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OVERLOOKED AND UNDERUTILIZED: PEOPLE WITH DISABILITIES ARE AN UNTAPPED HUMAN RESOURCE

**MARK L. LENGNICK-HALL, PHILIP M. GAUNT, AND
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The retirement of baby boomers along with a smaller cohort group of young people replacing them poses a challenge for employers in the future—where will they find the workers they need? One largely untapped source of human resources is people with disabilities (PWDs). Why have employers mostly ignored this large labor pool? This research used a semistructured interview approach with 38 executives across a broad array of industries and geographic regions to examine why employers don't hire PWDs and what they believe can be done to change this situation. Results show that most employers are not very proactive in hiring PWDs and that most employers hold stereotypical beliefs not supported by research evidence. © 2008 Wiley Periodicals, Inc.

The labor force is growing at a slower rate than in the past, and this means there will be tighter labor markets in the future. The slower growth has two primary causes: an increasing number of older people in the workforce and a smaller number of young new entrants to replace them. Here are some projections from the Bureau of Labor Statistics (2005):

- The projected labor force growth will be affected by the aging of the baby-boom generation—persons born between 1946 and 1964.
- In 2014, baby-boomers will be ages 50 to 68 years, and this age group will grow significantly over the 2004–14 period.
- The labor force will continue to age, with the number of workers in the 55-and-older group projected to grow by 49.1%, nearly five times the 10% growth projected for the overall labor force.
- Youths—those between the ages of 16 and 24—will decline in numbers and lose share of the labor force, from 15.1% in 2004 to 13.7% in 2014.
- Prime-age workers—those between the ages of 25 and 54—also will lose share of the labor force, from 69.3% in 2004 to 65.2% in 2014.
- The 55-and-older age group, on the other hand, is projected to gain share of the labor force, from 15.6% to 21.2%.

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Where will employers find the workers they need in the future? Some sources of labor that employers rely upon today will not be sufficient for meeting future staffing needs (Toosi, 2002). For example, since the demographic trends of more old workers and fewer younger worker replacements is a worldwide phenomenon, outsourcing will not answer the problem sufficiently. And, while the increasing labor force participation rate of women helped meet the staffing needs of employers during the period 1960–1990, it is not expected to increase substantially in the future.

Virtually no research has examined the demand-side perspective—attempting to understand why employers hire (or don't hire) people with disabilities.

While new immigrants (largely from Mexico and Latin America) will offset some of the slower growth in the labor force, their average education levels will be lower than the U.S.-born population, which will present problems for employers in need of more educated workers. One answer to the staffing needs of employers in the future is to use a largely untapped and currently available labor pool—people with disabilities (PWDs).

Based upon the American Community Survey (as analyzed by researchers at Cornell University), here are some relevant statistics that describe the prevalence of PWDs in the labor force and the magnitude of their avail-

ability for meeting employer needs (Rehabilitation Research and Training Center on Disability Demographics and Statistics, 2005). In 2005:

- 21,455,000 (12.6%) of the 169,765,000 working-age individuals reported one or more disabilities.
- The employment rate of working-age PWDs was 38.1%. Therefore, approximately 60% of working-age PWDs were not employed.
- The employment rate of working-age people without disabilities was 78.3%. Therefore, approximately 20% of working-age people without disabilities were not employed.

- The gap between the employment rates of working-age people with and without disabilities was 40.3%.
- Of working-age PWDs, 22.6% were employed in full-time/full-year employment (in contrast to 56.2% of working-age people without disabilities).

Therefore, of the approximately 21,455,000 working-age PWDs, approximately 8,174,355 of them are employed and 13,280,645 of them are not employed. And, of the approximately 8,174,355 working-age PWDs who are employed, approximately 1,806,432 are employed full-time/full-year.

So, if employers need new sources of workers and PWDs are available, why aren't more PWDs obtaining employment? And, what can be done to get these two groups—employers and PWDs—together?

From a theoretical standpoint, this study fits into a line of research examining the attitudes and reactions of persons without disabilities toward persons with disabilities (Stone & Colella, 1996). However, research to date has been conducted primarily by social and rehabilitation psychologists and not focused on work settings (Colella, 1998). Additionally, most of this research has focused on the supply-side perspective—examining issues related to the preparation of PWDs to be good job candidates. Virtually no research has examined the demand-side perspective—attempting to understand why employers hire (or don't hire) people with disabilities. This study begins to address this research need.

This study makes several contributions to the research literature examining the persistent low employment rate of PWDs (e.g., Stapleton & Burkhauser, 2003). First, we identify reasons employers give for not hiring PWDs. Second, we compare employer reasons for not hiring PWDs to research findings on PWDs in the workplace. We address the question of whether research supports or disconfirms employer justifications for not hiring PWDs. Finally, we report the recommendations of employers regarding what they believe will help improve the employment of PWDs.

Study Procedures

To learn more about why PWDs are not hired more frequently by employers and how that situation could be changed, we interviewed 38 corporate executives from companies that were small (0–49 employees), medium (50–499 employees), and large (500+ employees) in eight states in the United States (California, Colorado, Georgia, Kansas, Maryland, New Jersey, Texas, and Virginia) and Washington, D.C.¹

A semistructured interview research method was chosen for this study for the following reasons (Bachiochi & Weiner, 2002). First, this research is exploratory. Our objective was to discover why employers fail to hire PWDs and what they believe can be done to change the situation. Second, open-ended questions allow research participants the opportunity to explain their feelings more fully. Participants were able to provide interpretations not anticipated by the researchers. Third, an interview research method provides an opportunity to obtain greater depth and richness of data than what is typically gained from questionnaire surveys.

The interviews occurred over a period of nine months (April–December 2003). The question protocol was created based upon an extensive review of the literature on the employment of PWDs. Our previous experience in interviewing company representatives regarding their employment of PWDs led us to believe that there was great reluctance to speak about these issues in regard to their specific organizations. Consequently, we constructed our interview questions to focus at the industry level in order to elicit more candid responses. Interviews took place in participants' offices, typically with no other people present. Each participant was asked the same set of questions and allowed to respond in an open-ended fashion. Questions covered the following issues: (a) how proactive their industry is in hiring PWDs, (b) the most effective ways to encourage hiring PWDs, (c) reasons why PWDs are not hired in the industry, (d) arguments likely to persuade employers to hire PWDs, (e) why some companies in the

industry are more proactive than others in hiring PWDs, (f) familiarity of industry employers with federal tax incentives for hiring PWDs, (g) the importance of top-level leadership in promoting the hiring of PWDs, (h) the importance of the human resource department in promoting the hiring of PWDs, (i) internal organizational processes and procedures within companies in the industry that might contribute to increased hiring of PWDs, and (j) benefits of hiring PWDs.

Results

Data from the interviews were transcribed and responses to questions were analyzed to determine commonalities and differences. Few differences were found in responses across different types or sizes of organizations represented by the participants. In the following sections, we summarize what was learned from these executives. First, we summarize the responses of participants concerning how proactive employers are regarding hiring people with disabilities. Next, we summarize the responses of participants about why employers don't hire PWDs.

How Proactive Are Employers Regarding Hiring People With Disabilities?

Employers interviewed in this study expressed a range of opinions about how proactive their various industries were in hiring PWDs. However, the majority responded that their industries were not very proactive. The following quotes illustrate employer perceptions:

I don't think it is a priority at all. I don't think they have focused on it. A few

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years ago when the ADA legislation was developed, there was some discussion about it, but I don't think it is anything that has been a priority though so I think it has been very little.

Well, as far as qualified, I guess, as most people would think, we have not been too supportive of it or too proactive. I think we have all made some attempts.

I don't think they have been very proactive but I do think it has been more than in the past. First of all, not just because of the ADA but a lot of companies like ours are much more into diversity and if they are like ours the first thing that comes to mind with diversity is people's race and some of the obvious things that people think of. I know years ago when we first started talking about this, I would always raise my hand and say, well, what about people with disabilities? and they all looked at me and it got to whenever they brought up things they would look at me and say, oh yes, and add disabilities. They knew I was going to say that. So I think more so than they have been. Is it enough? I don't see that yet but I think the whole diversity initiative is a real help in that area.

The last quote expresses an interesting observation. When most employers talk about diversity efforts in general, they seem to focus on diversity defined as race/ethnicity and gender. Disability often is not mentioned or included in corporate proclamations about diversity.

In the next section, we describe participant responses that help explain why employers may not be proactive in hiring PWDs. Employers have beliefs about the capabilities, constraints, and costs associated with PWDs that may result in reluctance to hire them. If these beliefs are based upon stereotypes and lack of information, PWDs

may be denied access to jobs they could perform, and employers may be denied access to productive employees.

Why Employers Don't Hire People With Disabilities

Employers interviewed in this study expressed common concerns about hiring PWDs (see Table I). They are concerned that PWDs (a) may lack necessary knowledge, skills, and abilities; (b) may not be able to perform physically demanding tasks; (c) may increase health care costs; (d) will require costly accommodations; (e) may create safety problems; (f) may sue for discrimination; (g) may hurt coworker morale; and (h) may affect customers negatively. These concerns can be categorized into three major themes: (1) job qualifications/performance concerns; (2) costs associated with hiring PWDs; and (3) reactions/responses of others.

One concern expressed by a number of employers is that PWDs may not have the necessary knowledge, skills, and abilities to perform needed jobs. The following quotes illustrate this concern:

. . . trying to hire someone with a disability, the main concern is . . . having the skills you would need to be on the air to be able to do those things that would actually apply.

I think it would be the perception that people with disabilities don't have communication skills and wouldn't be able to problem-solve at a faster pace, wouldn't be able to independently problem-solve.

Another concern of employers in some industries is whether PWDs will be able to perform physically demanding tasks. The following quotes illustrate this concern:

In our industry, one of the main things we have to do is everybody we hire has to have the ability to lift and so I don't know if that would affect people with disabilities or not but I think it is definitely an issue. As far as my industry, I

TABLE I Employer Concerns About Hiring People With Disabilities

Job Qualification/ Performance Concerns	<p>People with disabilities may lack appropriate job qualifications.</p> <p>People with disabilities cannot perform physically demanding tasks.</p> <p>People with disabilities will be less productive than nondisabled workers.</p>
Costs Associated With Hiring People With Disabilities	<p>People with disabilities incur higher health care costs than those without disabilities.</p> <p>Reasonable accommodations are difficult and costly to implement.</p> <p>People with disabilities have more accidents and pose more safety problems than nondisabled employees.</p> <p>People with disabilities will sue employers.</p>
Reactions/Responses of Others	<p>Coworkers may react negatively to working with people with disabilities.</p> <p>Customers may react negatively to employees with disabilities, affecting the company's bottom line.</p> <p>There is a fear of the unknown (e.g., how to communicate, how to treat them) in working with people with disabilities.</p>

think that the problem with hiring anyone with a disability is lifting. You have to be able to lift. If you can't lift, you can't deliver. I don't know if I can help with that.

. . . it's just in the multiple driving from location to location often times visiting eight to ten customers in a given day, going in facilities and trying—so I think there might be some hesitancy would be my guess—that is more of a challenge than for somebody who is not disabled.

Another common concern expressed by a number of employers is that PWDs will be less productive than nondisabled workers. The following quote illustrates this concern:

They wouldn't be able to either do the work efficiently or effectively; therefore, they would affect the bottom line.

Since we are professional services, we get paid based on our services—that is normally an hourly rate, but in some cases it is a fixed contract amount. So if you have a fixed contract amount for \$50,000 and you end up spending time in excess of that, you lose money.

Employers fear that employees with disabilities may increase health care costs, and thereby raise overall labor costs. The following quote illustrates this concern:

The only one that I can think of and I have not experienced this (so this is not fact basis, this is just surmising) would be what we are all experiencing—medical costs skyrocketing . . . does an individual (with a disability) bring . . . an inherently higher medical cost?

Employers are concerned that reasonable accommodations may be difficult to imple-

ment and may be costly. The following quote illustrates this concern:

I think the perception is that the strenuous requirements for manufacturing and the accommodations that would have to be made to be able to handle certain handicaps. We buy machine tools from manufacturers and [for] those manufacturers, the design of those tools, are not really handicapped-friendly. I mean you have to lean way over into a tool to load it and if you get into the automotive industry and the manufacturing where there are a lot of automation stuff, it is different. But when you are talking about typical machine shop-type manufacturing, there is very little automation and there is very little automation available to the manufacturers so . . . you would have to almost make it or have someone to design it in order to accommodate the handicapped.

Employers are also concerned about safety issues. Workers with disabilities may not be able to safely perform jobs and/or potentially endanger their coworkers. The following quotes illustrate this concern:

There are always . . . the work comp issues. You are liable for persons getting hurt . . . I think probably my primary concern would be work compensation issues, injuries, and liabilities.

I think the one that is typically stereotyped could be physical disability—in terms of if someone has a hearing impairment [it] becomes very scary in having them in a manufacturing environment where you have moving things, particularly like overhead cranes, forklifts, and other transporta-

tion vehicles where they may not hear them when they are behind them.

. . . as far as eyesight, there again most of it (manufacturing) requires decent eyesight in order to perform the job. The other would be a lot of the manufacturing jobs in terms of assembly or in our case detailed masking [you] have to have very good use of your hands. I would think that that would probably be typically why people (employers) don't look for individuals [with disabilities].

Employers are concerned that PWDs may be more prone to suing for discrimination than their nondisabled counterparts. The following quotes illustrate this concern:

If somebody is qualified and makes an application, I think they would get equal consideration with a nondisabled individual but I would just have to say since there is not a priority and in addition to that—candidly—I do think that as the ADA legislation developed, HR people are perhaps seeing that people with disabilities have sued employers. That has had a negative impact on the employment of the disabled.

It is like saying “We are an Equal Opportunity Employer.” You know you put another sign on the wall, you expose yourself to more potential government regulations or abuse if they come in and there are grievances filed or lawsuits filed—whatever—it just opens the door potentially for more headaches.

Employers are concerned that having employees with disabilities may hurt the morale of other employees. The following quote illustrates this concern:

. . . the other one would be how it might affect morale within other people [coworkers] and the expectations of one person versus another.

Employers are concerned about how customers may react to employees with disabilities and how this might affect their bottom lines. The following quote illustrates this concern:

. . . if you are related to the public, you also have to be concerned about how well your customers will accept people with disabilities.

While many employers expressed specific concerns about hiring PWDs, a number expressed a more generalized fear of the unknown in hiring PWDs. This was best expressed in the following quote:

I think it is a fear of the unknown. I don't think there is any fear of somebody in a wheelchair is going to look funny or this person has a disability that makes them look a little bit different or we have to accommodate this person with giving them some kind of a different PC or chair or something. I don't think it is any of those. I think it is "I don't know." For companies as large as ours, it is not the insurance—a lot of smaller companies can say I am afraid what they are going to do with our insurance—that is not a factor. I think it is the unknown and, gosh, do we know what to do. The first time we hired one—when the manager said this just isn't working out and things are going wrong and I said did you write them up, fire them—and they were appalled, they didn't know that they could treat this type of person normally and it blew them away, and he is still there, by the way, that was eight years ago when she asked me.

It is apparent from the range of concerns expressed above that employers are reluctant to hire PWDs for a variety of reasons. However, what is not apparent is whether these concerns are justified. In the next section, we review the research evidence that addresses employer concerns about hiring PWDs and

contrast the research evidence with employer beliefs.

Are Employer Concerns About Hiring People With Disabilities Justified?

The interviews we conducted, along with previous research assessing employer attitudes toward hiring PWDs, suggest that perceptions are often formed with little objective information. We know what concerns employers have about hiring PWDs, but are their concerns justified? To answer this question, we reviewed the research literature addressing some of the major issues in hiring PWDs (Lengnick-Hall, 2007; see Table II for a summary).

Do People With Disabilities Lack Necessary Knowledge, Skills, Abilities, and Other Characteristics?

One explanation for the low employment rate of PWDs is that they do not have the necessary knowledge, skills, abilities, and other characteristics (KSAOs) for job performance. Typical employer attitudes about whether PWDs have necessary KSAOs to perform jobs are mixed—as we found in this study—some employers believe PWDs do not have necessary skills and can't meet job requirements; others view PWDs as punctual, hard-working, and competent.

What KSAOs do employers seek in potential employees and how do PWDs compare with people without disabilities? Millington and Reed (1997) identified a limited number of generic behavioral descriptors used as selection factors across jobs (i.e., nonspecific KSAOs of desirable job candidates). The KSAOs identified in their study included: (a) job knowledge/production skills, (b) socialization and emotional coping skills, (c) trainability/task, (d) dependability, and (e) motivation/satisfaction. Direct comparisons between PWDs and people without

While many employers expressed specific concerns about hiring PWDs, a number expressed a more generalized fear of the unknown in hiring PWDs.

TABLE II Are Employer Concerns About Hiring People With Disabilities Justified?

Employer Concern	Research Evidence
Job Qualifications/ Performance Concerns	<p>PWDs are equivalent to nondisabled people in obtaining high school diplomas. However, a lower percentage of PWDs have bachelor's degrees or higher levels of education in contrast to people without disabilities.</p> <p>Individuals with disabilities rate equal or better than people without disabilities on the criterion of dependability—lower absenteeism and turnover.</p> <p>Evidence shows no job performance and productivity differences between PWDs and people without disabilities.</p>
Costs Associated With Hiring PWDs	<p>Accommodations for PWDs may entail additional costs to employers, but evidence to date suggests that these costs are usually minor and unlikely to tip the benefit versus cost assessment away from hiring this source of labor.</p> <p>There are no major differences between PWDs and employees without disabilities on accidents, workplace injuries, and insurance costs.</p> <p>While the fear of litigation may have some impact on the employment of PWDs, evidence to date is indirect and inconclusive.</p>
Reactions/Responses of Others	<p>While employers may be reluctant to hire individuals with disabilities due to fears about negative reactions from coworkers, virtually no research supports these claims.</p> <p>While employers may be reluctant to hire individuals with disabilities because of fears about negative customer reactions, no research supports these claims.</p>

disabilities across these KSAOs are incomplete, but suggestive.

For example, PWDs are roughly equivalent to people without disabilities in obtaining high school diplomas and some college. Data from the 2005 American Community Survey (Rehabilitation Research and Training Center on Disability Demographics and Statistics, 2005) shows that among working-age PWDs, 34.5% had a high school diploma or equivalent and 28% had some college in contrast to people without disabilities, of which 27.9% had a high school diploma and 30.5% had some college. However, a greater percentage of people without disabilities had a bachelor's degree or more (30.1%) in comparison to PWDs (12.8%).

There are no data comparing PWDs and people without disabilities on socialization and emotional coping skills or trainability/

task flexibility, although employers express concerns in both areas (Greenwood & Johnson, 1987). However, studies have found employers generally hold positive attitudes when asked about the social skills and personality traits of PWDs (Lee & Newman, 1995).

Regarding dependability, the evidence is quite clear that PWDs fare well. Studies show that PWDs have equal or lower levels of absenteeism than people without disabilities, and that PWDs stay with jobs they occupy (Junor, 1985; Pati, 1978; Yelin & Trupin, 2000). Employers surveyed in McFarlin, Song, and Sonntag (1991) reported positive attitudes toward turnover rates, absenteeism, and performance of workers with disabilities. Finally, there are no direct data comparing the motivation/satisfaction of PWDs and people without disabilities.

Nine studies conducted since 1987 all have reported positive attitudes on the parts of employers toward employees with disabilities that came from vocational rehabilitation or supported-employment programs (Cooke, Pickett-Schenk, Banghart, Rosenheck, & Randolph, 2001; Coope, 1991; Eigenbrood & Retish, 1988; Kregel & Unger, 1993; Nietupski, Hamre-Nietupski, VanderHart, & Fishback, 1996; Petty & Fussell, 1997; Sandys, 1994; Shafer, Hill, Seyfarth, & Wehman, 1987; Wilgosh & Mueller, 1989). This trend could be indicative of employers having much more confidence in hiring PWDs who have institutional evidence of an education that would teach the required KSAOs.

What can be concluded from this depiction of the KSAOs of PWDs? First, lower levels of education may inhibit the employability of individuals with disabilities for jobs requiring a bachelor's degree or higher. Employers will not hire individuals who do not have the necessary KSAOs to perform the job. Second, individuals with disabilities are equal to or better than individuals without disabilities on the criterion of dependability. That is, PWDs have average or better absenteeism and average or lower turnover than their nondisabled counterparts. Third, employers react favorably to demonstrated evidence of employees with disabilities possessing KSAOs, such as through a vocational or supported-employment work programs. In other words, certification may improve employability by reducing employer uncertainty about the KSAOs of PWDs. Lastly, we simply do not know enough about how PWDs compare with people without disabilities across the criteria of socialization and emotional coping skills, trainability and task flexibility, and motivation/satisfaction.

Do Employees With Disabilities Have Lower Job Performance and Productivity Than Employees Without Disabilities?

Another explanation for the low employment rate of PWDs is that their job performance is lower and they are not as productive

as employees without disabilities. Evidence comparing the productivity of PWDs to people without disabilities is sparse, but typically shows that they have equal or higher ratings on the job than people without disabilities (Employer Assistance Referral Network, n.d.; Koss-Feder, 1999; Schur, 2002). Greenwood and Johnson (1987) reviewed studies covering the period 1948 to 1981 and concluded that results support "a continuing record of quality performance." Statistics from the U.S. Office of Vocational Rehabilitation show that 91% of workers with disabilities were rated either "average" or "better than average," the same as their counterparts without disabilities (Stein, 2000). A study by Lee and Newman (1995) reported that 72% of employers who had hired persons with disabilities rated their job performance as average, above average, or excellent. Employers surveyed in McFarlin et al. (1991) demonstrated positive attitudes toward turnover rates, absenteeism, and performance of workers with disabilities. However, several studies show that employers that previously had not employed persons with disabilities had great concerns regarding productivity, proper job fit (i.e., having suitable mental or repetitive tasks for PWDs to perform), accidents or injuries on the job, and worker's compensation claims (Blessing & Jamieson, 1999; Burnham, 1991; Diksa & Rogers, 1996; Fuqua, Rathburn, & Gade, 1984; Johnson, Greenwood, & Schriener, 1988; Scheid, 1999, Weisenstein & Koshman, 1991).

In summary, the evidence shows no significant performance and productivity differences between PWDs and people without disabilities. However, there still exists the perception among employers that these two groups differ, especially among those employers who have not had experience with PWDs. As knowledge work and information technology become more ubiquitous in business and industry, differences in productivity

Evidence comparing the productivity of PWDs to people without disabilities is sparse, but typically shows that they have equal or higher ratings on the job than people without disabilities.

between PWDs and people without disabilities should lessen.

Do Employees With Disabilities Entail Higher Costs Than Employees Without Disabilities?

One early study (California Governor's Committee for Employment of the Handicapped, 1978) found that people with disabilities tended to incur lower costs than the average employee. However, as a result of the passage of the Americans with Disabilities

...accommodations for PWDs may entail additional costs to employers, but evidence to date suggests that these costs are usually minor and unlikely to tip the benefit versus cost assessment away from hiring this source of labor.

Act, many employers believe that costly accommodations and other investments are necessary in order to hire and maintain employees with disabilities and equalize productivity. Mitchell, Alliger, and Morfopoulos (1997) found that the most common accommodations include special equipment (18%), scheduling of breaks or flextime (16%), task substitution (11%), office redesign (10%), computer software (10%), and increased access (10%). While some accommodations may be costly, survey data collected by the Job Accommodation Network (JAN) for the President's Committee on Employment of People with Disabilities between October 1992 and July 1999 shows that among employers making accommodations, 71% of accommodations cost \$500 or less, with 20% of those costing nothing (Job Accom-

modation Network, n.d.). Lengnick-Hall, Gaunt, and Collison (2003) found that 38% of human resource professionals indicated their organizations spent nothing on reasonable accommodations; 28% spent \$1,000 or less; approximately 8% spent between \$1,000 and \$5,000; and approximately 14% spent more than \$5,000. Other studies report accommodations that entail no cost number as high as 51–54% (Collignon, 1986; Lee & Newman, 1995). In addition, the annual amortized costs of these accom-

modations over their useful lifetime (or the tenure of PWDs' employment) may be much lower. Schartz, Hendricks, and Blanck (2006) note that asking employers only about accommodation costs may result in substantial overestimates of disability-related accommodation costs by \$300–\$400. This is because employers typically report investing between \$300 and \$400 in start-up costs for new employees and retention costs for continuing employees.

Four studies found that employers were very concerned about perceived costs in accommodations for workers with disabilities (Gilbride, Stensrud, Ehlers, Evans, & Peterson, 2000; Moore & Crimando, 1995; Roessler & Sumner, 1997; Walters & Baker, 1996). Moreover, Hazer and Bedell (2000) found that a job applicant's request for accommodation of an individual with a disability may have a negative effect; the more disruptive the accommodation, the less suitable the person will be seen for hire. One interesting viewpoint on the topic of accommodation costs was revealed in a focus group reported by Pitt-Catsoupes and Butterworth (1995):

Although several of the supervisors stated that they thought that most of the accommodations made at the workplace had not been particularly expensive, the financial burden often fell on the specific department where the employee with a disability was assigned. Given the firms' emphases on cost-cutting measures, many of the supervisors felt that this cost-allocation system introduced disincentives to the hiring of individuals with disabilities. (p. 17)

In summary, accommodations for PWDs may entail additional costs to employers, but evidence to date suggests that these costs are usually minor and unlikely to tip the benefit versus cost assessment away from hiring this source of labor. However, research indicates that employers who are unaware of this evidence still have concerns regarding accommodation costs for employees with disabilities.

Do Employees With Disabilities Experience More Accidents Than Employees Without Disabilities?

In addition to job accommodation costs, researchers have studied differences between PWDs and those without disabilities on costs related to lost time due to work injuries, accidents, and insurance costs. In general, findings show little or no differences between the groups on these cost criteria (Oshkosh Area Workforce Development Center, n.d.).

The Du Pont chemical company has been a pioneer in studying employees with disabilities (Freedman & Keller, 1981; Nathanson, 1977; "Studies Related to," n.d.). In 1973, Du Pont studied 1,452 employees, including those with such disabilities as blindness, heart disease, vision impairment, amputation, epilepsy, paralysis, hearing impairment, and total deafness. For workers with disabilities, they found no lost time due to disabling injuries. In 1981, Du Pont studied 2,745 employees with such disabilities as allergies, amputations, epilepsy, hearing disorders, heart disease, mental impairments, nonparalytic orthopedic problems, paralysis, respiratory ailments, vision impairments, and others. They found that 96% of these employees were rated as average or above average on safety. In 1990, Du Pont studied 811 employees with disabilities in the areas of motor skills, general bodily systems, substance addiction, neurological, hearing, vision, and others. In this study, they found that 97% of these employees were rated as average or above average on safety.

While available research on safety issues for employees with disabilities is limited to one company, three separate studies over a period of approximately 20 years with relatively large sample sizes suggests their findings are not idiosyncratic.

Do Employers Experience More Litigation Associated With Terminating People With Disabilities?

Many employers feel that if they hire PWDs, it will be difficult to terminate them

if their performance does not meet expectations. That is, they fear that terminating PWDs will increase their exposure to potential employment discrimination lawsuits that will be both costly and generate poor publicity (however, the same concern typically is not expressed about lawsuits and poor publicity resulting from failure to hire PWDs).

From July 1992 to September 1997, the Equal Employment Opportunity Commission (EEOC) received 90,803 charges under the Americans With Disabilities Act (ADA) (Acemoglu & Angrist, 2001). Of those charges filed directly with the EEOC during 1992–1997, 29% were related to failure to provide accommodation, 9.4% were related to discrimination at the hiring stage, and 62.9% were for wrongful termination. Between 1997 and 2006, 235,465 ADA charges were received by the Equal Employment Opportunity Commission (EEOC, n.d.). Only about 19% of charges resulted in merit resolutions (charges with outcomes favorable to charging parties and/or charges with meritorious allegations).

Research suggests that employer concerns about litigation regarding PWDs may be unwarranted. Allbright (2001) and Lee (2001) reviewed a total of 696 lawsuits charging violations of the ADA. Of these, 96% of the decisions were favorable for the employer, either through summary judgment or through merits of the case. Analysis of these cases suggests that if employers assess whether an individual is covered by law, and whether accommodation is reasonable, courts most often defer to the employer's judgment, resulting in minimal legal liability.

In summary, while the fear of litigation may have some impact on the employment of PWDs, evidence to date is indirect and inconclusive. However, employer concerns may be more overstated than justified.

While available research on safety issues for employees with disabilities is limited to one company, three separate studies over a period of approximately 20 years with relatively large sample sizes suggests their findings are not idiosyncratic.

Do Coworkers React Negatively to Employees With Disabilities?

Coworker reactions present a possibility for explaining why employers hire fewer workers with disabilities. Employers may fear that coworkers will react negatively to working with PWDs and thereby lower productivity, increase labor costs, and make their organizations less profitable. Greenwood and Johnson (1987) concluded that while the evidence for these concerns regarding PWDs is mixed, there is “a continuing concern about

coworker relationships, particularly when mental and emotional disabilities are involved.”

...while there are plausible explanations for why coworkers may react negatively to employees with disabilities, little evidence suggests these reactions are, in fact, commonplace.

What concerns might coworkers have about working with individuals with disabilities? Stone and Colella (1996) propose three possibilities. First, coworkers may fear a negative effect on work-related outcomes. For example, individuals without disabilities may fear an increase in their workloads as a result of working with an individual with a disability. In conditions of task interdependence, coworkers may fear a loss of rewards if their own job performance is dependent upon an individual with a disability's job performance. Colella, DeNisi, and Varma (1998) found some support for this reaction in a laboratory experiment.

Second, coworkers may fear a negative effect on personal outcomes. Individuals without disabilities may fear that some disabilities are contagious (even when they are not). People without disabilities also may feel resentment regarding accommodations and special treatment received by PWDs (Colella, 2001).

Third, coworkers may fear a negative effect on interpersonal outcomes. For example, coworkers may feel awkwardness, discomfort, ambivalence, and guilt about how they should interact with PWDs. This reaction may result in avoidance behavior and exclusion of PWDs from formal and informal

workgroups. All of these coworker concerns play an even more important role in organizations structured around teams, especially where team members hire their coworkers.

Some research has found that interaction patterns between workers without disabilities and workers with disabilities differ. Lignugaris-Kraft, Salzberg, Rule, and Stowitschek (1988) found that employees with disabilities received more task-related commands and were less involved in joking and teasing at work in contrast to employees without disabilities who were asked for information during work more frequently. Storey et al. (1991) found that employees without disabilities engaged in more work-related conversations than employees with disabilities, and that their interactions were with a significantly greater number of different people. Workers with disabilities engaged in work-related conversations mainly with their employment specialist, receiving instruction and praise. However, Chadsey-Rusch, Gonzalez, Tines, and Johnson (1989) found that while employees with disabilities were likely to be involved in job-related interactions with coworkers, they were less likely to be involved in non-job-related interactions during work breaks.

In summary, while there are plausible explanations for why coworkers may react negatively to employees with disabilities, little evidence suggests these reactions are, in fact, commonplace.

Do Customers React Negatively to Employees With Disabilities?

Employers may fear that customers without disabilities may have negative reactions to interactions with employees with disabilities and transact less business with their organizations. Both explanations are plausible, and interestingly, both explanations were offered in the past to explain employer reluctance to hire other minority groups, such as women, blacks, and Hispanics. However, this argument ignores the fact that PWDs earn \$175 billion in discretionary income, which is almost two times the spending power of teens, and more than 17 times

the spending power of tweens (those age 8–12), two groups sought after by businesses (U.S. Department of Justice, n.d.). By failing to hire PWDs, organizations may be losing revenue as well.

While no research expounds on this phenomenon, one might expect customers to have similar responses to those described previously for coworkers. For work-related outcomes, customers without disabilities may fear that employees with disabilities do not produce high-quality products or are incapable of delivering the same level of service as workers without disabilities. For personal outcomes, customers without disabilities may hold similar fears as coworkers regarding the contagion of disabilities. For interpersonal outcomes, customers without disabilities may likewise fear feelings of awkwardness, discomfort, ambivalence, and guilt about how they should interact with PWDs. All of these explanations are plausible; however, no research has been conducted in this area.

In summary, employers may choose not to hire individuals with disabilities because of fears about negative coworker and customer reactions (that is from coworkers and customers who do not have disabilities). Several theoretical explanations have been proposed that seem quite plausible. Unfortunately, no research has been conducted to test the validity of these propositions.

Recommendations for Improving the Employment of People with Disabilities

Participants in this study were asked to provide their suggestions for improving the employment of PWDs. Their responses may be grouped into four categories that illustrate the range of recommendations provided: (1) educational; (2) policies, programs, and practices; (3) management; and (4) external (see Table III).

Many of the study participants made recommendations that could be described as educational in purpose. It seems the underlying principle is that more PWDs will be hired if managers and employees receive education

and experience interacting with them—a principle that is supported by research (e.g., Popovich, et al., 2003). The following quote illustrates this belief:

I think there needs to be more education and knowledge about what people can do . . . the more you interact with people that are in that environment and see what they can do, the less you are going to refrain from hiring them.

Here are examples of educational recommendations:

- Identify success stories (i.e., companies that have integrated PWDs into their workforces) and use them as models for other companies.
- Publicize that PWDs are motivated and dedicated workers. Tell others what PWDs can do.
- Encourage organizations that help PWDs get jobs to proactively present to employers the benefits of hiring them.
- Encourage more personal contact with PWDs. Create opportunities for employees to have personal experiences with PWDs.

It seems the underlying principle is that more PWDs will be hired if managers and employees receive education and experience interacting with them—a principle that is supported by research.

Other recommendations seem to focus more on implementing specific policies, programs, and practices. The following quote illustrates this belief:

I think you would have to match them up with the proper jobs. Again, there are things that they may or may not be able to do, other things that they may be terrific at.

Here are examples of policy, program, and practice recommendations:

- Provide training for PWDs so they can meet specific job requirements.

TABLE III Recommendations for Improving the Employment of People With Disabilities

Type of Recommendation	Recommendation
Educational	<p>Identify success stories (companies that have integrated people with disabilities into their workforces) and use them as models for other companies.</p> <p>Publicize that people with disabilities are motivated and dedicated workers. Tell others what people with disabilities can do.</p> <p>Encourage organizations that help people with disabilities get jobs to proactively present the benefits of hiring them.</p> <p>Encourage more personal contact with people with disabilities. Create opportunities for employees to have personal experiences with people with disabilities.</p>
Policies, programs, and practices	<p>Provide training for people with disabilities so they are able to meet specific job requirements.</p> <p>Focus on ability, capability, and experience of people to do the job and do not focus on disability.</p> <p>Use internships and mentoring to integrate people with disabilities into organizations.</p> <p>Ensure proper job fit for people with disabilities.</p>
Management	<p>Obtain commitment from top management to hire people with disabilities.</p> <p>Create a disability-friendly culture initiated from top management.</p>
External	<p>Provide government awards and tax benefits to employers who hire people with disabilities.</p>

- Focus on the ability, capability, and experience of people to do the job—and do not focus on disability.
- Use internships and mentoring to integrate people with disabilities into organizations.
- Ensure proper job fit for PWDs.

Many of the participants discussed the necessity of top management taking an active role in encouraging the hiring of PWDs. The following quotes illustrate this recommendation:

If you have the person at the top saying we are making this a priority in this organization, there is a great deal higher chance of success.

I think it is important but I think you can have a policy but if you don't live it and breathe it and if it doesn't come from the top of the organization over and over saying this is important—then it is a policy that is in somebody's policy and procedure folder. Nothing happens when top leadership is not promoting it.

Finally, several participants recommended government incentives to hire PWDs. The following quotes illustrate this belief:

I really think tax incentives are the one thing that will get management's attention. There has to be an economic rea-

son for people in management to put their heart in action—I mean they may have a sincere desire to do it, to help the disabled find employment, but there has to be some incentive, some reason to give that priority attention, in my opinion.

But I would say just getting word out to employers about tax breaks because I know employers and owners are always looking for tax breaks—anything that saves money. They can give someone with a disability a job and in return get a little tax break—they are going to love that.

While there are tax incentives that employers can receive for hiring PWDs, previous research has shown that a majority of employers are unaware of them (Lengnick-Hall et al., 2003).

Conclusions

This study contributes to our understanding of why PWDs have difficulty obtaining employment by examining employer perceptions of PWDs as human resources. As we have shown, employers have reservations about the quality of human resources who have disabilities. However, these reservations are not borne out by research findings regarding PWDs in the workplace. Finally, while employers have reservations about hiring PWDs, they also have recommendations regarding how to overcome these concerns.

Hiring and retaining PWDs is a win-win solution (a win for PWDs, a win for employers, and a win for society) to a number of problems (Lengnick-Hall, 2007). First, many PWDs want to work but currently are unemployed. They want to work for the same reasons that nondisabled people want to work: to obtain income, to support themselves and their families, to get the satisfaction that can be derived from a job and a career, and to make contributions to organizations and society. Second, employers need the best talent available to compete effectively in a global economy. Capitalizing on a source of good

employees could make the difference between success and failure in the marketplace. And third, society is better off when more PWDs are able to find productive work. PWDs then pay taxes, have more income to purchase goods and services, and reduce their dependency on taxpayer-supported assistance programs. One author estimates society could save as much as \$37 billion a year in benefits payments alone if more PWDs were employed (Riley, 2006).

However, employers can only do so much to improve the employment of PWDs. Government programs should be reexamined to ensure that they do not discourage PWDs from seeking employment. Additionally, government programs that provide tax incentives for hiring PWDs should be assessed for effectiveness and adjusted if needed. Finally, PWDs will have to take the responsibility for making themselves employable and seeking out appropriate employment. It is the interaction of these three major stakeholders—employers, government, and PWDs—that ultimately will determine the effectiveness of efforts to improve the employment of PWDs. Until then, this potential human resource—like undiscovered oil in the ground—will remain overlooked and underutilized.

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This study contributes to our understanding of why PWDs have difficulty obtaining employment by examining employer perceptions of PWDs as human resources.

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NOTE

1. Additional information about the sample is available on request from the authors.

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