

Workplace accommodations: Evidence based outcomes

Helen A. Schartz^a, D.J. Hendricks^b and Peter Blanck^{c,*}

^a*Law, Health Policy and Disability Center (LHPDC), University of Iowa College of Law, Iowa City, IA, USA*

^b*International Center for Disability Information and Job Accommodation Network (JAN), West Virginia University, Morgantown, WV, USA*

^c*Burton Blatt Institute, Syracuse University, Syracuse, NY, USA*

Abstract. One central component to meaningful employment for people with disabilities is the ADA's workplace accommodation provision that allows qualified individuals to perform essential job functions. Little empirical evidence is available to evaluate the costs, benefits, and effectiveness of accommodations. Previous research has focused on direct costs. This article advocates an inclusive accommodation cost/benefit analysis to include direct and indirect costs and benefits and to differentiate disability-related accommodation costs from typical employee costs. The inclusive cost/benefit analysis is applied to preliminary data from interviews with employers who contacted the Job Accommodation Network (JAN). Results suggest that accommodations are low cost, beneficial and effective.

Keywords: Workplace accommodations, Americans with Disabilities Act, reasonable accommodations

1. Introduction

One central component to meaningful employment for people with disabilities is the Americans with Disabilities Act's (ADA) workplace accommodation provision that assists qualified individuals to perform essential job functions. Large and small employers regularly alter work routines, schedules and assignments, and provide modified work environments within reason for valued employees who need assistance due to illness or advancing age, or for job applicants. The effects of disability often are interwoven in such determinations.

The concept of reasonable workplace accommodation is central to the ADA's nondiscrimination in employment mandate [5,6]. Title I of the ADA prohibits employers from discriminating against qualified individuals with disabilities in hiring, retention, promotion or termination. One form of prohibited discrim-

ination is failing to make reasonable accommodations for a qualified job applicant or employee's physical or mental limitations, unless the accommodations would impose an undue hardship for the business (ADA, 42 USC 12112). Through the ADA's "interactive process," employers and employees collaborate to identify and implement reasonable accommodations.

Some critics (e.g. [19]) argue that the reasonable accommodation provision of the ADA creates an employment privilege or subsidy for individuals with disabilities. This presumes, all else being equal, that the net costs of accommodations exceed the benefits to employers and individuals with disabilities [3]. Often, the accommodation cost is assumed to include burdensome costs for the employer [1]. Despite the fact that there is little empirical evidence to support these assumptions, such assumptions are used in economic models to argue that the ADA has depressed the employment rate of persons with disabilities (see [7] for a review).

The limited research that exists on accommodation costs [2,11] has focused primarily on the direct costs associated with the capital outlay for the accommodations. A more thorough assessment of accommodation

* Address for correspondence: Professor P. Blanck, Syracuse University, Crouse-Hinds Hall, Suite 300, Syracuse, NY 13244, USA. Tel.: +1 315 443 9703; Fax: +1 315 443 9725; E-mail: pblanck@syr.edu.

effects should include (1) indirect costs (i.e., not immediately attributable to the accommodation, such as staff time for training or for implementing an accommodation), and (2) direct and indirect benefits (i.e., those effects associated with an employee, such as retention and those, such as a ramp or elevator, that benefit others, respectively).

In addition, assessments must distinguish disability-related accommodation costs from generic employee costs unrelated to a disability. Everyday, large and small businesses expend resources as start-up costs for new employees (e.g., computers or ergonomic desk chairs) or training and equipment for existing employees. The net cost (or benefit) of the ADA's workplace accommodation provision, therefore, is not simply the expenditure to employ an individual with a disability, but rather that figure less the amount the business would spend ordinarily in similar circumstances for an individual without a disability.

This article will apply an inclusive cost and benefit analysis to preliminary data collected from a nationwide sample of employers. Although data collection is ongoing, the purpose is to provide a model or framework to inform the discussion evaluating the utility and benefits of workplace accommodations.

2. Background

The few studies that exist on accommodation costs suggest that direct costs are low and benefits are substantial. Blanck [2] in a study of more than 500 accommodations provided by Sears, Roebuck and Co. from 1978 to 1997 reported that the majority (72%) had no direct costs. About one-fifth (17%) cost less than \$100, 10 percent cost less than \$500 and only 1 percent cost more than \$500. The average cost of an accommodation decreased after implementation of the ADA. From 1978 to 1992, the average direct cost of an accommodation was \$121. From 1993 to 1997, the average direct cost of an accommodation was \$45. In contrast, the average administrative costs for replacing an employee were between \$1,800 and \$2,400.

A 1996 Job Accommodation Network (JAN) study [8] reported that the median cost of workplace accommodations was \$200. For the 372 cases in which accommodations were made, almost one-fifth (18%) involved no costs. Slightly less than half (48%) cost between \$1 and \$500. Cases involved a variety of types of limitations, including sensory (29%), motor (56%), neurological/psychological (11%) and others

(4%). The most prevalent accommodation was purchasing new equipment (79%). Other accommodations included policy modifications (6%), job restructuring (6%), position transfers (5%), worksite modifications (4%), product modifications (3%), and others (2%). Similarly, JAN technical assistance data from 1992 through 1999 indicate that employers who sought JAN's assistance reported a median cost of \$250 for accommodations compared to a median benefit of \$10,000 for providing job accommodations [11].

The distinction between direct versus indirect accommodation costs and benefits may help to inform net cost estimates by type of limitation or disability. For example, accommodations for psychiatric disabilities, compared to those for sensory or physical disabilities, may involve less direct costs but higher indirect costs. MacDonald-Wilson et al. [13] found that accommodations for individuals with psychiatric disabilities were more likely to require human assistance, such as job coaches, rather than purchases or changes in the physical work environment. Virtually all of the accommodations in their study of individuals in a supported employment program had no direct costs. Although not quantified, over one-third of the sample reported indirect costs of additional supervisory (28%) or coworker (12%) time. Supervisors spent an average five hours of additional supervisory time per month. Coworkers expended on average an additional nine hours per month.

Regardless of the ADA's requirements, the primary economic benefits to an employer of providing accommodations may be in retaining employees and avoiding the costs of job searches, hiring and training replacement employees. Fabian et al. [9] report that the number of accommodations provided was positively associated with job tenure for individuals in a supported employment study. Those who received the mean number of accommodations or more stayed twice as long (median 24 months) as those who received less than the mean number of accommodations (median 12 month retention). The most frequent accommodations were orientation and training of supervisors, on-site job assistance provided by job coaches, and modifying work schedules and times.

One study of business personnel [16] found they would be willing to pay direct costs between \$501 and \$5,000 for workplace accommodations. Flexible scheduling, purchasing assistive or adaptive equipment, special parking, physical changes to the office space, temporary reassignment of duties to a colleague to accommodate sick leave, physical modification of the fa-

cility, and job sharing were viewed within the scope of reasonable accommodations. In contrast, providing support persons (e.g., readers, interpreters, or personal attendants), transportation to work, or allowing employees to work at home were less likely to be considered as accommodations within reason.

Despite generally positive findings on the low cost and substantial benefits of accommodations, employers continue to report unsubstantiated concerns about types and costs of workplace accommodations (see [10, 17] for reviews). Employers report a lack of knowledge about appropriate accommodations [15,18] and believe they will incur high costs for providing accommodations for their employees with disabilities [14]. Because employers' beliefs appear inconsistent with available empirical evidence, and indeed with the requirements of the ADA, a more inclusive cost/benefit model may better inform employers' concerns.

3. Methods: Applying the inclusive model to empirical data

In partnership with JAN and the Burton Blatt Institute (BBI), the Law Health Policy and Disability Center (LHPDC) has been conducting follow-up telephone interviews of JAN customers to understand their needs and the practical usefulness of the accommodation solutions discussed. JAN is a free consulting service, funded by the Office of Disability Employment Policy (ODEP) in the US Department of Labor. JAN provides individualized consultations about workplace accommodation solutions, self-employment options, and technical assistance about disability-related legislation [12]. JAN serves large and small employers, individuals with disabilities, rehabilitation, medical and legal professionals, and family and friends of individuals with disabilities.

Although anyone may use JAN's services, the majority of consultations about accommodation solutions come from employers [10]. Participants for the follow-up interviews were initially recruited by JAN consultants. At the end of the individualized consultation with JAN, callers are offered the opportunity to participate in a follow-up interview. Participation in the survey is voluntary. Callers who are interested in participating allow JAN to provide contact information to LHPDC. These callers are contacted by LHPDC approximately 45 to 60 days after the consultation. This allows time for the callers to decide on and possibly implement accommodation solutions.

The interviews, described in more detail elsewhere [10], are a series of forced-choice and open-ended questions. Separate, although similar, interview scripts were developed for each JAN client type (e.g., employer, individual with disability, rehabilitation, legal and medical professional, or others) and purpose of the consultation (e.g., workplace accommodation solution, education accommodation solution, legal or policy issue, etc.). Questions about satisfaction with and effectiveness of the services that JAN provides are included in all interview scripts. Pertinent to this article, questions are included about type, effectiveness, direct and indirect costs and benefits of the accommodation for those cases in which workplace accommodations have been made or are pending implementation.

4. Results

The data reported herein are derived from a subsample of interviews with employers conducted between January 2004 and June 2005. Of the 1,241 contacts provided by JAN, 890 employers were interviewed, resulting in a 71.7% completion rate. Almost 9 out of 10 employers (86.9%) made inquiries about workplace accommodations. In almost 43% (379) of accommodation inquiries by employers, the respondents had implemented, or were in the process of implementing, an accommodation solution. These cases are reported in the present findings.

4.1. Employees accommodated

Most JAN inquiries concerned accommodating a current employee. More than three-fourths (82.4%) of the accommodation inquiries focused on retaining an employee with an additional 1.8% concerned promoting a current employee. Accommodation inquiries for job applicants made up a small percentage of the sample (4.6%), as did requests involving hiring new employees (1.6%). Some inquiries did not concern a particular employee, but rather involved a company-wide issue (4.5%).

4.2. Direct costs

Accommodation costs were classified by type of cost: no cost, one-time, annual, or both one-time and annual costs. Of the 329 accommodation solutions implemented or being implemented, 259 respondents were able to provide actual or estimated direct cost

Table 1
Defining Direct Costs, Direct Benefits, and Net Benefits of Accommodations

Name	Definition
First Calendar Year Direct Cost	sum of one-time and first year's annual out-of-pocket expenses attributable to providing the accommodation
Disability-related Direct Cost	amount of direct cost that is more than employer would have paid for an employee in same position without a disability
Indirect Cost	costs not directly related to providing the accommodation, such as lost time because of training, supervisor's time, or loss of production
Disability-related Indirect Cost	amount of indirect cost that is more than employer would have paid for an employee in same position without a disability
Direct Benefits	estimate of direct benefits to the employer from providing accommodation; such as allowing the company to hire, retain or promote a qualified employee, eliminating the cost of training a new employee, savings on worker's compensation and other insurance costs, improved employee's productivity or attendance, or increased diversity
Indirect Benefits	estimate of indirect benefits to the employer from providing accommodation; such as increased overall company productivity, attendance, morale, profitability, workplace safety, or customer base, or improved interactions with co-workers or customers
First Calendar Year Net Benefit	Direct Benefits – First Calendar Year Direct Cost

data. In almost half of the cases (49.4%), employers reported that there was zero direct cost associated with the accommodation. The remaining reports were for a one-time cost only (42.9%), annual costs only (6.2%), or a combination of annual and one-time costs (1.5%).

To include both one-time and annual cost estimates, a First Calendar Year direct accommodation cost was calculated using the one-time cost reports and one year's worth of the annual cost reports (see Fig. 1). Cost and benefit definitions used in the analyses are summarized in Table 1. Approximately half (49.4%) of the accommodations had no cost. Almost three-quarters (74.1%) had a First Calendar Year Cost of \$500 or less. Of the 131 (50.6%) that had a cost, the median First Calendar Year Cost was \$600. When those accommodations with zero cost were included, the median was only \$25.

To obtain the portion of the direct cost that was specifically related to the disability accommodation, employers were asked how much of the reported cost was more than they would have paid for an employee in the same position who did not have a disability. They were provided with the following example: "an employer might purchase a computer monitor for all of his employees, but an employee may need a large screen rather than a regular monitor as an accommodation. The cost difference between the large screen monitor and the regular monitor would be the amount that we are asking about." This variable is defined as Disability-Related Direct Cost.

Disability-Related Direct Cost information (see Fig. 1) was provided by 249 respondents. Consistent with results for First Year Calendar Cost, more than half (59.0%) reported a Disability-Related Direct Cost of \$0. More than three-quarters (78.3%) reported a

Disability-Related Direct Cost less than \$500. Of the 41.0% that had a Disability-Related Direct Cost, the median cost was \$600.

Next, the difference between the First Year Calendar Year Direct Cost and the Disability-Related Direct Cost was calculated. For the 235 employers for which both cost estimates were available, the mean difference was \$388.

4.3. Indirect costs

Of the 152 employers providing estimates of indirect costs associated with the accommodation, more than three-quarters (84.9%) reported there were no indirect costs associated with the accommodation. To obtain disability-related indirect costs, employers were asked how much of the reported indirect cost was more than they would have paid for an employee in the same position who did not have a disability. Disability-Related Indirect Cost was provided by 156 respondents. More than three-quarters (86.8%) reported a Disability-Related Indirect Cost of \$0.

Similar to the analysis of direct costs above, the difference between the reported indirect costs and the Disability-Related Indirect Cost was calculated. For the 152 respondents for which both cost estimates were available, the vast majority (96.1%) resulted in no difference between the reported indirect costs and the Disability-Related Indirect cost. In other words, the indirect costs reported by these employers were those that were primarily disability-related.

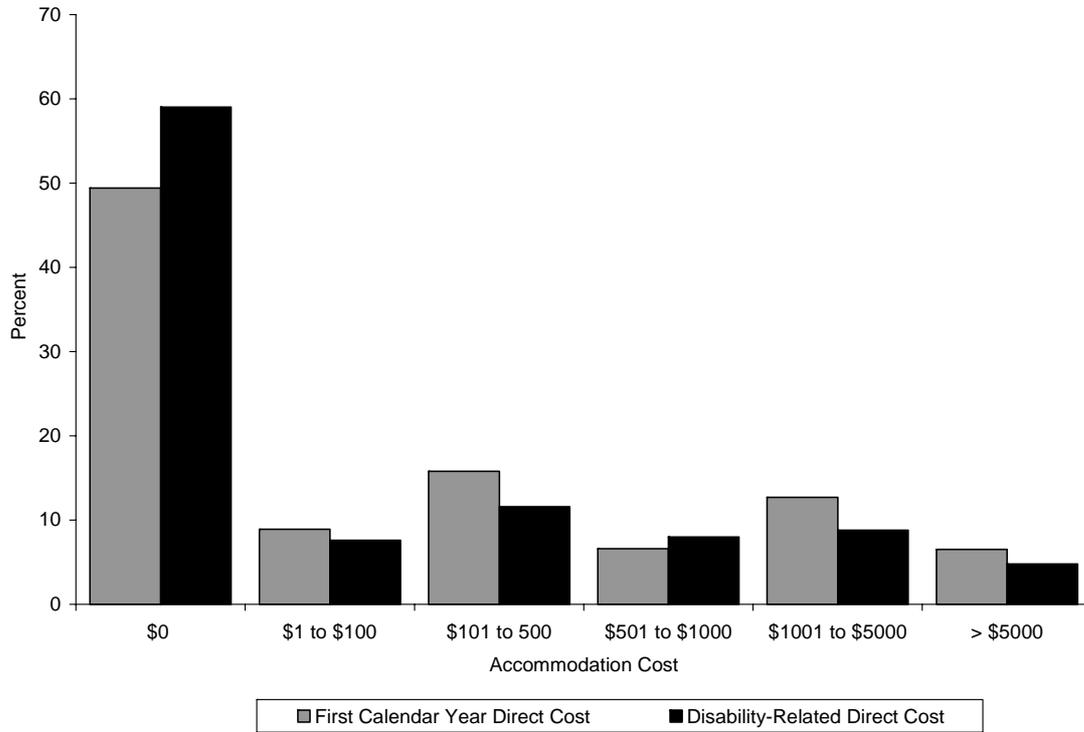


Fig. 1. First Year Calendar Year Direct Cost (sample size 259) and Disability-Related Direct Cost (sample size 249) for Workplace Accommodations.

4.4. Direct benefits

The vast majority of employers reported that the accommodation allowed the company to retain (87.1%), hire (16.7%), or promote (11.5%) a qualified or valued employee. Almost three-quarters (73.8%) reported that the accommodation increased the affected employee's productivity. More than half (55.4%) reported that the accommodation eliminated the cost of training a new employee. More than half (50.5%) reported it increased the accommodated employee's attendance. Other common direct benefits reported include saving on workers' compensation and other insurance (41.8%), and increased diversity of the company (43.8%).

A monetary estimate of direct benefits (see Fig. 2) was provided by 95 respondents. Direct benefits ranged from \$0 to \$116,000, with a median of \$1000. Of the 62 which reported direct benefits greater than zero, the median direct benefit was \$5500. Although unable to provide an exact estimate of direct benefits, an additional 75 respondents were able to estimate benefits within monetary ranges. For those with direct benefits (e.g., non-zero), the monetary estimates were combined with the categorical reports. Two-thirds (66.4%) reported that the company experienced direct benefits

of more than \$1000 from providing the accommodation. Another 16.1% reported that the company had direct benefits between \$500 and \$1000, 10.2% between \$100 and \$500, and the remaining 7.3% reported direct benefits of less than \$100.

4.5. Indirect benefits

The most frequently reported indirect benefits were improved interactions with co-workers (69.3%), increased overall company morale (60.7%), and increased overall company productivity (57.0%). Other reported indirect benefits included improved interactions with customers (42%), increased workplace safety (42.3%), and increased overall company attendance (36.0%). Increased profitability was reported by more than a quarter of the respondents (29.4%). Increased customer base (15.5%) and other indirect benefits (9.0%) were reported.

Employers were asked for their best monetary estimate of the indirect benefits. Of the 77 respondents, more than half (57.1%) reported no indirect benefits associated with providing the job accommodation. Of the 33 with indirect benefits greater than zero, the median indirect benefit was \$1000. Although unable to

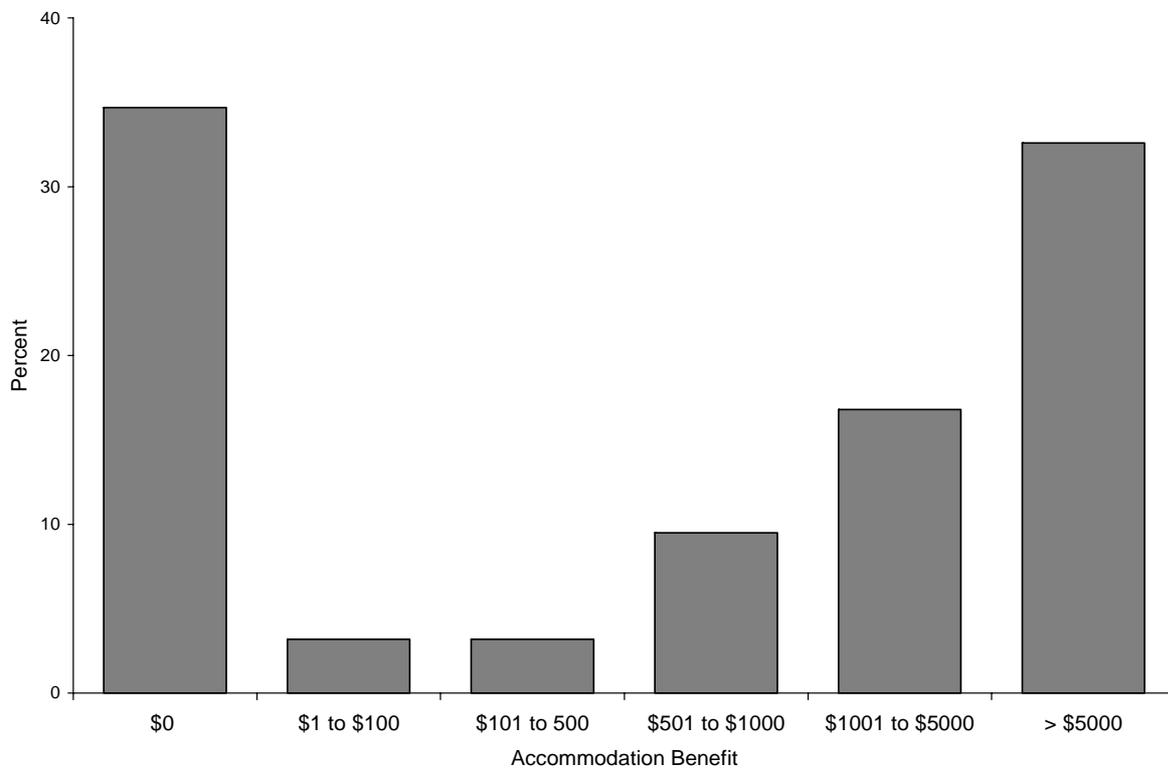


Fig. 2. Direct Benefits for Workplace Accommodations (sample size 95).

provide exact estimates of indirect benefits, an additional 58 respondents were able to estimate benefits within categories. For those with indirect benefits (e.g., non-zero), the monetary estimates were combined with the categorical reports. Almost half (48.4%) reported that the company experienced indirect benefits of more than \$1000 from providing the accommodation. Another 18.7% reported that the company had indirect benefits between \$500 and \$1000, 19.8% between \$100 and \$500, and the remaining 13.2% reported indirect benefits of less than \$100.

4.6. Net benefit

Net economic benefit to the company of providing the accommodation is the difference between reported costs and benefits. A conservative measure of net benefit may be derived from the difference between the calendar costs and reported benefits. First Calendar Year Net Benefit was calculated as the difference between Direct Benefits and First Calendar Year Direct Cost. Analysis was restricted to direct costs and benefits to provide sufficient sample size.

Calendar Year Net Benefit could be calculated for 87 respondents. The mean benefit was \$11,335; the

median \$1000. For more than half of the respondents (59.8%), the benefit was positive, meaning that the direct benefits associated with providing the accommodation more than offset the direct costs. More than one-fifth (21.8%) reported that direct costs and benefits balanced each other out, resulting in a Calendar Year Net Benefit of zero. The remaining 18.4% had a Calendar Year Net Benefit that was negative.

4.7. Effectiveness of the accommodation

For those cases in which an accommodation was made after consultation with JAN, employers were asked to rate the effectiveness of the accommodation. Effectiveness (see Fig. 3) is rated on a 5-point scale, with 1 being "not effective at all" and 5 being "extremely effective." The 205 employers who responded reported the implemented accommodations were very effective, resulting in a mean rating of 4.10.

To evaluate the anticipated effectiveness of job accommodations, questions were asked about the employer's perceptions of the employee's limitations with and without accommodations, regardless of whether an accommodation was made. Employers were asked

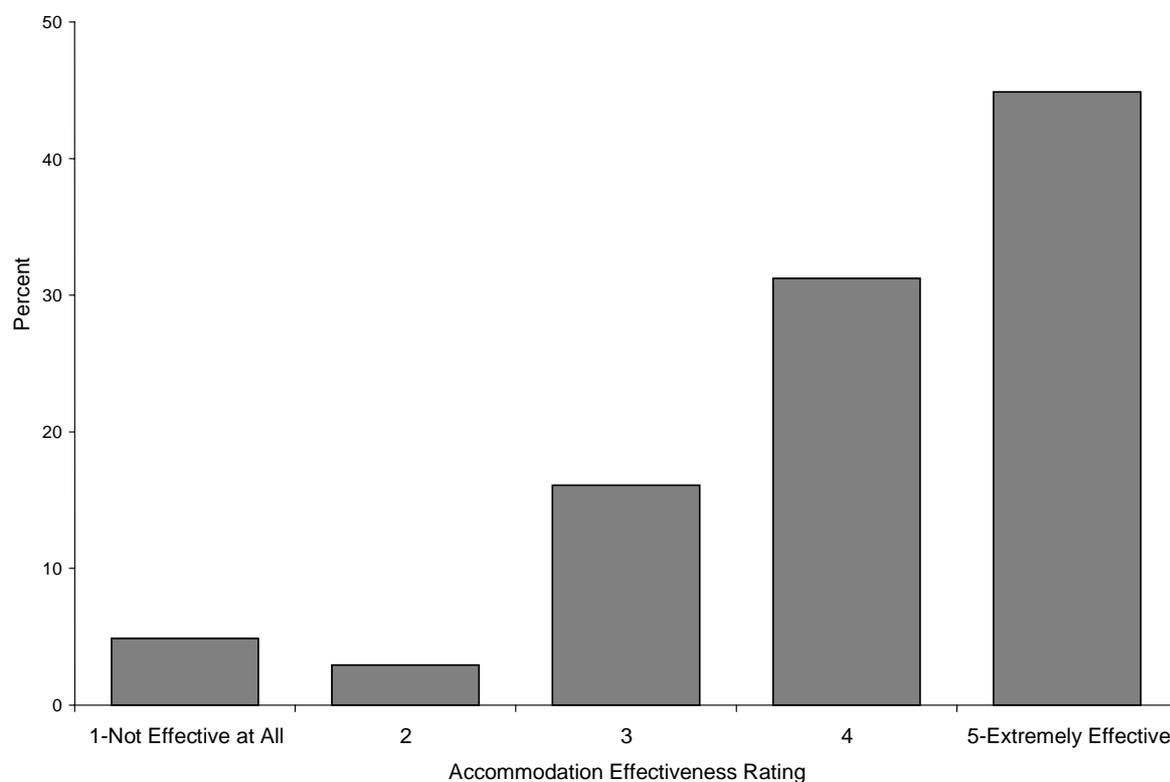


Fig. 3. Employer Ratings of Effectiveness of Implemented Job Accommodations (sample size 232).

whether the individual that was the basis for the JAN consultation had a physical, mental, or other health condition that substantially limits the kind or amount of work that the individual can do (i.e., mirroring definition of those covered by the ADA). If so, the employer was asked to rate the degree of limitation of the person's functional ability to work (1) without accommodations, and then (2) with accommodations.

The majority (60.8%) reported the individual at issue had substantial limits, with a mean life activities limitation rating of 3.41 on the five-point scale. Specific to work limitations (see Fig. 4), employers reported that the employees or job applicants were significantly less limited in their ability to work with accommodations (mean rating = 2.16) compared to without accommodations (mean rating = 3.67; paired t-test ($df = 283$) = 20.34, $p < 0.001$). The employers' anticipated effectiveness of work limitations was significantly negatively correlated with reported effectiveness of implemented accommodations. The more effective the implemented accommodation, the lower the employer rated the individual's work limitations when accommodated ($r = -0.391$, $N = 284$, $p < 0.001$).

5. Discussion and implications

For people with disabilities to obtain and retain meaningful, sustainable, and financially worthwhile employment, many interrelated factors must be addressed [4]. One factor is understanding the economic value of workplace accommodations to qualified applicants and workers with disabilities and to their employers.

The existing, albeit still limited, empirical evidence suggests workplace accommodations typically are effective and inexpensive. Results from the current study suggest that accommodation costs may be even less than previously reported when disability-related costs are differentiated from general employee costs.

Employers report investing between \$300 and \$400 in direct costs for the needs of qualified employees without a disability, or perhaps for those with impairments not believed to be covered by the ADA, for which there are no legal requirements. For new employees, these are likely to be start-up hiring costs. For continuing employees, these are costs necessary to retain a valued employee, again perhaps independent of requirements under the ADA's accommodation mandate.

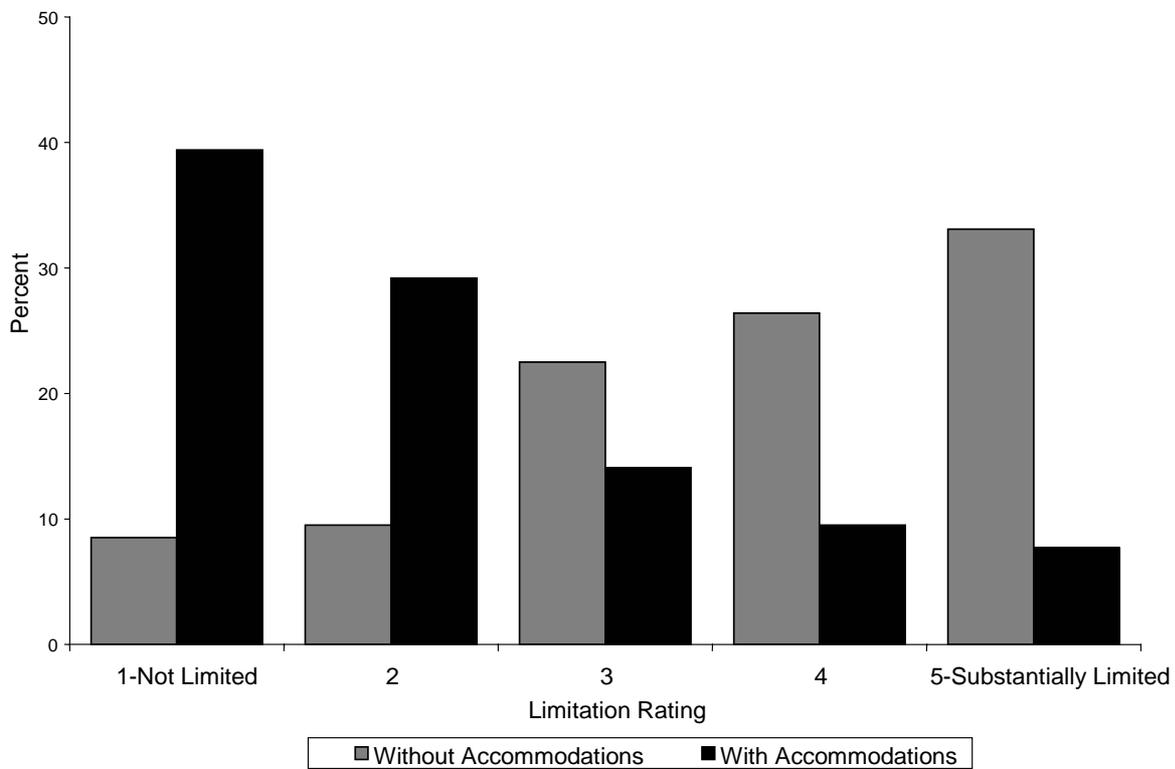


Fig. 4. Employers' Ratings of Work Limitations With and Without Accommodations (sample size 284).

Nonetheless, inquiring only for a so-called "accommodation cost" may result in a substantial overestimate of the disability-related accommodation costs by between \$300 and \$400.

Our findings, therefore, call for additional study on the extent to which employers associate accommodation costs generally with disability, at least more than is warranted based on generic workplace costs and benefits and under the ADA's accommodation mandate. Importantly, based on the current data, employers recognize that accommodations reduce the work limitations of employees with disabilities and are very effective.

Despite consistent empirical findings that accommodations are inexpensive and effective, many qualified individuals with disabilities remain unemployed although they could work with effective accommodation. A disconnect continues to exist between the benefits and effectiveness of accommodations and the employment rates of individuals with disabilities. Future study is warranted on the attitudes and behavior of employers regarding workplace accommodation, both from an economic perspective and in the context of the ADA accommodation mandate. For instance, why are employers' perceptions of workplace accommodation

costs for persons with disabilities higher than warranted or not based in economic fact?

Moreover, job applicants with disabilities find it particularly difficult to enter the workforce and be accommodated, as compared to current employees who become disabled. Our findings (see also [10]) reinforce this view, showing current employees who become disabled are the most likely to receive workplace accommodations. Although we cannot say with certainty whether such individuals would be covered by the ADA's accommodation requirement, for a current qualified employee as compared to a job applicant, the employer may more readily estimate that worker's direct benefit and value to the company, and factor in the benefits associated with not having to replace that employee.

Although far from complete, our ongoing work with JAN shows the benefits of workplace accommodations for individuals with disabilities typically more than offset their costs. From an ADA perspective, this suggests that most accommodations for persons with disabilities may not create an undue financial hardship, and particularly so when including more generic workplace accommodation benefits in the equation.

Future studies must continue to assess the net effect to businesses of accommodating individuals with and without disabilities. These models are needed to better gauge the impact of the ADA's accommodation mandate on employment rates of persons with disabilities, as well as to transcend the ADA model. Subsequent studies need to further refine estimates of accommodation benefits and costs to include only those disability-related costs that are more than the costs associated with an employee in the same position without a disability.

In addition to more information on the costs and benefits of workplace accommodations, another practical means to enhance employer provision of accommodations is to provide alternative funding sources. The Burton Blatt Institute (BBI) is exploring development of a Workplace Accommodations Account (WAA) [4]. The WAA would provide initial monies for accommodating employees with disabilities, particularly new employees. Participating companies would pay-back the accommodation loan after documentation of benefits derived from the accommodation and in relation to those benefits derived. BBI plans to undertake a nationwide series of town hall meetings with leaders from the disability and small business communities to develop and vet the WAA concept and other cooperative solutions for the successful employment of persons with disabilities.

A complementary approach to the employer-side WAA concept is to develop better strategies for individuals with disabilities to successfully obtain their first job or jobs with new employers. Our findings show that most employer accommodation inquiries to JAN concerned an existing employee, and few employers sought information for a job applicant or even a new employee.

Employers may be more likely to hire individuals with disabilities if those individuals themselves better understood their accommodation needs and how they add business value. As both employers and persons with disabilities appreciate the potential value of workplace accommodations, employment rates may improve for all qualified individuals.

Acknowledgments

This research was in part funded by grants from (a) the US Department of Education, National Institute on Disability and Rehabilitation Research for the Rehabilitation Research and Training Center (RRTC) on Workforce Investment and Employment Policy for

Persons with Disabilities, Grant No. H133B980042-99, "IT Works," Grant No. H133A011803, "Technology for Independence: A Community-Based Resource Center," Grant No. H133A021801; and The Rehabilitation Services Administration (RSA) for RRTC on Employment Policy for People with Disabilities and (b) the US Department of Labor, Office of Disability and Employment Policy, Contract #J-9-M-2-0022. The opinions expressed herein do not necessarily reflect the position or policy of the US Department of Education, the US Department of Labor, or any other entity. Nor does mention of tradenames, commercial products, or organizations imply endorsement by the US Departments of Education or Labor.

The authors would like to thank Elizabeth Emens, LeeAnn McCoy, Kevin Scharzt, and the editors of *Work* for their helpful comments and insights.

References

- [1] T.H. Barnard, The Americans with Disabilities Act: Nightmare for employers and dream for lawyers? *St. John's Law Review* **64** (1990), 229–252.
- [2] P.D. Blanck, The economics of the employment provisions of the Americans with Disabilities Act: Part I – Workplace accommodations, *DePaul Law Review* **46**(4) (1997), 877–914.
- [3] P.D. Blanck, The economics of the employment provisions of the Americans with Disabilities Act: Workplace accommodations, in: *Employment, Disability, and the Americans with Disabilities Act: Issues in Law, Public Policy, and Research*, Northwestern University Press 2000, pp. 201–227.
- [4] P. Blanck, The Burton Blatt Institute: Centers of innovation on disability at Syracuse University, *Syracuse Law Review* **56** (2006), 201–232.
- [5] P. Blanck, E. Hill, C. Siegal and M. Waterstone, *Disability Civil Rights Law and Policy*, Thomson/West Publishers, St. Paul, MN, 2003.
- [6] P. Blanck, E. Hill, C. Siegal and M. Waterstone, *Disability Civil Rights Law and Policy: Cases and Materials*, Thomson/West Publishers, St. Paul, MN, 2005.
- [7] P. Blanck, L. Schur, D. Kruse, S. Schwochau and C. Song, Calibrating the impact of the ADA's employment provisions, *Stanford Law & Policy Review* **14**(2) (2003), 267–290.
- [8] D.L. Dowler, A.E. Hirsh, R.D. Kittle and D.J. Hendricks, Outcomes of reasonable accommodations in the workplace, *Technology and Disability* **5** (1996), 345–354.
- [9] E.S. Fabian, A. Waterworth and B. Ripke, Reasonable accommodations for workers with serious mental illness: Type, frequency, and associated outcomes, *Psychosocial Rehabilitation Journal* **17**(2) (1993), 163–172.
- [10] D.J. Hendricks, L.C. Batiste, A. Hirsh, H. Scharzt and P. Blanck, Cost and effectiveness of accommodations in the workplace: Preliminary results of a nationwide study, *Disability Studies Quarterly* **25**(4) (2005), available at <http://www.dsqsds.org>.
- [11] Job Accommodation Network, Accommodation benefit/cost data, 1999. Retrieved October 5, 2005, from <http://www.jan.wvu.edu/media/stats/BenCosts0799.html>.

- [12] Job Accommodation Network. Retrieved October 5, 2005, from <http://www.jan.wvu.edu>.
- [13] K.L. MacDonald-Wilson, E.S. Rogers, J.M. Massaro, A. Lyass and T. Crean, An investigation of reasonable workplace accommodations for people with psychiatric disabilities: Quantitative findings from a multi-site study, *Community Mental Health Journal* **38**(1) (2002), 35–50.
- [14] T.J. Moore and W. Crimando, Attitudes toward Title I of the Americans with Disabilities Act, *Rehabilitation Counseling Bulletin* **38** (1995), 232–247.
- [15] L.A. Price and P.J. Gerber, At second glance: Employers and employees with learning disabilities in the Americans with Disabilities Act era, *Journal of Learning Disabilities* **34** (2001), 202–210.
- [16] R.T. Roessler and G. Sumner, Employer opinions about accommodating employees with chronic illness, *Journal of Applied Rehabilitation Counseling* **28**(3) (1997), 29–34.
- [17] K. Scharz, H. Scharz and P. Blanck, Employment of persons with disabilities in information technology jobs: A literature review for “IT Works,” *Behavioral Sciences & the Law* **20**(6) (2002), 637–657.
- [18] J.S. Trach and C.D. Mayhall, Analysis of the types of natural supports utilized during job placement and development, *Journal of Rehabilitation* **63**(2) (1997), 43–48.
- [19] C.L. Weaver, Incentives versus controls in Federal disability policy, in: *Disability and Work: Incentives, Rights and Opportunities*, C.L. Weaver, ed., AEI Press, Washington, DC, 1991, pp. 3–17.