

Quality Employment Outcomes: Benefits for Individuals with Disabilities

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A key aspect of quality employment outcomes for individuals with disabilities is receiving benefits similar to those expected by all employees. Access to employee benefits is often a barrier to finding a job for individuals with disabilities. This study compared access to health insurance, paid vacation, paid sick leave, and retirement of full-time employed individuals with disabilities to access of workers in the general population. Results indicated that workers with disabilities had access at a lower rate than workers in the general population. Implications for rehabilitation counselors are discussed.

The 1998 Amendments to the Rehabilitation Act emphasized quality employment outcomes. A key aspect of quality employment outcomes for individuals with disabilities is employee benefits similar to those expected by all employees (Gilbride, Thomas, & Stensrud, 1998; Hart Research Associates, 2001; Shoob, 2001). Access to employee benefits, specifically health insurance, is often cited as an important disincentive for individuals with disabilities entering the labor market (Golden, 1998; West, Kregel, & Banks, 1990). In addition, other benefits, such as vacation, sick leave, and retirement benefits, are significant factors in employee satisfaction for employees both with and without disabilities (Hart Research Associates, 2001; Mitchell, 1983; West et al., 1990). This study considers access to typical employee benefits for individuals with disabilities.

Employee benefits are an important aspect of overall job satisfaction (Blau, Merriman, Tatum, & Rudman, 2001; Golden, 1998; Hart Research Associates, 2001). Research has shown that satisfaction with benefits affects overall employee satisfaction, and satisfaction with specific individual benefits affects employees' overall benefit satisfaction (Blau et al., 2001). Benefits such as vacation, sick leave, health insurance, and retirement are viewed as very important by employees (Blau et al., 2001). In a national survey, workers stated that sick leave (90%), health coverage (75%), and retirement benefits (77%) were essential or very important to creating a "reasonable" work environment (Hart Research Associates, 2001). Studies with individuals with disabilities also use employee benefits as markers of quality jobs (Gilbride et al., 1998; Rumrill & Roessler, 1999; Shoob, 2001; U.S. Department of Education, 1998). West et al. (1990) noted that health insurance, paid vacation, and sick leave "contribute to longterm employment security and satisfaction [for individuals with disabilities]" (p. 126).

Health insurance is arguably the most important benefit (Alston & Bell, 1997). Although two thirds of Americans receive health insurance through their employer (Duchon, Schoen, Simantov, Davis, & An, 2000), a significant percentage of workers do not have health insurance in the United States, a situation that is primarily related to income (Budetti, Shikles, Duchon, & Schoen, 1999; Duchon et al., 2001). In a 1999 survey, Budetti et al. (1999) found that workers earning less than \$35,000 annually are five times as likely to be uninsured as those earning more than \$35,000 (35% vs. 7%). In addition, those earning less than \$35,000 were (a) three times as likely to be in fair or poor health (25% vs. 7%), (h) three times as likely to have skipped needed medical care in the past year because of cost (37% vs. 13%), and (c) four times as likely to have been unable to pay medical bills in the past year (41% vs. 9%; Budetti et al., 1999). Those earning less than \$20,000 were particularly vulnerable, with 25% working for an employer who did not offer health insurance and an additional 17% not being eligible for the employer-sponsored

plan (Budetti et al., 1999).

The cost of employee benefits to employers in the United States has increased dramatically in the past 70 years, from 3% of employers' payrolls in 1929 to 41% in 1993 (Blau et al., 2001). The significant cost of health insurance to employers has "caused employers to tighten or drop health insurance benefits, perhaps making jobs less appealing to people with disabilities and discouraging employers from employing people with disabilities who have high health care costs" (Stapleton, Houtenville, & Goodman, 2001, p. 2). Nationally, employers are being charged increased costs by insurers for health insurance (Clark & Fischman, 2001). In a national survey, insurers averaged a cost of \$4,000 per worker for health insurance in 1999 but expected to charge \$6,000 in 2003.

In addition to rising health insurance costs for employers, health insurance premiums are also rising (Lambrew, 2001). Private health insurance premiums rose by 11% in 2001, compared to increases of 4% in 1999 and 0.8% in 1996 (Lambrew, 2001). Most employers anticipate shifting the increased costs of health insurance to the employee through higher employee out-of-pocket costs, reduced coverage, and less choice (Clark & Fischman, 2001; Lambrew, 2001; Levit, Smith, Cowan, Lazenby, & Martin, 2002).

High out-of-pocket (OOP) expenses are a significant financial burden for workers with employer-sponsored health insurance (Merlis, 2002). OOP expenses are all health insurance costs that must be covered by a worker, including the cost of premiums, deductibles/co-pays, prescriptions, inpatient care, and medical equipment. Although the OOP spending of families did not increase from 1987 to 1996 and the average spending as a share of family income has declined, poorer families with working members incur significant OOP costs. Thirty-one percent of families with incomes between \$15,000 and \$29,999 spend greater than 5% of family income on OOP expenses and 13% spend greater than 10%.

Families with members with health problems also are at risk for increased OOP expenditures. Families with any health problem, regardless of family income, are twice as likely (13% vs. 7%) to spend 5% or more on health-related costs. Specific medical conditions are also associated with an increased likelihood of spending 5% or more on OOP expenses. For example, having a family member with diabetes or a mental disorder doubles the likelihood of this occurring, and having a family member with heart disease makes it 2.5 times as likely.

The likelihood that workers will have access to employer-based health insurance and can afford to use it when it is offered is related primarily to workers' earning level and secondarily to workers' health status. These two factors, earnings and health, particularly affect individuals with disabilities. Although approximately 62% of competitively employed vocational rehabilitation clients earn less than \$7 per hour, the percentage of jobs without health insurance benefits is 87% for clients earning less than \$5 per hour and 65% for clients earning between \$5 and \$7 per hour (U.S. Department of Education, 1998). Thus, a significant proportion of vocational rehabilitation clients are employed at relatively low-paying jobs with a diminished chance to receive health insurance. These low-paying jobs also affect workers' ability to afford health insurance when it is offered by employers. In addition, individuals with disabilities are, by definition, a group with health problems that require the use of health insurance related services, thus increasing worker costs.

One aspect of access to health insurance that is particularly relevant to individuals with disabilities has been the requirement of a waiting period for preexisting conditions before employer-based health insurance could be obtained. This problem was addressed through passage of the Health Insurance

Portability and Accountability Act (HIPAA; U.S. Department of Labor, n.d.) in 1997. HIPAA limits health insurance exclusions for preexisting medical conditions to a maximum of 12 months with a new employer. In addition, the employee is given credit for the length of time he or she had prior health coverage without a break exceeding 63 days. Prior to passage of HIPAA, an employee with a serious medical condition was locked into his or her job (Carlson, 1999). Under HIPAA, an employer is not required to offer health insurance, but if it is offered they cannot deny coverage on the basis of health status, medical condition (physical or mental illness), claims experience, receipt of medical care, medical history, genetic information, evidence of insurability, or disability ("Agencies jointly release rule," 2001). Although health-care plans are not required to provide a particular benefit, the benefit plan offered must be applied uniformly. HIPAA continues to allow employers to restrict access to employees with preexisting conditions for 12 months if there are previous gaps in coverage, but it has reduced the problem of preexisting conditions clauses. HIPAA does not tackle the problems associated with the costs of employer-based health insurance and the lack of health insurance for low-wage earners. The 63-day requirement can also be troublesome if the period between jobs is lengthy. Although the Consolidated Omnibus Budget Reconciliation Act (COBRA) allows individuals the option of continuing the employer-based health insurance after ending employment by paying 102% of the plan premium for up to 18 months (Duchon et al., 2001), for low-wage earners who are between jobs, the cost of premiums can be prohibitive.

Employees who are changing jobs also must endure a significant cost because of income loss associated with forfeited nonportable fringe benefits such as vacation, sick leave, and nonvested pensions (Mitchell, 1983). This is a more acute problem for individuals with disabilities because they are more likely to change jobs frequently (Stapleton et al., 2001; Szymanski, Ryan, Merz, Trevino, & Johnston-Rodriguez, 1996).

In sum, access to fringe benefits is an important issue for workers both with and without disabilities. Although problems associated with access to health benefits and portability of vacation, sick leave, and retirement benefits are significant issues for all workers, workers with disabilities are particularly affected because of the likelihood that (a) wages will be low, (b) health needs will be higher, and (c) the worker will change jobs more often.

The current study focuses on one aspect of the preceding discussion. We analyzed data on whether employers offered specific benefits and compared benefits offered to workers with disabilities to benefits offered to workers in the general population. It was assumed that workers with disabilities are entitled to the same fringe benefits as all workers. The data sets used to analyze access to benefits asked the employee whether the employer offered four benefits—health insurance, paid sick leave, paid vacation, and retirement for full-time workers. Access is defined as the availability of a particular benefit for the employee. This is an important distinction because it focuses on whether the employer offers a particular benefit, not on whether the employee decides to use the benefit. We further assumed that workers will automatically participate in paid vacation, paid sick leave, and retirement benefits because there is no expense to the employee. Participation in employee-sponsored health insurance is more difficult to evaluate because of the associated employee expenses. In addition, whether the employee can participate in a non-employer-based health insurance (e.g., Supplemental Security Income, Social Security Disability Insurance) does not affect whether the employer offers health insurance or other fringe benefits.

Two research questions were considered:

1. Is there a difference in the level of access to benefits between workers with disabilities and workers in the general population?
2. Is there a difference in the level of access to benefits between individuals in categories of disability and workers in the general population?

Answers to these research questions provide a preliminary understanding of the level of access to employee benefits for individuals with disabilities. These answers can inform policymakers, administrators, and rehabilitation counselors as to the relative success in providing individuals with disabilities quality vocational placements.

METHOD

Participants

The participants for this study were from three sources. The first group consisted of Tennessee Division of Rehabilitation Services (TDRS) clients, who were contacted by telephone during fiscal year 1999-2000. NonTennCare clients who were employed full-time ($n = 1,326$) were contacted. Individuals with traumatic brain injury were not included because of the small number of respondents. The second group was composed of respondents to a 1996 Bureau of Labor Statistics, Department of Labor, survey of the incidence of selected benefit plans in small private establishments (U.S. Department of Labor, 1999b). These establishments ($n = 2,202$), which resulted in a combined estimated 39,816,173 workers, were contacted. The third group came from a 1997 Bureau of Labor Statistics, Department of Labor, survey of the incidence of selected benefit plans in medium and large private establishments (U.S. Department of Labor, 1999a). These establishments ($n = 1,945$), which resulted in an estimated 38,409,120 workers, were contacted. Employee benefit data for the southern geographic region, which includes Tennessee, indicate that employee benefit levels in the South are nearly identical to the average benefit levels nationwide (U.S. Department of Labor, 1999a, 1999b). Thus, benefit levels in the United States are comparable to Tennessee levels and can be reasonably used for comparison purposes.

TDRS participants ranged in age from 18 to 72 years ($M = 30.2$, $SD = 11.5$), with 49% between ages 18 and 24, 29% between ages 25 and 40, and 22% older than 41. Most participants were never married (65%), but 19% were married and 16% were divorced, separated, or widowed. Most (82%) respondents were Caucasian, and 17% were African American, less than 1% American Indian, and less than 1% Asian and Pacific Islander. Participants could identify themselves as an individual of Hispanic origin (Cubans, Puerto Ricans, Mexicans, etc.) and also choose one of the racial categories. Forty-nine percent had not received a high school diploma, whereas 39% had completed high school, 11% had completed post-high school education, and 1 were in special education. More than half (56%) of the respondents were men.

Participants reported a primary and secondary (if any) disability, as well as the severity of their disability. Of participants reporting the severity of their disability, 77% reported a severe disability. Nineteen percent of participants reported a secondary disability. Respondents reported the following primary disabilities: (a) 41% chronic medical conditions, (b) 22% psychiatric disorders, (c) 20% mobility and orthopedic impairments, (d) 9% hearing or visual impairments, and (e) 8% mental retardation.

Instrument

The researcher used two existing data sources for analysis in the current study. The first source was a 47-item questionnaire regarding clients' satisfaction with TDRS programs and services, current employment status, and wages and benefits. In addition to demographic questions, the questionnaire was divided into three sections. The first section, 26 items, contained questions concerning client satisfaction with services. An example of a question is "Did your counselor try to understand your problems and needs?" Respondents used a rating scale with responses ranging from 1 (most of the time) to 3 (hardly ever) in addition to "not sure" and "does not apply." The second section, 20 items, consisted of questions about employment status, pay, and hours. The third section consisted of a single item, "Which of these benefits does your employer provide?" Clients responded "yes," "no," or "don't know" separately to the listed benefits. Data on the size of the employer for employed clients were not collected.

The second data source was the Bureau of Labor Statistics, Department of Labor, on the incidence of selected benefit plans in small, medium, and large private establishments in the United States. One survey collected information from small private establishments, and a second survey collected information from medium and large private establishments. Both Bureau of Labor Statistics surveys used the same survey methodology. The survey of small private establishments reported on establishments with fewer than 100 employees, and the survey of medium and large private establishments reported on establishments with 100 and 250 or more employees, respectively.

Procedure

Each month, the TDRS provided a list of clients. We contacted clients by telephone 60 days after closure and administered the questionnaire to them. If the initial attempt to contact the client was unsuccessful, six additional attempts were made. We attempted to contact 10,387 clients. Of this number, 4,754 (46%) were contacted and completed the questionnaire. We were unable to contact 4,913 (47%), and 722 (7%) were contacted but refused to respond. Ninety-three percent of the individuals who completed the questionnaire were clients, and the other 7% were parents (5%) and family members and guardians (2%). Of the 4,754 clients who were contacted and completed the survey, approximately 43% returned questionnaires that were unusable due to missing data and frequency of items that were marked "not sure" and "does not apply" or that received no response. Only surveys that were nearly complete were used for the current study. This requirement reduced the usable surveys to a final sample of 2,732 surveys, representing 57% of completed surveys and 26.3% of the original 10,387. The 2,732 participants consisted of both currently employed and unemployed clients.

A subset of the 2,732 surveys was analyzed. Because the purpose of the study was to investigate access to employer-provided benefits, only employed clients' responses were used. Of the 2,732 clients, 1,822 were employed. Those individuals receiving health insurance from TennCare, a state-administered managed health insurance program for individuals who are eligible for Medicaid or who lack access to health insurance (Bureau of TennCare, n.d.), were not included. A final sample of 1,326 full-time employed participants, not receiving TennCare, were used for analysis.

The Bureau of Labor Statistics conducted a probability sample of all employees in private nonfarm industries in the United States. Bureau field economists visited employees or contacted them by telephone and requested documentation of their benefit plans. The sample design used was a two-stage probability sample. The first stage of sample selection is a probability sample of establishments stratified by industry group using the Standard Industrial Classification. The second stage is a probability sample of occupations stratified by the Standard Occupational Classification and region. For the survey of small

private establishments, 4,482 establishments were contacted, of which 2,202 responded and 2,280 did not respond, were out of business, or were out of the scope of the survey (e.g., farm business or too many employees). For the survey of medium or large private establishments, 3,640 establishments were contacted, of which 1,945 responded and 1,695 did not respond or were out of business or out of the scope of the survey.

Data Analysis

Access to benefits was defined as the proportion of individuals who had access to the specific benefit analyzed. For the two research questions, a two-sample test of proportions was conducted (Hinkle, Wiersma, & Jurs, 1988). For each test of proportions, the p value and effect size are provided. Cohen's h is provided as a measure of effect size (Rosenthal & Rosnow, 1991). Cohen's h is the difference between the arcsin transformations of the two proportions. According to Cohen (1977), an h value of .20 is considered a small effect, an h value of .50 is a medium effect, and an h value of .80 is a large effect. Rosenthal, Rosnow, and Rubin (2000) noted that these are "convenient guidelines" and should not be used "mechanically" (p. 15). As suggested by Rosenthal et al., the primary focus for interpretation of the results will be on the "practical significance as judged by the effect size" (p. 4). The proportion of employers offering a specific fringe benefit can also be interpreted directly as the chances that a particular client will find a job offering the benefit. For example, if health insurance is offered by 54% of employers of vocational rehabilitation clients, one can interpret this as a client having a 54% chance that her or his place of employment will offer health insurance. An alpha level of .05 was used for hypothesis testing. As with effect size interpretation, an alpha level of .05 as acceptable is used for guidance (Rosenthal et al., 2000). In addition, the proportion of individuals provided the benefit is presented in Tables 1 through 3 and Figure 1.

RESULTS

Research Question 1: Is there a difference in the level of access to benefits between workers with disabilities and workers in the general population?

Because all results exhibiting at least a small effect (greater than .20) were also statistically significant at the .05 alpha level or better, results exhibiting at least a small effect are noted. The group of individuals with disabilities had access to benefits at a practically significant lower proportion than individuals in (a) medium/large establishments for health insurance, paid vacation, and retirement benefits and (b) small establishments for paid vacation benefits (see Table 1 and Figure 1). The group of individuals with disabilities had access to health insurance, paid sick leave, and retirement benefits at levels similar to those of individuals in small establishments and paid sick leave benefits at levels similar to those of individuals in medium/large establishments. Three comparisons are noteworthy:

1. Individuals with disabilities were 20% less likely ($h = .49$) to have access to vacation benefits than were workers at small establishments.
2. Individuals with disabilities were 28% less likely ($h = .78$) to have access to vacation benefits than were workers at medium/large establishments.
3. Individuals with disabilities were 36% less likely ($h = .75$) to have access to retirement benefits than were workers at medium/large establishments.

Research Question 2: Is there a difference in the level of access to benefits between categories of disability and workers in the general population?

Because all results exhibiting at least a small effect (Cohen's h less than .50) were also statistically significant at the .05 alpha level or better, results exhibiting at least a small effect are noted (see Table 2 and Figure 1). Individuals in each category of disability had access to health insurance, paid vacation, and retirement benefits at a practically significant lower proportion than individuals at medium/large establishments with two caveats. The effect sizes for mobility/orthopedic disabilities and chronic health conditions were $h = .18$, which is slightly less than Cohen's cutoff point for a small effect.

A number of comparisons are noteworthy. First, individuals in each category of disabilities were much less likely to have access to vacation benefits than were workers at medium/large establishments, with gaps ranging from 19% to 35% for paid vacation. Second, large gaps in access were found for retirement benefits for visual or hearing impairments (33%, $h = .69$), psychological disabilities (38%, $h = .80$), and mental retardation (54%, $h = 1.14$). Finally, individuals with mental retardation were 37% less likely ($h = .77$) to obtain access to health insurance than were workers at medium/large establishments.

Individuals in each category of disability had access to paid sick leave benefits at levels similar to those of individuals in medium/large establishments, except individuals with mental retardation, who had access to benefits at a significantly lower rate. Individuals with mental retardation fared worse than other groups of individuals with disabilities, with one small effect size, two medium effect sizes, and one large effect size.

Individuals in each category of disability had access to paid vacation benefits at a significantly lower rate than did individuals who worked at small establishments (see Table 3 and Figure 1). Individuals with mental retardation had access to health insurance benefits at a significantly lower rate than did individuals at small establishments. Individuals with visual or hearing impairment and mobility/ orthopedic disabilities had access to paid sick leave benefits at a significantly higher rate than did individuals at small establishments. Individuals with mental retardation had access to retirement benefits at a significantly lower rate than did individuals at small establishments. In addition, individuals with chronic health conditions had access to retirement benefits at a significantly higher level than did individuals at small establishments. All other comparisons revealed that individuals with specific disabilities and employees of small establishments had access to benefits at similar levels. A number of comparisons are noteworthy. First, individuals with mental retardation experienced gaps in access to health benefits (25%, $h = .51$), paid vacation benefits (26%, $h = .60$), and retirement benefits (19%, $h = 1.14$), compared to small establishments. Second, individuals with chronic health conditions had access to retirement benefits at a higher level than individuals at small establishments (25%, $h = .51$).

TABLE 1. Tests of Proportion for Access to Benefits Received Between Individuals with Disabilities and Employees of Small and Medium/Large Establishments

Benefit	Disability	Small establishments	Medium/large establishments
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	(%)	%	h	p	%	h	p
Health	60	64	.080	.001	76	.340 (a)	.001
Vacation	67	87	.490 (a)	.001	95	.780 (b)	.001
Sick	55	51	.080	.002	56	.020	.400
Retire	43	46	.060	.028	79	.750 (b)	.001

Note. Percentages represent the proportion of individuals who had access to the benefit. Tests of proportions are between the disability group and small establishments and between the disability group and medium/large establishments. Health = health insurance; Vacation = paid vacation; Sick = paid sick leave; Retire = retirement benefits.

(a) Small effect. (b) Medium effect.

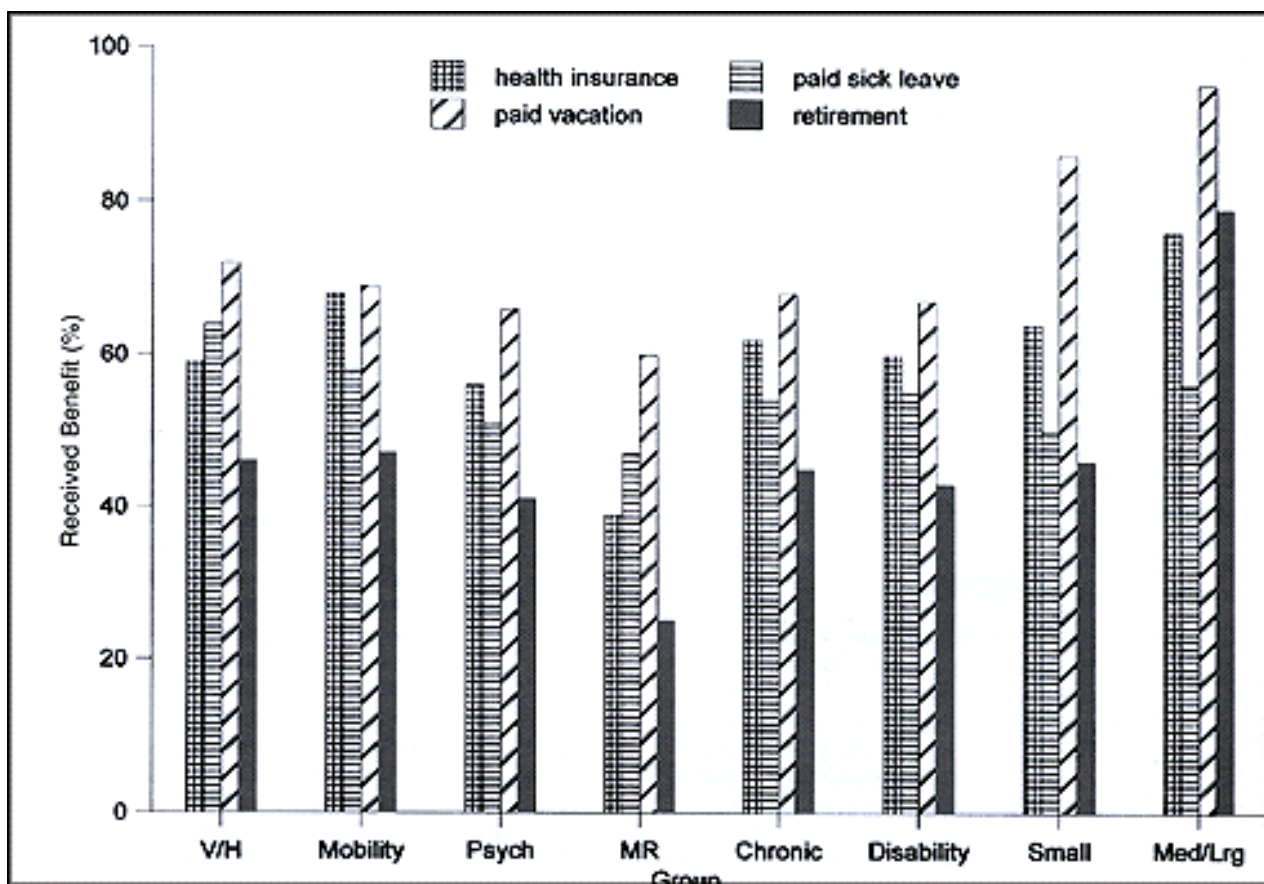


TABLE 2. Tests of Proportion for Benefits Received Between Categories of Individuals with Disabilities and Employees of Medium/Large Establishments

Benefit	%	h	p	%	h	p
Health insurance	59	.360 (a)	.001	68	.180	.005
Paid vacation	72	.670 (b)	.001	69	.730 (b)	.001
Paid sick leave	64	.160	.001	58	.040	.440
Retirement benefits	46	.690 (b)	.001	47	.670 (b)	.001

Psy

MR

Benefit	%	h	p	%	h	p
Health insurance	56	.420 (a)	.001	39	.770 (b)	.001
Paid vacation	66	.800 (c)	.001	60	.920 (b)	.001
Paid sick leave	51	.100	.120	47	.180	.070
Retirement benefits	41	.800 (c)	.001	25	1.140 (c)	.001

CH

Benefit	%	h	p	M/L (%)
Health insurance	62	.300 (a)	.001	76
Paid vacation	68	.760 (b)	.001	95
Paid sick leave	54	.040	.430	56
Retirement benefits	71	.180	.001	79

Note. Percentages represent the proportion of individuals who had access to the benefit. Tests of proportions are between each disability group and medium/large establishments. V/H = visual or hearing impairment; M = Mobility or orthopedic disabilities; Psy = Psychological disabilities; MR = mental retardation; CH = chronic health conditions; M/L = medium/large establishments.

(a) Small effect. (b) Medium effect. (c) Large effect.

TABLE 3. Tests of Proportion for Benefits Received Between Categories of Individuals with Disabilities and Employees of Small Establishments

V/H				M		
Benefit	%	h	p	%	h	p
Health insurance	59	.100	.250	68	.080	.160
Paid vacation	72	.350 (a)	.001	69	.410 (a)	.001
Paid sick leave	64	.280 (a)	.001	58	.180	.010
Retirement benefits	46	.000	.960	47	.020	.470

Benefit	%	Psy		%	MR	
		h	p		h	p
Health insurance	56	.160	.004	39	.510 (b)	.001
Paid vacation	66	.480 (a)	.001	60	.600 (b)	.001
Paid sick leave	51	.020	.750	47	.060	.520
Retirement benefits	41	.110	.070	25	1.140 (c)	.001

Benefit	%	CH		S (%)
		h	p	
Health insurance	62	.040	.280	64
Paid vacation	68	.440 (a)	.001	86
Paid sick leave	54	.080	.080	50
Retirement benefits	71	.510 (b)	.001	46

Note. Percentages represent the proportion of individuals who had access to the benefit. Tests of proportions are between each disability group and small establishments. V/H = visual or hearing impairment; M = Mobility or orthopedic disabilities; Psy = Psychological disabilities; MR = mental retardation; CH = chronic health conditions; S = small establishments.

(a) Small effect. (b) Medium effect. (c) Large effect.

DISCUSSION

In general, workers in medium/large establishments and small establishments had access to health insurance and paid vacation at a higher rate than did individuals with disabilities. Workers in medium/large and small establishments had access to paid sick leave benefits at a rate similar to that of each category of individuals with disabilities. Workers in medium/large establishments had access to retirement benefits at a higher rate than did individuals with disabilities, whereas workers in small establishments had access at a rate similar to that of workers with disabilities.

In general, workers with disabilities were less likely to have access to health insurance, paid vacation, paid sick leave, and retirement benefits. The surveys of vocational rehabilitation clients and workers in the general population asked employees if their employer offered a specific benefit. Thus, the interpretation of the results is different for health insurance than for paid vacation, paid sick leave, and retirement benefits. Because there are typically no employee expenditures associated with paid vacation, paid sick leave, and retirement benefits, one could assume that if the employer offered those benefits and the employee was eligible, the employee would receive the benefit. Conversely, the OOP costs associated with health insurance (i.e., premiums and OOP expenses) are likely to negatively affect utilization of those benefits, even when they are offered. An alternative explanation for why individuals with disabilities have less access to health insurance benefits is that employers do not offer health insurance uniformly, thus making them out of compliance with HIPAA provisions. The most likely explanation is that workers with disabilities earn less than workers in general and, consequently, have jobs that are less likely to offer health insurance.

Implications for Rehabilitation Counselors

Employee benefits are an important aspect of employment. Consequently, the rehabilitation counselor should consider the fringe benefits of potential employment as an essential consideration in career exploration and job placement activities. With respect to access to benefits, the data provided evidence that workers in each category of disabilities had less access to benefits than did workers in the general population. This gap was evident when comparing workers with disabilities with workers in both medium/large establishments and small establishments, although medium/large establishments typically offered more benefits than did small establishments.

This suggests that rehabilitation counselors need to increase the number of individuals with disabilities who find jobs with benefits. Fringe benefits should be an important consideration early in the job placement process. For example, clients should consider their need for fringe benefits when they are exploring career options. In addition, the results suggest that vocational rehabilitation clients will have a better chance of finding employment with access to benefits through medium or large employers than through small employers. This is not surprising because each employer forms a "mini-health system," through which the cost of health care is shared by all employees ("The Unraveling of Health Insurance," 2002). Health insurers charge employers for coverage based on the number and health of the workers. Larger employers can obtain health insurance at a lower rate per person and are better able to afford health care for their employees. As Stapleton et al. (2001) noted, increases in health care costs have "caused employers to tighten or drop health insurance benefits" (p. 2). Although health insurance costs to employers in general increased by 11% in 2001, the increase was considerably higher for small employers (Prakash, 2002). It is noteworthy that 60% of uninsured heads of households work at small employers (Prakash, 2002).

Limitations and Further Research

Conclusions about the results are limited by the following considerations:

1. This study utilized an ex post facto design. A limitation of ex post facto designs is that it is difficult to determine a causal link between variables.
2. Slightly less than half (47%) of the potential respondents could not be contacted, and 7% were

contacted but refused to reply. Of those who responded to the questionnaire, approximately 50% did not participate in the study due to missing data. It is unclear whether nonrespondents and respondents with missing data differ significantly from respondents.

3. Interviews were completed during the 1999-2000 fiscal year with Tennessee Division of Rehabilitation Services clients. Consequently, the interpretation of the results should be limited to the sample examined at the time of the study. It should be noted, however, that benefit data for the southern geographic region, including Tennessee, show benefit levels similar to the national average.
4. Although it is known that larger employers are more likely to offer benefits, the size of the employer for vocational rehabilitation clients was not known. Thus, it is possible that the gap in access to benefits is partly a function of the typical size of the employer for vocational rehabilitation clients.
5. The samples of workers in small and medium/large employers are likely to have included individuals with disabilities, consequently contaminating the comparison group with members from the target group. It is possible that the discrepancy between benefits for persons with disabilities and workers in the general population would have been larger if workers with disabilities were not included in the comparison group.
6. Because the comparisons were made between workers in the general population and workers with disabilities, rather than between workers with the same employers, results should be interpreted with caution.
7. A potentially significant moderator variable on access to benefits is the annual income of the worker. This variable was not analyzed because wage information on the workers in the general population was not known and wage information on the workers with disabilities was incomplete.

A number of unanswered questions have been suggested by this research. First, because the current study investigated access to benefits for only full-time workers, the effect of part-time employment should be explored. There is evidence that individuals securing part-time employment are less likely to receive fringe benefits (West et al., 1990) and that two related factors, specifically lower math and reading levels and jobs that pay less than \$7 per hour, are significantly more likely to indicate a lack of health insurance (Shoob, 2001; U.S. Department of Education, 1998). Second, the impact of employment in governmental jobs should be explored. One would expect that a higher proportion of governmental workers would receive a full package of fringe benefits. Third, it would be informative to examine the effect of gender and ethnicity on benefit levels, looking at both comparisons among people with disabilities and comparisons between individuals with disability and workers in the general population. Fourth, with respect to health insurance, employees' access to health insurance may be different from their utilization of health insurance benefits. It would be informative to investigate the use of health insurance when offered by the employer, especially for workers with low wages and significant health needs. Finally, the effect of the level of functional limitations on benefit level should be explored.

Conclusions

The increased difficulty that individuals with disabilities have securing employment with benefits relative to the general population focuses attention on the important advocacy role of rehabilitation counselors. Advocating for employment with benefits can occur at three levels:

1. Rehabilitation counselors can help clients learn to advocate for themselves (Commission on

- Rehabilitation Counselor Certification, 2001; Koch, 2000; Moxley & Freddolino, 1994; Pennell, 2001). Clients who are knowledgeable about their rights as employees and capable of effectively communicating these rights to their employer are more likely to secure employment with benefits.
2. Rehabilitation counselors can advocate for their clients by assisting them in finding jobs with employers who offer benefits.
 3. Rehabilitation counselors can advocate at legislative and policy levels. Furthering the interests of clients by affecting legislation and public policies is considered a legitimate and important role of rehabilitation counselors and counselors in general.

As Bruyere (2000) noted, rehabilitation service providers play an important part in the development of social policy. McConnell (2000) asserted the importance of the "political side of disability policy formulation, for example, coalition building, consumer activism, policy priorities, [and] legislative advocacy" (p. 5). The counseling profession also views legislative advocacy as important (American Counseling Association, 1999, 2001; Eriksen, 1997). If rehabilitation counselors are to be effective in assisting clients with securing jobs with benefits, they must act as constructive advocates.

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