002). This study confirmed those findings, discovering differences in awareness, concerns, and information needs regarding certain disabilities. Particular areas rehabilitation counselors could address include accommodations for persons with visual or hearing impairments and accommodations for those with mental health/psychiatric disabilities, topics that all organizations found problematic.

**Barriers to Hiring and Retaining**

Staff responsible for interviewing job applicants in small firms were less familiar with preemployment screening and interview concerns than those in larger firms. This is another area where rehabilitation professionals can offer consultation services and assistance to smaller businesses.

Worthy of note is employers’ reports of the most common barriers to employment and advancement for people with disabilities: the perceived lack of related experience and requisite skills and training on the part of the individual with a disability, and lack of supervisor knowledge of which accommodation to make. Larger firms were significantly more likely to say that attitudes and stereotypes were an issue, and smaller firms were slightly more likely to mention the cost of accommodation. These results suggest that diversity- or disability-sensitivity
training may be worthwhile services to offer to larger firms, and information on costs of accommodations and ways to finance accommodations might better appeal to smaller firms.

Interestingly, large and small businesses have almost identical views of how best to reduce barriers within their organizations. Consistent with findings from the literature (Thakker & Solomon, 1999), the commitment of visible top management was viewed as having the greatest impact. Rehabilitation professions must encourage top management to develop organizational policies that support the hiring and accommodations of persons with disabilities. Staff training, on-site consultation and technical assistance, and mentoring were also rated as effective strategies. Since larger firms were more likely to have trained their staff, training services offered by rehabilitation professionals might better be targeted to smaller firms. Smaller companies were also more likely to be interested in a variety of disability and ADA-related information than larger companies. Companies with fewer than 100 employees were less interested in information than the companies with 100 to 499 employees, but both were more interested than the largest companies.

**Resources Used to Address ADA Issues**

Results of this survey also suggest resources that might be helpful in accommodation consultations. Employers of all sizes are likely to look to their legal counsel for advisement on ADA issues. Finding a forum to distribute information to legal professionals, such as regional or state bar association meetings, might be a way to get information back to businesses regarding their responsibilities to accommodate and what community resources are available to assist them. Smaller firms frequently consult professional organizations such as SHRM or local Chambers of Commerce. Offering services as either a speaker or a provider of print information on accommodations and the services of your agency at local, regional, or state SHRM or Chamber of Commerce meetings might be a good strategy.

In summary, although 15 years have passed since the ADA was signed into law, and much progress has been made, there is still work to be done. Employers of all sizes report a desire for further information on key topics related to accommodations. The results of this survey also indicate that smaller firms might need more or different informational support and technical assistance than larger firms. Rehabilitation professionals have a role to fill in meeting this information need. By meeting it, they will assist in contributing further to the realization of the dream that the ADA promises: employment equity for people with disabilities.

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**NOTE**

The information that “the concentration of people with disabilities in the small-business workforce (3.0 percent) is similar to that in the large-business workforce (2.6 percent), based on calculations from the 2004 Current Population Survey” was obtained from Andrew Houtenville, Cornell University Disability Statistics and Demographics Rehabilitation Research and Training Center (personal communication, March 15, 2005).

**REFERENCES**


