In the past 2 decades, the issue of disability in the workplace has garnered a great deal of attention. Concern exists over discrimination against and accommodation of people with disabilities, to name just a few issues. In the United States, the passage of the Americans With Disabilities Act of 1990 (ADA) broadened the concern over disability and work to the fields of law, sociology, economics, and rehabilitation psychology. Similar legislation in other countries (e.g., England, Australia, Canada) has also fueled applied concern and scholarly activity.\footnote{In the United Kingdom, the Disability Discrimination Act of 1995 protects and promotes civil rights for people with disabilities. The text of the act as currently in force can be read at \url{http://www.statelaw.gov.uk/content.aspx?activeTextDocId=3330327; also see \url{http://www.direct.gov.uk/en/DisabledPeople/RightsAndObligations/DisabilityRights/DG_4010108} for information and guidance for the public and for employers. For Australia, more information on the Australian Disability Discrimination Act of 1992 can be found at \url{http://www.hreoc.gov.au/disability_rights/}. In Canada, the province of Ontario has passed the Accessibility for Ontarians With Disabilities Act of 2005, and readers are directed to \url{http://www.mcss.gov.on.ca/mcss/english/pillars/accessibilityOntario/} for information and guidance.} Research on disability and employment has been less developed in the field of industrial and organizational (I/O) psychology, despite the fact that many issues pertaining to the selection, development, and integration of people with disabilities into the workforce are relevant to the domain of I/O psychology. Indeed, since 1990, very few articles related to disability issues have appeared in the \textit{Journal of Applied Psychology} and \textit{Personnel Psychology}, compared with scores of articles focusing on gender and race issues. Despite the relative dearth of research on disability employment issues in the field of I/O psychology, there is a plethora of theory and research from other fields that addresses these issues. The purpose of this chapter is to provide an overview of this literature and to engage I/O scholars and practitioners in the ongoing work related to the integration of people with disabilities into the workforce.

We begin this chapter by discussing the definition of disability. Disability is defined in many ways for many purposes. Not only does the definition of disability provide fodder for the courts (e.g., \textit{Sutton v. United Airlines}, 1999), but it also has methodological implications for research. We then focus on three areas related to disability and employment: accommodation, selection, and workplace integration. These three areas were chosen because they are areas in which significant research has been conducted, they are areas that can benefit from the application of I/O psychology, and they are issues that are important in the employment of people with disabilities.

Before moving on, we need to state some boundary conditions. First of all, we do not review case law on the ADA, nor do we discuss the ADA in detail, except where necessary. Much has been written on
DEFINITION OF DISABILITY

A discussion of the definition of disability is included here because it is important that employers understand their obligations under related laws and also that applicants and employees understand whether they are protected by the various laws related to people with disabilities. Disability is a complex and multidimensional concept. Several theoretical frameworks have been developed to characterize the various dimensions of disability and to model the process of disablement (Livermore & She, 2007). There are a variety of sources and considerations that one can include when considering the definition of disability—legal and public policy, economic, conceptual—philosophical, and applied—practical. In the discussion that follows, we attempt to provide an appreciation of these varying definitions while narrowing this discussion specifically to the realm of employment.

There is no single, universally accepted definition of disability. Mashaw and Reno (1996) documented over 20 definitions of disability used by programs, government agencies, or researchers and argued that the appropriateness of any definition can be judged only in the context in which it is used. In general, there are two prominent conceptualizations of disability (Burkhauser, Houtenville, & Wittenburg, 2003). One views disability as an impairment that limits a person's capacity to function at work, in society, or in daily life. Another defines certain conditions as disabling and counts people with those conditions as disabled.

For public policy purposes, national surveys have often been used to assist in identifying the population of people with disabilities. The definitions of disability that result from these surveys vary (Houtenville, 2003). Each survey asks questions of respondents that are used to determine an individual's disability status. For example, the 2000 U.S. Census asked, "Does this person have any of the following long-lasting conditions: Blindness, deafness, or a severe vision or hearing impairment?" (Erickson & Houtenville, 2005). Respondents who answered affirmatively became the population that has sensory disabilities. Other questions in the 2000 Census determined whether people had conditions that "substantially limit" one or more basic physical activities, such as walking, climbing stairs, lifting, or carrying (physical disability; Erickson & Houtenville, 2005). The definition of mental disability when using 2000 Census data is drawn from the question, "Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty: Learning, remembering, or concentrating?"

Other surveys result in a work-limitation definition of disability. The Current Population Survey
**TABLE 15.1**

Psychologically Based Theoretical Reasons for Biased Treatment of People With Disabilities

<table>
<thead>
<tr>
<th>Reason</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotyping</td>
<td>People hold negative stereotypes about people with disabilities that influence how they process and recall information about them (e.g., D. L. Stone &amp; Colella, 1996). Stereotypes include helpless, benevolent, hypersensitive, inferior, depressed, distant, shy, unappealing, unsociable, bitter, insecure, nonaggressive, unhappy, submissive (Fichten &amp; Amsel, 1986); saintly (Colella, 1996); and less capable of competing (Makas, 1988). Specific stereotypes vary with the type of disability.</td>
</tr>
<tr>
<td>Just world hypothesis</td>
<td>People with disabilities are blamed for the disability or viewed as deserving of the disability so that others may maintain a belief in a just world and thus can ease their anxiety that they could one day become disabled (Lerner, 1980). Negative attributes are ascribed to people with disabilities to make the disability seem justified.</td>
</tr>
<tr>
<td>Existential anxiety</td>
<td>Nondisabled people identify with people with disabilities, which creates anxiety over the possibility that they, too, may become disabled (Hahn, 1988; Livneh, 1982). Anxiety leads to avoidance.</td>
</tr>
<tr>
<td>Aesthetic anxiety</td>
<td>People experience discomfort due to interacting with someone who deviates from society's norms about what is considered physically attractive (Hahn, 1988; Livneh, 1982). Anxiety leads to avoidance.</td>
</tr>
<tr>
<td>Norm to be kind or sympathy effects</td>
<td>People wish to view themselves as good people, which means that they follow normative beliefs about treating those less fortunate in a kind manner (Carver, Glass, Snyder, &amp; Katz, 1977). Effect can lead to avoidance of negative feedback (Hastorf, Northcraft, &amp; Piciotto, 1979), overly positive performance evaluations (Czajka &amp; DeNisi, 1988), and paternalism (Colella &amp; Stone, 2005).</td>
</tr>
<tr>
<td>Ambivalence response theory</td>
<td>People hold ambivalent affect toward people with disabilities, feeling both disgust and pity or nurturance at the same time. They respond by displaying heightened affect cued by the social situation (Katz, 1979, 1981).</td>
</tr>
<tr>
<td>Social adaptation theory</td>
<td>People choose the most adaptive response in a given situation or context (Piner &amp; Kahle, 1984). Sympathy effects should therefore occur in situations of little importance (i.e., there is nothing to lose), whereas negative stigmatizing reactions should occur in situations the nondisabled actor believes are important or have serious consequences.</td>
</tr>
<tr>
<td>Stigmatization</td>
<td>Disability is viewed as a social stigma, which guides the cognitive processing of information about people with disabilities and the scripts that people engage to interact with them (Jones et al., 1984). Common scripts include &quot;child among adults,&quot; &quot;illness and disease,&quot; and &quot;moral deviate&quot; (Jones et al., 1984).</td>
</tr>
</tbody>
</table>

(CPS) asks, “Does anyone in this household have a health problem or disability which prevents them from working or which limits the kind or amount of work they can do?” (Burkhauser & Houtenville, 2006). A common denominator of all these definitions is that they rely on the self-report of the persons being interviewed, thus requiring these persons to decide for themselves whether their condition prevents them from working or limits the kinds of work available to them. Because some people with disabilities who are in the workforce would not consider themselves work limited, these surveys do not always accurately identify or define people with disabilities (Burkhauser, Daly, & Houtenville, 2002). Currently, the U.S. Census and three major noninstitutional surveys (the American Community Survey, the National Health Interview Survey, and the Survey of Income Program participation) all contain information on sensory disability, functional limitations, mental disabilities, limitations in
activities of daily living, limitations in instrumental activities of daily living, and work disabilities, although definitions vary (Burkhauser, Houtenville, & Wittenburg, 2003; She & Stapleton, 2006).

Over the past 10 years or more, an international effort led by the World Health Organization (WHO) has been reframing how disability is defined, making it more consistent with a social rather than a medical model of disability and impairment. The result has been the International Classification of Functioning, Disability, and Health (ICF), which includes measures of activities and participation and environmental factors, in addition to health and disability classifications (WHO, 2001).

In these very early stages of the ICF implementation, there have been a significant number of efforts both in the United States and abroad to examine the conceptual utility of this classification framework to the fields of rehabilitation, health, and other clinical practices. In addition, serious work has begun to examine how this classification system relates to specific national and international surveys where measures relevant to the interests of people with disabilities are reflected, as well as in a wide variety of clinical and research settings (Bruyère, VanLooy, & Peterson, 2005).

One of the fertile areas for further work by I/O and rehabilitation psychologists is applications of the ICF conceptual model to employment-related issues for people with disabilities (Bruyère, 2005). Within the “Activities and Participation” section of the ICF is Chapter 8, “Major Life Areas,” which is about carrying out the tasks and actions required to engage in education, work, and employment and to conduct economic transactions. Some of the specific relevant components for consideration include apprenticeship (work preparation); vocational training; acquiring, keeping, and terminating a job; and remunerative and nonremunerative employment. The “Activities and Participation” section of the ICF includes indicators of the individual’s capacity and performance ability with and without assistance; the employment-related items can therefore be further coded using qualifiers for activity limitations and participation restrictions (WHO, 2001). Ongoing work is needed to prove and support the utility of the ICF, especially an examination of employment and workplace-related applications.

With many definitions possible, legislators and federal agencies define disability differently, depending on the particular protection or eligibility criteria for services that they are attempting to afford. The ADA definition of disability is rooted in the impairment model of disability. The ADA defines disability as (with respect to an individual) (a) a physical or mental impairment that substantially limits one or more of the major life activities of the individual, (b) having a record of such impairment, or (c) being regarded as having such an impairment (Equal Employment Opportunity Commission [EEOC], 1992, 2002).

The Social Security Administration (SSA) has an extensive approach to defining the impairment of an individual for purposes of determining eligibility for benefits (SSA, 2006). When Congress added disability assistance to Social Security in 1950, it limited eligibility to those who were "totally and permanently disabled" (Social Security Advisory Board, 2003). Today, the SSA defines disability as

the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairments which can be expected to result in death or which has lasted or can be expected to last for not less than 10 months. (Social Security Online, 2008, ¶ 4)

Although the core definition of disability has not changed, SSA continues to examine their definition of disability to make certain that it stays current with advances in rehabilitation knowledge and technology that impact people’s ability to work (Social Security Advisory Board, 2003). However, the ADA does not require that someone be considered disabled by the SSA to be protected. What matters is that there is some impairment that substantially affects a major life activity.

Generally, the existence of an impairment is relatively clear. What is less clear is whether this impairment rises to the level of a disability for the purposes of the ADA. To be defined as a disability and to be eligible for accommodations under the
ADA, a physical or mental impairment must also meet the "substantially limits" test (Duston, 2001). For example, someone with a learning disability affecting auditory perception might have difficulty gaining information from a staff meeting. This would likely be an ADA disability (Tominey, 2001). There is no specific listing of names of ADA-eligible impairments. It is the effect of an impairment or condition on the life of the particular person that defines a disability (EEOC, 1992). Some impairments (e.g., blindness, deafness, AIDS) are by their nature substantially limiting, whereas others may be limiting for some individuals and not for others (EEOC, 1992).

Historically, people with physical impairments have had an easier time making the case to employers, the EEOC, and the courts that they have a substantial limitation to major life activities. The sporadic nature of some psychiatric impairments, the subjective nature of some of the impacts on a person's ability to work (e.g., difficulty concentrating is hard to measure), and the specific exclusion in the ADA of personality traits as impairments all make mental impairments more difficult to substantiate (Paetzold, 2005).

It is also important to be aware of changes in interpretation of these definitions that occur over time on the basis of court rulings. For instance, in Sutton v. United Airlines (1999), the U.S. Supreme Court ruled that factors that mitigate the disabling nature of an impairment may be considered when determining whether a person is covered under the ADA. More recently, on the basis of the assessment that this Supreme Court decision has resulted in some individuals with substantial impairments incorrectly being found as not having disabilities, amendments to the ADA that attempt to reinstate a broad interpretation of protections available under the ADA have been passed (e.g., the ADA Amendments Act of 2008, or ADAAA). During the past few years since the Sutton v. United Airlines decision, individuals with disabilities appear to have been filing for claims of employment discrimination under state laws that provided greater protections than the ADA affords (Bruyere et al., 2007). This illustrates the importance of knowledge of state laws, as well as federal statutes, that provide employment disability nondiscrimination protections for people with disabilities.

The ADA definition of disability, intended by legislators to be broad and open ended, was so contentious and so limited by subsequent court rulings that the ADAAA of 2008 was passed. The intent of the ADAAA was to reject the increasingly narrow judicial constructions of the ADA, constructions that often had a disproportionate impact on people with psychiatric disabilities, in favor of broad coverage (Center, in press; EEOC, 2008d). The ADAAA specifically overturned the Sutton decision by making explicit the legislative intent that mitigating measures not be considered in deciding whether a person has an ADA disability (Center, in press). It retained the basic definition of disability but provided a clearer definition of "substantially limits," expanded on the definition of "major life activities" by providing nonexhaustive lists of examples, and clarified that a condition that is episodic or in remission (such as bipolar disorder or depression) can still be a disability if it would be considered a disability when active (EEOC, 2008d).

To be protected by the ADA, an individual must also be qualified for the job in question. The regulations define this as a person who "satisfies the requisite skill, experience, education and other job-related requirements of the employment position such individual holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position" (EEOC, 1992, ¶ 2, Section 2.3). Essential functions are job duties that have been required of employees in the position because the position exists to perform that function, because the job is highly specialized and the person is hired for that special expertise, or because there are a limited number of other employees to perform the function. For example, the ability to proofread accurately would be an essential function of a copy editor's job. The ability to work nights would be an essential function of a floating supervisor. The ability to communicate with coworkers via e-mail might be an essential part of a job; however, doing this via reading and typing might not be essential if the information could be listened to via speech synthesis software and entered via voice recognition dictation software.
ACCOMMODATION

The ADA differs from most other civil rights legislation in that it requires employers to provide reasonable accommodation. Accommodations are modifications in the job, work environment, work process, or conditions of work that reduce physical and social barriers so that people with disabilities experience equal opportunity in a competitive work environment (EEOC, 1992). Reasonable accommodations are those that do not cause undue hardship, which is defined as causing significant expense or difficulty, not minimal cost or difficulty (Knapp, Foley, & Long, 2006). Costs must be shown to be excessive in relation to the benefits of the accommodation or the employer's financial survival (Vande Zande v. Wisconsin Dept. of Admin., 1995).

Soon after the ADA was passed, employers were worried about the financial costs of accommodation. However, data soon demonstrated that monetary costs were quite low (Braddock & Bachelder, 1994; Schartz, Hendricks, & Blanck, 2006). Yet, lawsuits over the failure to provide accommodation to disabled employees constitute approximately 25% of ADA discrimination charges (Bjelland, Bruyere, Houtenville, Ruiz-Quinanilla, & Webber, 2008), the second largest category of discrimination allegations brought up under the ADA (McMahon, Edwards, Rumrill, & Hursh, 2005; McMahon & Shaw, 2005); discharge is the number one category. Case law has shed light on two important issues (Knapp et al., 2006) that can and should be addressed by I/O psychologists: the accommodation process and the costs and benefits of accommodation.

The Accommodation Process

Employees, as the ones with the most knowledge of their needs for reasonable accommodation, are generally responsible for requesting accommodation from their employers (EEOC, 2002; Knapp et al., 2006) and must explain to the employer what the impairments are that require an accommodation (Taylor v. Principal Financial Group, Inc., 1996). After the request is made, it is the employer's responsibility to engage in an interactive dialogue with the requesting employee to determine which accommodations are appropriate (EEOC, 2002; Knapp, et al., 2006). Most commonly, the immediate supervisor, with or without consultation of his or her supervisor, makes the final decision (Bruyere, Erickson, & Horne, 2002). The requesting individual must establish that he or she has a disability and that there are reasonable accommodations that would allow him or her to perform the essential functions of the job. If the employer determines that the organization is unable to provide the requested accommodation, then it is the employer's responsibility to provide specific evidence demonstrating that an accommodation would cause undue hardship. It should also be noted that employers do not have to provide the specific requested accommodation if an alternative accommodation is available. The employer should give primary consideration to the employee's preference, but, ultimately, the choice between accommodations rests with the employer, as long as the accommodation provided is effective—meaning that it allows the employee to perform the essential functions of the job and offers equal opportunities to enjoy the full rights and privileges of employment (EEOC, 2002; Knapp et al., 2006).

Although a great deal of legal and some public policy research has been conducted about the accommodation process, very little research has been done from a psychological perspective. One issue that deserves attention is the willingness of disabled employees to request an accommodation. Individuals with disabilities who are entitled to accommodation and who would benefit from accommodation are often reluctant to request an accommodation (Anderson & Williams, 1996; Lee, 1997). Research that asks people with disabilities whether they have requested an accommodation shows that fewer than those who need accommodations ask for them. For example, Allaire, Li, and LaValley (2003) found that although 98% of their sample of people with arthritis and rheumatoid disease faced barriers at work because of their disability, only 38% requested an accommodation. Balsen (2007), in her study of people with mobility-related disorders, found that 72% had requested an accommodation.

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1Reasonable accommodation is also required for employees' sincerely held religious practices by Title VII of the Civil Rights Act of 1964. See http://www.eeoc.gov/types/religion.html for EEOC guidance on accommodations for religious practice.
Baldridge and Veiga (2001) developed a model to explain the likelihood that a person with a disability would request an accommodation at work. According to this model, situational variables likely to influence accommodation requests include the accommodation culture (the extent to which the organization supports people with disabilities), the magnitude of the accommodation (e.g., cost, disruption of regular routines), and the onset controllability of the disability. These situational characteristics are proposed to influence the requester's beliefs about asking for an accommodation, such as the perceived usefulness of the accommodation, the anticipated image cost, the perceived fairness of the accommodation, and anticipated compliance. Normative assessments also occur, including the perceived help-seeking appropriateness and the perceived social obligation toward others with disabilities.

To our knowledge, the only empirical test of this model was conducted by Baldridge and Veiga (2006). They surveyed hearing-impaired individuals to determine the extent to which perceptions of supervisory compliance, personal cost of requesting an accommodation, and normative appropriateness mediate the impact of the monetary cost and imposition (as rated by experts) of various accommodations on the likelihood of asking for that accommodation. They found support for their model, suggesting that hearing-impaired individuals strongly considered the social cost of asking for an accommodation. For example, they found that respondents' perceptions of the personal cost and the normative appropriateness of an accommodation accounted for 10% and 11%, respectively, of the variance in the decision to request an accommodation, over and above the perceived monetary cost and imposition of the accommodation. Clearly, more research is needed to test this model to determine whether these findings generalize across other types of disabilities. This was a hearing-impaired sample, whose coworkers were likely to have known about their disabilities and who were more likely to have a political identity associated with their disability than people with other types of disabilities.

Others have suggested additional factors that influence the likelihood of requesting an accommodation. For example, severity of need (Cleveland, Barnes-Farrell, & Ratz, 1997), perceptions of self-competence (Cleveland et al., 1997), and fear of disclosure of a hidden disability (McLaughlin & Gray, 1998) have also been proposed to influence requesting behavior. We know of no research that has examined these other factors. Thus, a great deal of research is needed concerning what influences people with disabilities to ask for an accommodation.

Another avenue for future research is to examine what actually happens to people with disabilities who request accommodations and whether their expectations are justified. Are these concerns on the part of people with disabilities justified? Recent research by Paetzold et al. (2009) found that when accommodations were viewed as increasing the competitive performance of a person with disabilities, others thought that the accommodation was unfair.

Another important question related to the accommodation process is what influences employers to either grant or deny an accommodation request, an issue that has been approached from several different perspectives. First of all, it should be noted that it is a relatively common event for a supervisor to be asked for an accommodation. A recent survey of federal agency supervisors (Bruyère et al., 2002) reported that half of the supervisor respondents had received at least one accommodation request in the past 5 years, about one third had received one to three requests, 11% had received 4 to 10 requests, and 4% had received more than 10 requests. It should be noted that the employment rate of people with disabilities in the federal government is not particularly high (Bruyère et al., 2002) and that these findings coincide with a study of 131 private-sector managers (Florey & Harrison, 2000), which found that 45% had received an accommodation request. To our knowledge, there are no data indicating the percentage of requests that are accepted and the percentage that are refused.

One way of addressing the question of what affects managers' likelihood of granting an accommodation is to ask them. Lee (1997) conducted a survey of a well-derived sample of 500 employers from various industries. These employers agreed that the cost of accommodations and excessive structural modifications were major barriers to accommodating individuals. They agreed to a lesser
extent that higher insurance costs, resistance from coworkers and managers, union contracts, and safety risks were major barriers. However, these data were collected only immediately after the ADA was passed, when employer fears of the cost of accommodation were high (McFarlin, Song, & Sonntag, 1991).

A study of supervisors relating to workplace accommodation practices was also conducted in the federal sector with over 1,000 white- and blue-collar employees across 16 agencies (Bruyère et al., 2002). Costs were seen as less of a barrier to employment for people with disabilities than were supervisor knowledge of which accommodation to make; needs, attitudes, and stereotypes toward people with disabilities; and the lack of related experience and requisite skills in the person with a disability.

Subsequent research has shown that the cost of accommodating individuals with disabilities is quite low (Blanck, 1996; Lee & Newman, 1995) and not necessarily perceived as a barrier by employers. Bruyère (2000) reported that less than 10% of private-sector respondents felt that cost was a barrier to providing accommodations. In Lee’s (1996) sample, 62% of respondents reported that the accommodations provided cost less than $500 and only 11% reported that accommodations cost more than $5,000. This research needs to be conducted again, after employers have had almost 20 years of experience with the ADA.

Another way of examining the question has been to conduct laboratory research experiments where extraneous variables are held constant and internal validity is high. T. L. Mitchell and Kovera (2006) conducted two scenario studies and found, as hypothesized, that respondents were more likely to grant accommodations (and more expensive ones) when the disability was viewed as externally caused compared with self-caused ($\eta^2 = .65$ and $\eta^2 = .61$, respectively). Contrary to predictions, they found mixed results across studies regarding the effect of work history on accommodation granting ($\eta^2 = .30$ and $\eta^2 = .58$). Florey and Harrison (2000) conducted two scenario studies in which they examined the impact of origin of the disability (or onset controllability) and request magnitude on attitudes toward providing a specific accommodation to a hearing-impaired employee. As in T. L. Mitchell and Kovera’s study, they found that respondents intended to give more accommodations to an employee with an externally caused disability than to those whose impairment was self-caused ($\omega^2 = .06$ and $\omega^2 = .02$, respectively)—for example, a person who uses a wheelchair after a drunk-driving car accident (external cause) or a person with health issues resulting from alcohol or drug abuse (internal cause). They also found support for a positive relationship between past performance and intentions to accommodate ($\omega^2 = .05$). They found that the magnitude of the accommodation was only related to attitudes toward accommodation and felt obligation to accommodate but not to actual behavioral intentions. In addition to the experimentally manipulated variables, they also found that performance instrumentality, previous contact with people with disabilities, and perceived fairness of the accommodation influenced intentions to accommodate.

A final way to determine what influences whether accommodations are granted has been to conduct large-scale correlational studies examining the correlates of the types of accommodations provided (e.g., Allaire et al., 2003; Balser, 2007; Campolieti, 2004). In a study of workers with various injuries returning to work, Campolieti (2004) found that only previous vocational training, returning back to the previous employer, and having sprains versus other types of disabilities increased one’s chances of receiving an accommodation. Returning to one’s previous employer had the strongest impact, accounting for about an 8% increase in the probability that an employee would receive an accommodation. Allaire et al. (2003), in a study of persons with rheumatic diseases and arthritis, found that educational attainment, functional limitation, physical demands of the job, having a professional–managerial occupation, and believing that requesting an accommodation would result in receiving one were positively related to the likelihood of receiving an accommodation. Functional limitation had the strongest effect, with a 1-standard-deviation increase in limitation increasing the likelihood of accommodation by 60%. McDonald-Wilson, Rogers, and Massaro (2003) found that for persons with psychiatric disabilities, the strongest predictor of the number of accommodations they received was the
number of functional limitations (e.g., difficulty conversing with others, displaying relevant affect, following instructions). Those with one limitation had a mean number of 1.2 accommodations, whereas those with four limitations had a mean of 2.5 accommodations. The most theoretically developed study in this area, by Balser (2007), examined the likelihood that people with mobility-related disabilities would receive various accommodations. She found that being an employee in the nonprofit sector, unionization, race, and employee input into the accommodation process were related to receiving various accommodations. She found that different factors predicted the likelihood of receiving different types of accommodation. For example, union membership was not related to scheduling flexibility, but union members were 95% less likely to receive work-at-home accommodations. Others have found that employers are more likely to grant accommodations to employees of higher socioeconomic status (Burkhauser & Daly, 1996; Collignon, 1986).

Taken as a whole, it is difficult to draw conclusions from this research because separate disabilities and accommodations have been studied, different lists of factors have been excluded and included, and different questions have been asked. Furthermore, the results of this research do not tell us whether those who do not receive accommodations do not get them because (a) they do not ask for them, (b) they were denied them, or (c) they do not need them. One general conclusion that can be drawn here is that factors reflecting human capital (education, training, occupational level, performance history) are the ones most strongly related to accommodation. Another general conclusion is that factors associated with other types of discrimination (cause of disability or race) also influence the granting of accommodations.

One way in which I/O psychologists can contribute to the literature on the accommodation process is to examine more closely the dialogue and negotiation that takes place between the requester and the grantor (most often the immediate supervisor; McLaughlin & Gray, 1998). Rousseau's (2001, 2004) and Rousseau, Ho, and Greenberg's (2006) work on idiosyncratic deals and flexible work arrangements arise (Rousseau, 2001) and by discussing when such customized work arrangements are likely to be functional and dysfunctional (Rousseau et al., 2006), this new area of research could serve as a basis of a framework for when accommodations for disability reasons will most likely benefit accommodated workers and be viewed as fair by others. Another aspect of the accommodation process that is in the purview of I/O psychologists is to study the decision-making process of those deciding to grant the accommodation. What we have now is very little research outlining the factors related to when accommodations are granted and/or received. However, we know very little about what accommodation grantors think about when making those decisions. Research addressing this issue would make it easier to generalize across disabilities and accommodations.

One question to examine is how managers interpret the meaning of "reasonable accommodation." The ADA stated that

reasonable accommodation is any change or adjustment to a job or work environment that permits a qualified applicant or employee with a disability to participate in the job application process, to perform the essential functions of a job, or to enjoy benefits and privileges of employment equal to those enjoyed by employees without disabilities. (EEOC, 2008a, "What Are My Obligations to Provide Reasonable Accommodations?" section)

With continuing questions about what is "reasonable," ongoing guidance has been needed to bring more precision to both employers' and applicants' employees' understanding of what is reasonable. Are accommodations to be provided to just enable an employee to perform the essential job functions at an acceptable level? Are they to be provided to make the employee more competitive or perform at a higher level? Are they to be provided to make the workplace more tolerable for employees with disabilities?

In an attempt to respond to early feedback about a need for further clarity in defining reasonable
accommodation, the EEOC has continued to issue additional guidance on this topic. Enforcement guidance issued in the fall of 2002 addresses what constitutes a request for reasonable accommodation, the form and substance of the request, and an employer’s ability to ask questions and seek documentation after a request has been made (EEOC, 2002). For example, the EEOC (2002, ¶ 4; see http://www.eeoc.gov/policy/docs/accommodation.html) stated,

A modification or adjustment is “reasonable” if it “seems reasonable on its face, i.e., ordinarily or in the run of cases;” this means it is “reasonable” if it appears to be “feasible” or “plausible.” An accommodation also must be effective in meeting the needs of the individual. In the context of job performance, this means that a reasonable accommodation enables the individual to perform the essential functions of the position. Similarly, a reasonable accommodation enables an applicant with a disability to have an equal opportunity to participate in the application process and to be considered for a job. Finally, a reasonable accommodation allows an employee with a disability an equal opportunity to enjoy the benefits and privileges of employment that employees without disabilities enjoy.

Still, to many managers, the law and its accommodation provisions remain unclear in their implementation. Thus, two important research questions are, How do managers interpret the intended purpose of accommodations? and How do these interpretations influence organizational willingness to provide accommodations?

Another question that can be more systematically addressed is, How do supervisors decide on what is an appropriate accommodation? We do know that supervisors tend to have little information about how and when to grant accommodation (Bruyère, Erikson, & VanLooy, 2000; Bruyère et al., 2007), despite such helpful resources as the Job Accommodation Network (see http://www.jan.wvu.edu/). The research cited above suggests that human capital is related to the granting and receiving of accommodations and that grantors may engage in some type of cost–benefit analysis. The finding that stigmatizing factors are associated with the granting of accommodations suggests that this decision, in part, is also influenced by prejudice. Neither of these decision heuristics is acceptable in considering whether to grant an accommodation. Thus, further research at the behavioral level is warranted.

Further complicating this issue is the sheer breadth of what constitutes an accommodation. The Job Accommodation Network provides employers a wealth of information about what accommodations may be suitable for a great variety of disabilities and the ensuing functional limitations. Different researchers use different ways of grouping and classifying accommodations. For example, from the field of rehabilitation medicine, a taxonomy of assistive technology device outcomes has been developed for use by practitioners in the field (Jutai, Fuhrer, Demers, Scherer, & DeRuyter, 2005), and from the field of rehabilitation engineering, workplace accommodation and computer use classification schemes are beginning to emerge (Bruce & Sanford, in press; Milchus & Bruce, in press). However, to date, no overarching definitive taxonomy of workplace accommodations exists.

To provide an example of the variety of possible accommodations, Table 15.2 lists various accommodations that frequently appear in the literature. Such a taxonomy of accommodations connected to a taxonomy of functional limitations would be useful in developing tools for managers to use in deciding what accommodations are appropriate and effective in addressing various impairments and for research assessing the efficacy of classes of accommodations. The Job Accommodation Network does provide employers with typical functional limitations for a myriad of disabilities and describes accompanying accommodations. However, no taxonomy of potential accommodations is provided. This is one area in which I/O-based research would be useful.

Costs and Benefits of Accommodation
Evidence suggests that the passage of the ADA has not led to better employment figures for people
### TABLE 15.2

Common Types of Accommodations

<table>
<thead>
<tr>
<th>Assistive technologies</th>
<th>Environmental accessibility</th>
<th>Personal assistance</th>
<th>Job restructuring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen reader</td>
<td>Ramps</td>
<td>Job coach</td>
<td>Reassignment to different job</td>
</tr>
<tr>
<td>Adapted keyboard</td>
<td>Automatic doors</td>
<td>Assistant</td>
<td>Reassign tasks to coworkers</td>
</tr>
<tr>
<td>Hearing aid</td>
<td>Ergonomic table</td>
<td>Personal assistance services</td>
<td>Flextime</td>
</tr>
<tr>
<td>TTY communicator</td>
<td>Ergonomic chair</td>
<td>Readers</td>
<td>Modified work schedule</td>
</tr>
<tr>
<td>Braile output device</td>
<td>Modified restrooms</td>
<td>Interpreters</td>
<td>Additional supervision</td>
</tr>
<tr>
<td>Telephone headset</td>
<td>Special parking</td>
<td>Service animal</td>
<td>Excused absences</td>
</tr>
<tr>
<td>Wheelchair</td>
<td>Removal of toxins</td>
<td>Coworker training (e.g., in use of ASL)</td>
<td>Short breaks</td>
</tr>
<tr>
<td>Wrist splints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapted mouse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amplified telephone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mouth stick</td>
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</tr>
</tbody>
</table>

*Note. TTY = teletypewriter; ASL = American Sign Language.*

with disabilities (see Bjelland, Burkhauser, & Houtenville, 2008; Houtenville, Stapleton, Weathers, & Burkhauser, in press; Stapleton & Burkhauser, 2003, for an in-depth discussion of this issue), with some economists arguing that the ADA has caused a decline in employment for people with disabilities (Acemoglu & Angrist, 2001; DeLeire, 2003) and others taking a more positive approach and arguing that the employment statistics are not nearly as bad when one accounts for other factors, such as different definitions of disability or employment (Houtenville & Burkhauser, 2004; Kruse & Schur, 2003). Some also point to the impact of accommodation on the retention of employees. Burkhauser, Butler, and Weathers (2001/2002) found that men and women who are accommodated by their employers are significantly less likely to apply for Social Security Disability benefits in each of the first few years after their conditions begin to impact their ability to work than are those who are not accommodated. In any event, no one argues that the ADA has had a strong positive impact on the employment prospects for people with disabilities.

One rationale given for why the ADA may not have had the intended effect (there are others; see, e.g., Lee, 2003) is presented by economists, who suggest that because of the accommodation stipulation of the ADA, people with disabilities are more expensive for employers to employ (DeLeire, 2000; Donohue, 1994; Weaver, 1991) and thus employers are less likely to hire people with disabilities. This argument states that because employers are legally prohibited from paying people with disabilities less, their mandate to provide accommodation makes a person with a disability more expensive to employ in contrast to another employee at the same productivity level who does not require accommodation.

There are several economic counterarguments to this point of view (Blanck, Schur, Kruse, Schwochau, & Song, 2003; Blanck, Schwochau, & Song, 2003; Jolls, 2000). One such argument questions the assumption that people with disabilities are less productive without accommodation than are those without disabilities (Blanck, Schur, et al., 2003) and that accommodations are always provided at a financial loss (Schartz et al., 2006). Another argues that providing accommodations lowers everyone’s wages and consequently is beneficial to organizations (Jolls, 2000). Most of these arguments are in the realm of economic theory and analysis. However, one question emerges that is in the domain of I/O psychologists: What are the costs and value to the organization of providing employees with accommodations?

Economists and legal scholars have addressed the issue of cost–benefit analyses of accommodations (e.g., Blanck, 1996; Schartz et al., 2006; Stein, 2000). A study conducted by the Job Accommodation Network (1997) found that the median cost of an
accommodation was $200. A large-scale longitudinal study conducted at Sears & Roebuck (Blanck, 1996) found that 72% of accommodations cost nothing, 17% cost less than $100, 10% cost less than $599, and only 1% cost more than $500. In a large-scale study of all private employers in New Jersey, Lee (1997) found that when asked about the most expensive accommodation that had been provided, 38% reported that it cost nothing, 24% reported it cost less than $500, 26% reported that it cost between $500 and $5,000, and 11% said it cost more than $5,000. In dollar terms, the accommodations do not cost very much. Schartz et al. (2006), in a survey of 890 employers who consulted the Job Accommodation Network, found that almost half reported that there was zero cost associated with an accommodation, with a median 1-year cost of $600. Only 10% of private-sector employers selected the costs of accommodation or additional supervision as potential barriers to the employment or advancement of people with disabilities in Bruyère's (2000) employer survey.

There are other indirect costs associated with accommodations. Many disabilities require accommodations involving help and time from supervisors and coworkers (Colella, 2001; McLaughlin & Gray, 1998). For example, McDonald-Wilson, Rogers, Massaro, Lyass, and Cream (2002), in a study of accommodations for individuals with psychiatric disorders, found that supervisors spent an average of 5 hr extra per month and coworkers spent an extra 9 hrs per month in activities for the accommodation of a coworker with psychiatric disabilities. Another indirect cost of accommodation is the potential negative reaction on the part of coworkers (Colella, 2001; Colella, Paetzold, & Belliveau, 2004). Bruyère, Erickson, and Ferrentino (2003) reported that employers found changing coworker and supervisor attitudes to be the most difficult change to make when accommodating employees, and Paetzold et al. (2009) found that coworkers perceive accommodations as unfair when they are viewed as providing a competitive advantage. Cleveland et al. (1997) found that reactions to accommodation varied with the rationale provided for the accommodation, such that other employees may see the presence of a disabled coworker as coercive if the accommodation is presented as being done for legal reasons. Another study found that coworkers resented accommodations that involved modified job duties for people with disabilities and reassignment of certain tasks to coworkers (Stoddard, 2006). Indeed, coworker reactions have been taken into consideration by courts of law in determining undue hardship (Benson v. Northwest Airlines, 1995; Kralik v. Durbin, 1997; Wooten v. Farmland Foods, 1995).

Systematic research that empirically assesses the benefits of accommodation for the organization and the individual being accommodated is relatively scarce. Most studies on the impact of accommodations are case studies (Butterfield & Ramsour, 2004); examine rehabilitation-related variables, such as client satisfaction; do not use reliable and valid assessment methodology; and do not focus on criteria that organizations would find important. One exception involves studies that demonstrate that accommodating people with disabilities is related to their return to work and staying at work (Burkhauser, Butler, & Kim, 1993; Burkhauser et al., 2001/2002; Butterfield & Ramsour, 2004; Fabian, Waterworth, & Ripke, 1993). Another potential benefit of providing accommodations is that accommodations initially provided for disability purposes may be applied to all employees and improve everyone's performance and/or morale. Flextime would be one example of such an accommodation.

Given that employers are still concerned about the costs of an accommodation and believe that it is unlikely that benefits exceed costs (Schartz et al., 2006), research providing a more balanced, systematic, and in-depth cost analysis of accommodations is needed. Parallels can be drawn from similar such attempts to create a balanced perspective on the costs of managing diversity for other protected populations (i.e., race–ethnicity, gender, age). Robinson and Deschant (1997) used higher turnover rates, higher absenteeism rates, and lawsuits on sexual, race, and age discrimination, which can occur when people become more aware of discriminatory practices, as reasons for employers to attend to the need for creating a nondiscriminatory work environment where difference is valued.

A recent study by Schartz et al. (2006) demonstrates what such an analysis should look like. She
and her colleagues surveyed employers who used the Job Accommodation Network to obtain employer estimates of the direct costs, indirect costs, direct benefits, and indirect benefits of providing specific accommodations in their companies. Direct cost was the 1-year estimate of out-of-pocket expenses for providing the accommodation. Indirect costs included lost time due to training, supervisor's time, coworkers' time, and loss of production. Direct benefits included allowing the company to hire, retain, and promote a qualified employee; eliminating the cost of training new employees; savings on workers' compensation and other insurance costs; improved employee attendance and productivity; and increased diversity. Indirect benefits included increased overall company productivity, attendance, morale, profitability, and workplace safety; increased customer base; and improved interactions with coworkers and customers. They found that the mean calendar year net benefit for providing an accommodation was $11,335. Almost 60% of respondents reported a positive net benefit, whereas 18% reported a negative net benefit.

Schartz et al. (2006) asked employers to estimate these costs and benefits. Given the criticism of employer estimates of the dollar value of various personnel interventions that surfaced in the utility analysis literature (Latham & Whyte, 1994), research that empirically connects accommodations to various cost and benefit outcomes is needed. For example, do accommodations actually increase productivity? What types of accommodations are likely to result in the highest indirect costs? In parallel research for other protected populations, Barrington and Troske (2001) empirically assessed the relationship between workforce diversity and the economic performance of an establishment using the New Worker–Establishment Characteristics Database, a nationwide employer–employee matched data set, to estimate the association between productivity and workforce diversity. In this research, their main finding was that diversity either was positively associated with productivity or had no significant relationship with productivity.

In summary, the issue of accommodation needs and offers multiple research opportunities for I/O psychologists. Accommodations may result in direct and indirect costs, such as monetary expense and coworker resentment, respectively. In contrast, there may be direct benefits, such as the increased performance, satisfaction, and commitment of the accommodated person, as well as indirect benefits, such as increased performance and morale of coworkers. What we lack is a systematic manner in which to assess these outcomes. The evaluation of accommodation outcomes lags behind the methodology for assessing the value of other personnel procedures (cf. Cascio & Boudreau, 2008). As the workforce ages, the issue of accommodation will become ever more important both to individuals and organizations. As of now, there is scant advice we can offer to organizations on how to best implement disability accommodation procedures and to individuals on how to secure the accommodations they may need. Hopefully, future research will move us toward this goal.

**SELECTION AND ENTRY**

One thing we do know is that people with disabilities have a harder time entering into employment than do those without disabilities, even when they are qualified, want to work, and are able to work. Statistics derived from the 2006 American Community Survey (Rehabilitation Research and Training Center on Disability Demographics and Statistics, 2007) indicate that only 37.7% of people with disabilities are employed overall and that only 87.1% of those who report that they are able to work actually do, compared with 79.7% and 95.0% of the general population, respectively. Results from the CPS coincide with these findings, revealing that people with disabilities had an unemployment rate of 10.5% compared with 4.7% of the general population (McMenamin, Miller, & Polivka, 2006). Significant numbers of people with disabilities are not finding jobs even though they want to work and are able to work.

As a result of these statistics, there is a significant amount of research examining the selection, hiring, and entry of persons with disabilities into the workforce. D. L. Stone and Williams (1997) laid out a research agenda for the impact of the ADA on organizational selection that provides an excellent
organizing framework for a review of the literature in the past 10 years since their review. We begin by examining disability issues related to job analysis, followed by recruiting, the application process, and testing and assessment. We complete this discussion by addressing the final selection decision.

Job Analysis
Early on in the ADA's history, there was much discussion about the need for organizations to redo job analyses and ensuing position descriptions to comply with the law. (See Vol. 2, chap. 1, this handbook.) The ADA stipulates that a qualified person with a disability is an individual with a disability "who . . . with or without reasonable accommodation, can perform the essential functions of such a position" (EEOC, 1992, p. 11). Although the ADA does not require that new job analyses be performed (K. E. Mitchell, Alliger, & Morfopoulos, 1997), it does bring up two issues that were not typically addressed by previous job analysis methods: identifying essential job functions and the role of accommodation in task performance.

According to the ADA (EEOC, 1992, pp. 13–18), a job function is essential if (a) the position exists to perform the function; or (b) there are a limited number of other employees who could perform the function, or among whom the function can be distributed; or (c) a function is highly specialized, and the person is hired for special expertise or ability to perform it. The EEOC (1992, pp. 13–18) went on to state what information can be used to determine the above criteria. This information includes the employer's judgment, a written position description, the amount of time spent on the function, the consequences of not performing the function, the terms of a collective bargaining agreement, work experience of those performing similar jobs, and other relevant factors.

The implication of the accommodation stipulation suggests that employers focus on outcomes rather than processes when conducting job analyses (K. E. Mitchell et al., 1997), acknowledging that employees with disabilities may be able to get the job done but in a different way than those without disabilities. K. E. Mitchell et al. (1997) conducted a survey to determine the extent to which people with disabilities performed their jobs in a different manner, and, in accordance with the accommodation literature, they found that 54% performed their jobs differently. Thirty percent performed their jobs differently because they used different tools and technological devices (e.g., special software), 5% changed the amount of time worked by taking short naps, and 16% actually switched tasks with other employees.

There has been very little research on job analysis and disability issues. There are many articles and resources written for practitioners that give specific advice. A visit to the Occupational Information Network (http://online.onetcenter.org/) takes the interested employer to the Job Accommodation Network site for help determining what accommodations exist for certain aspects of performance. There are also more in-depth accounts of how job analyses were conducted to meet ADA requirements. For example, Brannick, Brannick, and Levine (1992) conducted a job analysis for pharmacists. Unique aspects of this job analysis were that incumbents and supervisors were asked to rate how essential each task was in getting the job done and how many other people were available to perform the task in question. They came up with four criteria to judge whether a task was essential: the pharmacists thought it was essential, the task had serious consequences if performed incorrectly, no one was available to cover the task, and/or over 70% of incumbents did the task or reported spending an above average amount of time on it. The job analysts then determined the minimum level of sensory and motor requirements for performing each task and had incumbents and supervisors estimate the importance of various knowledge, skills, and abilities for performing the task.

Instead of creating a new procedure, K. E. Mitchell et al. (1997) reviewed common current job analysis methods (task analysis, e.g., the Comprehensive Occupational Data Analysis Program; Positional Analysis Questionnaire; critical incidence techniques; threshold traits analysis; and functional job analysis) to determine which met ADA stipulations. They concluded that functional job analysis (Fine, 1989) was the most satisfactory method because it describes jobs in terms of outcomes and provides information that should help in determining appropriate accommodations (such as the tools and technology used for the job).
In summary, there are plenty of resources and guidance available to practitioners on how to do a job analysis that would be defensible under the ADA. Thus, we see little need for more research on this issue. However, one issue that does relate to job analysis is the way in which position descriptions are written and the effect that has on the likelihood that people with disabilities apply for jobs and are considered suitable applicants. We address this issue in the next session on recruiting. Also, research using people with disabilities as subject-matter experts in job analysis may result in job descriptions that are more flexible and amenable to people who would benefit from such flexibility.

**Recruiting People With Disabilities**

Little research has been conducted on how to recruit people with disabilities into the organization, perhaps because disability is rarely considered an aspect of diversity programs and because there is no affirmative action requirement under the ADA. (See also Vol. 2, chap. 2, this handbook.) Various states and municipalities offer tax incentives for organizations to hire people with disabilities (see Legnick-Hall, 2007, for a listing). Many sources exist for employers to locate people with disabilities, such as rehabilitation agencies, the Employer Assistance and Recruiting Network (http://www.dol.gov/odep/programs/earm.htm), independent living centers, state employment agencies, special Web sites, and disabled person associations (D. L. Stone & Williams, 1997). Organizations that are acknowledged as being “disability friendly” and that have a good record of hiring and retaining people with disabilities tend to be very proactive in recruiting people with disabilities (see Legnick-Hall, 2007, for a series of case studies). For example, Hewlett-Packard engages in multiple partnerships with rehabilitation organizations and schools to recruit people with disabilities (Gaunt, 2007). However, there is evidence that employers are generally unaware of these incentives and sources for hiring people with disabilities. A recent Society for Human Resources Poll (Schramm, 2007) found that 87% of employers were aware of welfare to work tax credits, but only 34% and 27%, respectively, were aware of the disabled tax credit and the SSA employment network cash provision.

The growth of online recruiting on both corporate Web sites and job boards, such as Monster.com, has raised concerns about new barriers to the workplace for people with disabilities. A Cornell University survey of 10 job boards and 31 corporate recruitment sites found that because of poor accessibility features and usability characteristics, it was not possible to complete an application and submit a resume on more than two thirds of the sites (Bruyère, Erickson, & VanLooy, 2005). As nearly 90% of employers surveyed in 2002 were using online job postings, and less than 20% reported any familiarity with existing guidelines for accessible Web design, this is an area of concern (Bruyère, Erickson, & VanLooy, 2005). These technologies may improve access to employment opportunities for some people with disabilities but can preclude people with other types of disabilities from finding available positions.

An important research question is, why do so few employers actively recruit people with disabilities? That is, why are the majority of employers unwilling or unknowledgeable about how to go about recruiting from this demographic? How can employers be motivated to recruit people with disabilities? In September of 2006 and June of 2008, the Interagency Committee on Disability Research held national summit meetings focused on the future direction of disability employment research. The general theme was that this research should move away from a rehabilitation, supply side perspective and take on an employer-centered, demand-side perspective. The above research question is one example of a demand-side research question and one in which I/O psychologists are uniquely qualified to address.

Another recruiting issue of interest to I/O psychologists is how certain recruiting methods and content influence the likelihood that people with disabilities will apply. Such research has already been conducted on how recruiting ads impact the recruitment of Black (e.g., Highhouse, Zickar, Thorsteinson, Stierwalt, & Slaughter, 1999; McKay & Avery, 2006) and female (Avery & McKay, 2006) employees. D. L. Stone and Williams (1997) suggested that factors such as whether recruiting messages emphasized essential job functions, focused on ideal applicants, or used “disability” in the affirmative action
statement could influence the attractiveness of jobs for people with disabilities. To our knowledge, no published research has examined this issue.

**Application Process, Testing, and Assessment of People With Disabilities**

One implication of the ADA is that all prehire assessments must not unfairly discriminate on the basis of disability. Reasonable accommodations must be provided so that job applicants with disabilities have access to all application procedures, and prehire disability-related questions are prohibited (EEOC, 1992). For example, accommodations must be made so that applicants in wheelchairs may attend a job interview, and job notices should be provided in an accessible format (e.g., large print) for applicants with visual impairments. Some accommodations at application time will be unrelated to actual testing, such as holding interviews in accessible locations. However, other accommodations may require that the form of the assessment be changed. For example, if a job does not require vision, accommodations should be made so that paper-and-pencil tests are read to visually impaired applicants. Prior to hiring, employers may not ask applicants about the "existence, nature, or severity" of a disability (EEOC, 2009). Instead, employers may only ask about employees' ability to perform essential job functions and to describe or demonstrate how they would perform these functions, with or without reasonable accommodation. Employers also may not require applicants to take medical exams prior to the job offer. After the offer, receiving the job may be made contingent upon the results of a medical exam only if all employees in the job category are required to take the exam and exclusion based on exam results is related to ability to perform the job (EEOC, 2009).

One natural research question for I/O psychologists is whether the validity of tests that have been modified because of accommodation (e.g., presented verbally rather than visually) generalizes for disabled applicants. The Educational Testing Service and the U.S. Office of Personnel Management (reported in Brannick et al., 1992) have conducted tests to see whether validity generalizes across various forms (Braille, large print, audiocassette) of cognitive ability tests. Psychometric characteristics of the tests remained stable across different test versions. However, there were performance-level differences for people with varying degrees of disability. Thus, one fruitful avenue for future research is the extent to which accommodating people with disabilities during the applicant assessment phase may actually result in unfair testing or adverse impact.

There has been no systematic research or concern about the effectiveness of different selection techniques for people with disabilities, with two exceptions: personality testing and job interviews. (See also Vol. 2, chaps. 5 and 6, this handbook.) Legally, prehire personality testing has been a contentious issue under the ADA (Knapp et al., 2006) because some personality tests are designed to detect mental illness (a disability that can be protected under the ADA). In Karraker et al. v. Rent-a-Center, Inc. (2005), the Seventh Circuit Court of Appeals ruled that the Minnesota Multiphasic Personality Inventory cannot be used in preemployment testing (without showing job relatedness or business necessity) because it can be considered a medical exam. The Minnesota Multiphasic Personality Inventory also screens out people with certain mental disabilities (i.e., mental illnesses, such as anxiety and depression). One interesting line of research would be to determine whether other more commonly used employment personality tests (not designed to assess mental illness), such as those assessing the Big Five, result in adverse impact against people with disabilities. If commonly assessed personality traits such as Conscientiousness or Neuroticism correlate with mental illness, then a case could be made that the use of these personality tests are creating adverse impact (cf. Stone-Romero, 2005).

Several studies examined whether employment interviews of people with disabilities resulted in unfair evaluations (Cesare, Tannenbaum, & Dallessio, 1990; Farina & Felner, 1973; Gouvier, Steiner, Jackson, Schlater, & Rain, 1991; Jasper & Klassen, 1990; Johnson & Heath, 1976; Krefting & Brief, 1976; Marchioro & Bartels, 1994; Miceli, Harvey, & Buckley, 2001; Nordstrom, Huffaker, & Williams, 1998; Reilly, Bocketti, Maser, & Wennet, 2006; Rose & Brief, 1979; C. I. Stone & Sawatzki, 1980; Tagalakis, Amsel, & Fichten, 1988). Although these individual studies tended to have mixed results, Ren,
Paetzold, and Colella (2008) conducted a meta-analysis of these studies (and others examining reactions to paper people) and found that there was a significant effect of disability on hiring decisions (mean $d = -0.09$, 95% confidence interval [CI] = -0.14 to -0.04). They also found that the negative effect was worse for mental disabilities (mean $d = -0.58$) than physical disabilities (mean $d = -0.08$). Recent work not included in this meta-analysis found supporting results. Reilly et al. (2006) found stronger bias against those with depression and substance abuse problems compared with those with a history of cancer. Reilly et al. and Brecher, Braggar, and Kutcher (2006) found that structured interviews helped mitigate the negative bias toward people with histories of disability. Thus, there is pretty strong evidence that bias does occur in interviews and the strength of that bias depends on the type of disability. The next step in this line of research is to understand why this bias may occur and how to mitigate it.

Hebl and her colleagues (Hebl & Kleck, 2002; Hebl & Skorinko, 2005) have conducted a series of experiments examining whether acknowledging one’s disability during a job interview can mitigate bias, based on a line of social psychological research demonstrating that if a stigmatized person acknowledges the stigma in social interaction, that person is viewed more favorably (Belgrave & Mills, 1981; Davis, 1961; Farina, Sherman, & Allen, 1968; Hastorf, Wildfogel, & Cassman, 1979; Mills, Belgrave, & Boyer, 1984). The reasons for this effect range from making the nonstigmatized person more at ease to leading to perceptions that the stigmatized person is better adjusted. Hebl and Kleck (2002) found that an interviewee in a wheelchair was viewed more positively, more likely to be hired, better liked, and considered to have more positive traits and skills than was an interviewee who did not acknowledge the disability. Hebl and Skorinko (2005) found similar results using the same paradigm and also found that the positive effects of acknowledgement only occurred when the acknowledgment was made early in the interview, as compared with later or not at all.

The research on the bias-mitigating effects of acknowledging one’s disability during interviews is important because it leads to implications about how people with disabilities can combat negative reactions. However, most of this research concerns visible disabilities, and the manipulation used in the interview was a wheelchair. Evidence suggests that personnel decision bias is weaker for physical disabilities (Gouvier et al., 1991; Ren et al., 2008), thus conducting such research using more heavily stigmatized and nonvisible disabilities (e.g., depression, AIDS) is warranted. Any research on mental disabilities tends to appear in the rehabilitation literature and focuses on issues such as having a supportive employment assistant present at interviews (e.g., Gervey & Kowal, 2005). A dilemma faced by people with hidden disabilities is whether to acknowledge the disability to gain an accommodation at the risk of experiencing discrimination (Duckett, 2000). This issue presents a future research need.

Final Selection Decisions
In this section, we examine research that generally is aimed at examining why employers do not hire people with disabilities. Research examining why people with disabilities are underemployed has taken two general tracks. One track is to focus on the characteristics of people with disabilities (e.g., age, severity of disability, skill level) that correlate with employment. Most of this research is from a vocational rehabilitation or economics perspective. The other track focuses on decision makers’ attitudes and bias toward people with disabilities. This research is divided into either large-scale surveys of employer attitudes and beliefs about hiring people with disabilities or experimental studies, mostly conducted in the laboratory, which attempt to discern hiring discrimination.

Employer surveys generally show that employers have somewhat positive attitudes toward hiring people with disabilities. Hernandez, Keys, and Balcazar (2000), Unger (2002), and Ainspan (2006) reviewed the myriad of employer surveys that occurred within the decade after the 1990 ADA. Hernandez et al. reviewed 37 studies of various employer attitudes and beliefs toward people with disabilities and the ADA. They found 7 studies in which employers from a variety of settings reported positive global attitudes toward people with a variety of disabilities at all severity levels. They found 11 studies in which
employers reported negative attitudes; however, these studies assessed more specific attitudes or intentions (e.g., Would you hire?) and were more likely to focus on a specific disability (intellectual disabilities, epilepsy, psychiatric disabilities, learning disabilities, back pain).

Unger (2002) reviewed 24 studies focusing solely on employer attitudes. Like Hernandez et al. (2000), she obtained mixed results. She found that employers were more positive when the disability in question was physical as opposed to mental or emotional, they had previous experience with employing people with disabilities, and they had a sense of corporate social responsibility. Common concerns expressed about employees with disabilities included work performance, productivity, safety, dependability, attendance, coworker acceptance, lack of skills, costs (workers compensation, insurance, accommodation), and extra training and supervision. Ainspan (2006) qualitatively reviewed the studies in the previous reviews plus others and came to the same conclusions.

This literature has been criticized on several grounds, including being subject to social desirability (Colella & Stone, 2005; Unger, 2002); focusing on human resource managers who may not be the people making the decisions (Ainspan, 2006; Colella & Stone, 2005); using a diversity of measures, many of which are not validated (Hernandez et al., 2000); and using methodology that makes it difficult to compare studies (Unger, 2002). Also, such surveys were quite popular during the 1990s, but there have been very few since. Furthermore, there has been little research that directly links these attitudes to actual hiring behavior. This leads to the next set of studies that attempt to get more directly at hiring decisions.

In a recent meta-analysis, Ren et al. (2008) located 37 studies that experimentally examined hiring decisions concerning people with disabilities. Most of these studies were conducted in a laboratory setting, using paper or videotaped applicants with a disability and comparing them with a control without a disability. They found a mean effect size (d) of -.09 for disability, with a 95% CI ranging from -.14 to -.04, indicating a small negative bias toward people with disabilities. This finding is corroborated by a study by Schur (2002), who found that 63.2% of people with disabilities who felt they had been discriminated against felt that the discrimination had occurred at hiring, compared with no individuals (0%) in a nondisabled sample who felt they had been discriminated against. The nondisabled sample was more likely to feel like they had been discriminated against in terms of losing jobs (75%, compared with 32.5% of the disabled sample).

Ren et al. (2008) also found that type of disability moderated the effect size, which was mean $d = -.58$ for people with mental disabilities ($k = 6$) compared with $-.08$ for people with physical disabilities ($k = 28$). This finding is corroborated by a study by Chan, McMahon, Cheing, Rosenthal, and Bezyak (2005), who studied EEOC case statistics and found that perceived discrimination (allegations filed with the EEOC) was greater for controllable but unstable disabilities (depression, schizophrenia, alcohol and drug abuse, HIV/AIDS) than for uncontrollable but stable disabilities (visual impairment, cancer, cardiovascular disease, spinal cord injuries). It is interesting to note that Chan et al. found that actual discrimination (EEOC merit resolutions) occurred at higher levels for uncontrollable but stable disabilities. This brings up the possibility not only that people with mental disabilities face more discrimination at hiring time but also that it is more difficult for them to prove it.

A major criticism of research on discrimination conducted in the laboratory using paper people is that it overestimates the impact of bias and does not generalize to the field (Landy, in press). Ren et al. (2008) were able to compare laboratory and field study effects. They did find that negative bias effects were stronger in the laboratory (mean $d = -.12$, $k = 25$, 95% CI = -.19 to -.04) versus the field (mean $d = -.07$, $k = 12$, 95% CI = -.14 to -.01) but that negative bias also remained in the field setting. Thus, it appears that discrimination does appear in the "real world."

**Implications for Needed Research**

Labor statistics that highlight the gap in employment levels between those with and without disabilities make it quite clear that people with disabilities who are able and willing to work have a more difficult time finding and maintaining employment than those who are not disabled. Research has approached
the "why" behind this issue from several angles, focusing on psychological-cognitive explanations (e.g., employer attitudes), more economically based explanations (e.g., increased cost because of accommodation and insurance), inaccessibility issues (lack of accommodation in selection procedures), or inaccurate job analyses. What future research needs to do is to simultaneously consider these different explanations to truly understand the obstacles facing people with disabilities trying to enter into employment. Different explanations lead to different remedies. For example, if the reason for not hiring employees with disabilities rests on stereotypes and erroneous assumptions, then education efforts aimed at hiring managers would help. In contrast, if actual costs are the issue, then such things as tax incentives and grants should help. Rehabilitation professionals could focus on such solutions as better training of the person with the disability.

What is interesting is that there is no one answer to the question of how we can improve hiring rates for people with disabilities and that the most effective solutions may vary by disability. There may be a frame of reference problem here, where people from different disciplines are more inclined to focus on problems relevant to their own field and ignore other potential solutions. Cross-disciplinary research would help address this issue.

INTEGRATION INTO THE WORKPLACE

A great deal of research has examined the entry of persons with disabilities into the workplace, but relatively less research has focused on what happens to them once they get there. More recent research on disability and employment has considered what happens within organizations regarding disability policy and how people with disabilities are treated. We focus on three lines of work here: performance evaluations and promotion, inclusion, and organization culture. (See also chap. 12, this volume; Vol. 2, chap. 9, and Vol. 3, chap. 2, this handbook.)

Performance Evaluations and Promotion

A fair amount of research has examined whether people with disabilities are evaluated unfairly in terms of present or past performance and contribu-
tions (for a review of disability and the performance appraisal process, see Colella, DeNisi, & Varma, 1997). Ren et al. (2008) located 13 studies that were controlled experiments examining the impact of disability on performance evaluations. In line with both the norm to be kind and sympathy effects (Carver, Glass, Snyder, & Katz, 1977; Czajka & DeNisi, 1988; Hastorf, Northcraft, & Piciotto, 1979), they found that the average effect size of the difference between performance evaluations of targets with disabilities and control targets without disabilities was .25, indicating evaluations favored people with disabilities. The 95% CI ranged from .14 to .36. They also examined, but did not find, moderating effects for the sex of the target and type of disability. All of these studies were conducted in the laboratory.

Individual studies have posited and found moderators of performance evaluation effects. One of the most studied (in terms of all types of discrimination) is the controllability or the perceived cause of the impairment, that is, the degree to which the cause of a person's disability is internally attributed (Bordieri & Drehmer, 1987; Chan et al., 2005; Weiner, Perry, & Magnusson, 1988). When the cause of a person's disability is blamed on some aspect of their own behavior or character, evaluations are more negative than when it is perceived that they incurred the disability through no fault of their own. D. L. Stone and Colella (1996) also posited that the following characteristics of disabilities are likely to lead to more discriminatory responses: unattractive aesthetic qualities, progressive course, visibility, disruptiveness, and danger or peril. Colella and her colleagues (Colella, DeNisi, & Varma, 1998; Colella & Varma, 1999) posited and found that stereotypes about how well a given disability fit with a specific job moderated the impact that disability had on performance evaluations in that job.

Given the experimental evidence above and employer reports that people with disabilities perform as well as anyone else (Legnick-Hall, 2007), it does not seem that bias in performance evaluations is a big problem for people with disabilities. This, however, does not translate into better employment opportunities or bias elsewhere in the integration process. It appears that even though raters are fair or even overly generous in their assessments of the
performance of people with disabilities, they still hold lower performance expectations for people with disabilities (D. L. Stone & Colella, 1996). Ren et al. (2008) meta-analyzed the results of 14 studies examining future performance expectations that might lead to lessened opportunity. They found that performance expectations were lower for people with disabilities than for control groups of people without disabilities, holding past performance constant \((d = -0.14)\). They found this negative effect to be greater for people with mental disabilities than physical disabilities, for men compared with women, and in field studies compared with laboratory studies. What is most interesting about these results is that the field effects were so much larger than the laboratory effects, contrary to criticisms that laboratory discrimination studies may inflate bias (Landy, in press).

Colella (1996) posited that such low performance expectations would lead to unrealistic feedback, fewer growth opportunities, and poorer promotion rates for people with disabilities. We know of no research that directly examines the impact of low performance expectations on these outcomes; however, there is research that does suggest that people with disabilities experience these problems at work.

In a much-cited study, Hastorf, Northcraft, and Piciotto (1979) found that nondisabled participants gave disabled performers unrealistically positive feedback. They attributed their results to the norm to be kind; however, lower performance expectations could also result in inflated feedback. Furthermore, paternalistic and patronizing behavior has often been cited as a complaint of people with disabilities (Ainsley, 1988; Colella & Stone, 2005) when others are overzealous in their attempts to protect them from unpleasantness.

Some data do suggest that people with disabilities experience fewer growth opportunities, in terms of training and challenging job assignments, than people without disabilities. In a controlled laboratory study, Colella and Varma (1999) found that raters were less likely to assign a telemarketer with a disability (visual and hearing impairments) to training opportunities than a telemarketer without a disability. Furthermore, studies that examine the quality of work of people with disabilities report that people with disabilities tend to experience jobs with less autonomy and decision making as well as jobs that require less education than comparable nondisabled samples (Grzywacz & Dooley, 2003; Schur, Kruse, Blasi, & Blaneck, 2009; Yelin & Trupin, 2003). The third highest reason for filing a discrimination claim under the ADA is unequal terms and conditions of employment (28,528 allegations from 1992 through 2003), with another 4,516 allegations of unequal job assignments and 1,675 allegations of refusing training (McMahon et al., 2005; McMahon & Shaw, 2005).

Finally, people with disabilities also appear to be at a disadvantage in terms of promotions. A large-scale study of disability employment in the federal government (EEOC, 2008c) found that between fiscal years 2002 and 2006 the number and rate of promotions decreased by 25.2% for people with disabilities, compared with a decrease of 3.99% for federal employees with no disabilities. This lack of promotional opportunities was posited as one reason why people with disabilities leave federal government positions at a much greater rate than other federal employees. A large-scale study of all EEOC ADA allegations (see Bruyere et al., 2007; McMahon et al., 2005; McMahon & Shaw, 2005) found promotion to be one of the top 10 reasons why people filed discrimination charges under the ADA. The EEOC has attempted to clarify issues around performance standards, releasing guidance on the subject of performance evaluations and reasonable accommodations (EEOC, 2008b).

In summary, unfair evaluations of actual work performance do not seem to be a major problem for people with disabilities. However, despite good past performance, evaluators tend to hold unfairly low expectations about future performance. These low performance expectations may be one reason why there is evidence that people with disabilities are prone to receive unrealistic feedback, unsatisfactory growth opportunities, and a disadvantage in promotion tournaments.

Inclusion Into the Organization
In this section, we address the scant research that focuses on how well people with disabilities are included into the organization by its members. By inclusion, we mean the extent to which people with
disabilities are accepted, helped, and treated as others by their coworkers. Ample theoretical reasoning exists for why people with disabilities may suffer from exclusion (Colella, 1996; D. L. Stone & Colella, 1996). Reasons range from communication difficulties, anxiety, stigmatization, stereotyping, and distrust (see Table 15.1). However, aside from studies of people with severe cognitive disabilities in supported employment settings (e.g., Wehman, 2003), this is the least examined area in the field of disability and employment.

Evidence for exclusion comes from social psychological laboratory experiments showing that non-disabled people avoid interacting with people with disabilities (Farina & Ring, 1965; Snyder, Kleck, Strenta, & Mentzer, 1979). More recent studies that frame the issue in a work context have found mixed results (Colella et al., 1998; D. L. Stone & Michaels, 1994). It is interesting to note that Colella et al. (1998) found that non-disabled people were less willing to work with a person with a disability only when their own rewards depended on the disabled person's performance. The results of these lab studies do coincide with survey research of employers and people with disabilities.

Bruyère et al. (2003) surveyed 865 private employers and 403 federal employers about the barriers facing employees with disabilities in their organizations. One of the most significant barriers was coworkers' and supervisors' attitudes and stereotypes (43% of federal respondents and 22% of private-sector respondents). Results of surveys asking people with disabilities about their interactions with and inclusion by supervisors and coworkers are mixed, with some finding that interactions with coworkers and supervisors are not a problem for people with disabilities (e.g., Schur, 2002) and others finding that these interpersonal relationships are more problematic than they are for people without disabilities (e.g., Crudden & McBroom, 1999; Uppal, 2005). A recent large-scale survey (N = 29,897) comparing people with disabilities with those without found that people with disabilities are less likely to be included on teams and receive informal training from coworkers, suggesting that there is a lack of inclusion (Schur, Kruse, Blasi, & Blanck, 2009).

Colella and Varma (2001) examined the extent to which people with disabilities form meaningful relationships with their supervisors compared with those without disabilities from a leader–member exchange framework (Graen, 1976). In both a laboratory experiment and a field survey, they found that when people with disabilities engaged in impression management behavior, their relationships with their supervisors were just as good as those without disabilities. However, in the absence of impression management behavior, people with disabilities had worse relationships with their supervisors than those without disabilities. It appears that engaging in impression management behavior mitigated the negative bias effects on supervisor–subordinate relationships.

In summary, not much is known about the experiences of people with disabilities at work. Self-reports about inclusion are mixed, as are the results of laboratory studies focused on work contexts. However, research in this area has not progressed to systematically examining moderators of the effects of disability on workplace inclusion. One exception is Colella and Varma (1999), who found that employee impression management mitigated negative disability effects. It may be that any behavior that people engage in to enhance their inclusion and success in the workplace is even more important for people with disabilities than for those without them. Furthermore, there are a number of other factors that can influence the inclusion of people with disabilities, such as disability type, job type, reward structure, personality of coworkers, and so forth (cf. D. L. Stone & Colella, 1996). Clearly, this is one area of research in which I/O psychologists can make a significant contribution. Recently, scholars (Legnick-Hall, 2007; Schur, Kruse, & Blanck, 2005; Schur et al., 2009; Stensrud & Gilbride, 2006) have begun to focus on organizational culture as a moderator of the workplace experiences of people with disabilities. The WHO's ICF has the potential to assist disability service administrators, policymakers, and practitioners with creating a transferable conceptual framework for defining indicators of successful outcomes in the integration of persons with disabilities into the workforce and community (Bruyère, 2005).
Culture
Given the findings reported above about the comparably unfavorable work experiences of people with disabilities and the recent focus on the demand side of disability employment issues, several scholars have begun to examine the role that organizational culture plays in determining the work experiences of people with disabilities. Cultural factors include an inclusive, diversity-friendly climate; policies and practices that allow for flexible work arrangements; top management support of the inclusion of people with disabilities; and shared values concerning the worth of all employees. This issue has been studied using a variety of methodologies.

Legnick-Hall (2007) conducted case studies of seven companies recognized as being exemplary employers of people with disabilities. On the basis of these case studies, Legnick-Hall came to several conclusions about the aspects of an organizational culture that is disability-friendly. These are presented in the Appendix.

Schur et al. (2009) surveyed almost 30,000 employees in 14 companies and determined that people with disabilities were paid less and had less desirable job experiences than employees without disabilities. However, they also found that these results did not hold across work sites (n = 175). They found that in work sites where employees (including those without disabilities) reported a fair and responsive climate, differences among the experiences between employees with disabilities and those without disappeared. As workplace climate became less fair and responsive, the gap between employees with disabilities and those without increased.

The results of Schur et al.'s (2009) study are intriguing. However, it should be noted that the data came from a survey that was not designed to specifically test the effects of culture on the workplace welfare of people with disabilities. Stensrud and Gilbride (2006) developed the Employment Opportunity Survey to help rehabilitation specialists find organizations that are most responsive to hiring and retaining people with disabilities. This instrument could possibly be used to assess disability culture in future empirical studies.

In conclusion, most past research has focused on micro factors and processes that result in disability discrimination (e.g., stereotypes, fear of costs) or more macro-economic factors (e.g., effects of insurance). By focusing on organizational-level factors, such as culture, current, and hopefully future, research is expanding what we know about disability effects in the workplace. To some extent, what goes on in the organization has been ignored by disability and employment researchers. More recent research is addressing this problem. Furthermore, most research on disability has taken place at one level (either micro or macro). This research suggests that future research on disability and employment should be addressed from a multilevel analysis perspective.

CONCLUSION
We opened this chapter by stating that not much disability research has been conducted in the field of I/O psychology. However, this review makes it clear that I/O psychologists have a great deal to add to our knowledge about how to integrate people with disabilities into the workforce and ensure that they enjoy the same privileges as everyone else. Disability employment research is taking a new turn by focusing on the employer's perspective, rather than on rehabilitation, legal, or economic perspectives. It is from this demand-side perspective that I/O psychologists can make the greatest contribution because of the field's knowledge of hiring, workplace integration, discrimination, justice, and diversity.

In contrast, if the field of I/O psychology focuses more on disability and employment, then much can be added to our literature in terms of new content and impact. Three particular areas stand out: accommodation, the aging workforce, and the impact on human welfare. This issue of accommodation was discussed in detail earlier in the chapter. Suffice it to say that accommodation brings a relatively new phenomenon into consideration, particularly when we usually define justice as being treated equitably or equally. Furthermore, the issue of accommodation is not limited to people with disabilities. Others, such as parents or older workers, may need accommodations.

The aging workforce is likely to result in increasing numbers of workers with disabilities who may have difficulty staying employed. The U.S. Census Bureau
projects that the 45–54- and 55–64-year-old population in the United States will have grown by nearly 44.2 million (17%) and 35 million (39%) between 2000 and 2010 (U.S. Census Bureau, 2004). By the year 2010, this group will account for nearly half (44%) of the working-age population (20–64 years), and the number of people with disabilities between the ages of 50 and 65 will almost double (Weathers, 2006). Accommodation policies and practices and increased understanding of workplace diversity and disability employment nondiscrimination readily lend themselves to addressing the challenges that employers will face with an aging workforce and the increasing prevalence of disability that these demographics bring. Proactive workplace education about employment accommodation and ways to maximize the productivity of an aging workforce can significantly contribute to aging-worker retention.

Related research can also demonstrate which accommodations, workplace modifications, and policy and practice changes may positively impact the retention and productivity of an aging workforce. I/O psychology researchers are in a unique position to provide the design conceptualization, metrics, and analyses to test the array of interventions the United States will be exploring to keep our aging workforce healthy and fully engaged in the employment environment. I/O psychologists may, in addition, assist with implementation of these interventions. A focus globally on these issues by the I/O psychology field is also imperative.

One example for the need of an international perspective on accommodation and analysis of disability and aging-related workplace factors is the increasing effort in the disability field to find globally acceptable measures for the experience of people with disabilities. Of particular interest is the need to extend the paradigm beyond the medical model to an analysis of how environmental factors impact people with disabilities. There is a growing consensus within the disability research community that environmental factors have a profound effect on the lives of people with disabilities. Elements of the environment are cited for increasing impairments, adding activity limitations, presenting participation restrictions, and contributing to a variety of secondary conditions. However, few methods exist for measuring its effect. The WHO’s ICF highlights this environmental impact and affords us the beginnings of a schema upon which we may be able to build a globally recognized classification of the experience of people with disabilities (Brooke, Whiteneck, & Terrill, 2004). I/O psychologists can certainly contribute to these efforts, particularly in assisting in finding ways to better quantify the employment experience of people with disabilities, such as workplace inclusion, job satisfaction, and equitable access to the terms and conditions of employment.

Finally, with the recent passing of the United Nations Convention on the Rights of Persons With Disabilities (UNCRPD), there is now even greater international contextual support for pursuing the interests of persons with disabilities. The purpose of this Convention is to "promote, protect and ensure the full and equal enjoyment of all human rights by persons with disabilities" (see http://www.un.org/disabilities/convention/conventionfull.shtml, Article 1, ¶ 1). It covers a number of relevant key areas, such as equality and nondiscrimination (Article 5), equal recognition before the law (Article 12), employment (Article 27), and participation in political life (Article 29). The Convention marks a shift in thinking about disability from a social welfare concern to a human rights issue, which acknowledges that societal barriers and prejudices are themselves disabling. Most of the research cited in this chapter is based on North American samples and organizations or other English-speaking countries (England, Australia). What is missing is work that examines how disability may be viewed differently in different cultural contexts and what impact such differences may have on adopting an international perspective. The UNCRPD should serve as a catalyst for such work.

Future research and implementation efforts made by I/O psychology in more effective employment accommodation, inclusion, and advancement for people with disabilities can now ultimately have a significant international influence. The UNCRPD affords a global platform upon which to transfer the knowledge gained in increasing workplace participation for applicants and employees with disabilities in corporate America to the ever-increasing multinational organizational environment and perhaps.
even ultimately into the informal economies of developing countries. Many years of opportunity for significant national and international contribution in this area await.

**APPENDIX: ASPECTS OF DISABILITY-FRIENDLY CULTURES BASED ON LEGNICK-HALL (2007)**

- Top management support for the employment of persons with disabilities.
- Emphasize a business case for employing people with disabilities.
- Align disability initiatives with corporate strategy.
- Develop a disability philosophy that focuses on abilities rather than on disability.
- Have systematic accommodation policies and procedures.
- Address supervisors' and coworkers' negative attitudes and concerns.
- Partner with community resources and schools to recruit people with disabilities.
- Create affinity groups, task forces, and information clearinghouses related to disability.
- Address disability issues in employee diversity training and orientations.
- Monitor how people with disabilities fare in the organization.
- Publicize achievements of people with disabilities.
- Examine personnel policies that could lead to more hiring of people with disabilities (e.g., flextime).

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