Competitive Employment Outcomes of Vocational Rehabilitation

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Abstract

This study examines occupational outcomes for successfully closed vocational rehabilitation (VR) consumers using the Standard Occupational Classification (SOC) system. It replicates previous research by Walls and Fullmer (1997) that quantified the top 50 job titles and the top five occupations by disability categories, including blindness, deafness, cerebral palsy, autism, mental illness, and others. Median hourly wages for VR participants are reported and compared with those of the general labor force (GLF). Findings and implications are discussed, and suggestions are offered to rehabilitation counselors about how to expand consumers' job and career options. The main recommendations are that counselors focus on functional limitations rather than disability categories, and that vocational opportunities be expanded through assistive technology and job accommodations.

Keywords: Employment, Vocational Rehabilitation, Occupational Outcomes, RSA 911

Competitive Employment Outcomes of Vocational Rehabilitation

Descriptive and comparative data from the Rehabilitation Services Administration (RSA) 911 Case Service Report have been used to provide insight about the range of occupations, the most commonly obtained jobs, and the specific jobs that are obtained across various disability categories (Capella, 2003; Patterson, 2010). Occupational outcome data regarding earnings, benefits, employee autonomy, career advancement opportunities, and other objective and subjective characteristics of an occupation can also be used to assist consumers in exploring diverse career possibilities (Gilbride, Thomas, & Stensrud, 1998; Loprest, 2007). To provide insight on occupations obtained after successful VR closure, this study describes the top 50 occupational outcomes for consumers who exited VR with an employment outcome in fiscal year 2008. The study also describes the top five occupational outcomes for 23 disability categories.

This study updates previous research by Walls and Fullmer (1997) that used the Dictionary of Occupational Titles (DOT) classifications. There are several reasons to update this study. First, RSA is now using SOC outcome codes instead of the DOT; the current study also uses the SOC categories. To the best of our knowledge, only one previously published study has examined VR outcomes using the SOC system (Boutin, 2010). Second, this study reports how the wages earned by VR consumers after closure compare with the general labor force (GLF) for identical occupational classifications. Median hourly wages are reported for VR consumers by occupational title and compared with Bureau of Labor Statistics (BLS) data on entry-level wages from the GLF (BLS, 2009). Finally, the VR demographic profile has changed since 1997, with an increase in consumers with attention-deficit hyperactivity disorder (ADHD), specific learning

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disabilities (SLD), and autism. Updating Walls and Fullner indicates changes (or stability) in occupational outcomes for the 2008 VR population.

Occupational Classification Systems

In 2004–2005, most federal statistical agencies, including RSA, changed from the DOT to the SOC system. An RSA policy directive (RSA-PD-06-01) required the State-Federal VR programs to transition from the DOT to the SOC system beginning with Federal Fiscal Year 2007 (October 1, 2006). Because this change is recent, most published research on VR occupational outcomes uses DOT codes. DOT is a descriptive and hierarchical system that allows counselors to assess consumers' goodness of fit for a specific occupation by reviewing information on a job's complexity, physical demands, and associated working conditions, as well as the motor skills it requires. DOT uses a nine-digit code to describe categories of occupations (e.g., professional, technical), divisions within each occupation, and work function related to data, people, and things (Patterson, 2010). In contrast, the more recently developed O^*NET emphasizes skills, as opposed to tasks. Although O*NET has been useful in many situations, the Social Security Administration has recommended that vocational experts continue to use the DOT when testifying on the disability issues of claimants applying for Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI). It regards the O*NET as lacking sufficient data when compared to the DOT (M. Brodwin, personal communication, June 2, 2010)

The federal government adopted the SOC system across all federal agencies so data would be comparable from one agency to another. The system "is designed to reflect the current occupational structure of the United States; it classifies all occupations in

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which work is performed for pay or profit. SOC covers all jobs in the national economy, including occupations in the public, private, and military sectors" (Standard Occupational Classification, 2006, p. 28536). SOC uses a six-digit code and a four-level classification system consisting of 23 major groups. Major groups are divided into 96 minor groups, then into 449 broad occupations, and finally into 821 detailed occupations. Occupations requiring similar skills or involving similar work activities are grouped at each of the four levels of hierarchy to facilitate comparisons (BLS, 2010). A search program is available that provides equivalent codes across DOT and SOC categories (O*NET, 2010) A major limitation inherent in the SOC system is that it is not a validated assessment instrument. For example, there are no distinct occupational titles for supervisors and no titles for volunteer work. In other words, SOC is not a measurement tool that can determine appropriate occupations based on the functional abilities of VR clients.

Research on VR and Occupational Outcomes

A considerable number of researchers have examined VR occupational outcomes using RSA 911 data (e.g., Boutin & Wilson, 2009; Capella, 2003; Dunham, 1998; Dunham, Schrader, & Dunham, 2000; Walls & Fullmer, 1997; Walls, Misra, & Majumder, 2002; Whitfield, 2009). Recently, Boutin (2010) used codes in the 911 data to examine outcomes after VR closure. He reported the majority of consumers were closed in service-oriented positions. He contrasted these findings with data from the BLS indicating that more people in the GLF hold managerial jobs when compared to the VR population. Studies prior to Boutin (2010) that investigated multiple disability groups and occupational patterns over time used DOT codes. For example, Walls and Fullmer (1997) examined occupational outcomes for 13 disability categories. They found that the most common occupations were janitor, chef or cook, hospital attendant, and porter. They also reported that occupational outcomes were similar across several disability categories. Not surprisingly, the authors concluded that functional limitation was likely a stronger determinant of occupational outcomes than disability category. Subsequently, Walls et al. (2002) examined trends in occupational outcomes across three decades: 1978, 1988, and 1998. The authors reported an increase in service and professional/technical occupations over the years and a corresponding decrease in machine trades and processing.

Capella (2003) compared occupational outcomes for consumers with hearing loss to outcomes for consumers with other disabilities. She reported few differences in occupational outcomes across disability groups, similar to Walls and Fullner (1997). She did find substantive differences between disability groups and the GLF. In particular, VR consumers (i.e., disability groups) were employed in lower-skill jobs than the GLF. Capella limited her sample to consumers who were not employed at the time of application for VR services.

Boutin and Wilson (2009) examined occupational outcomes for consumers who were deaf and hard-of-hearing. The authors dichotomized professional and nonprofessional DOT categories for their analysis and reported that consumers who were deaf were less likely to be in professional occupations compared to consumers who were hard of hearing. The converse was also true. Consumers who were deaf were more likely to be in nonprofessional positions than consumers who were hard-of-hearing.

Studies by Dunham (1998) and by Dunham et al. (2000) examined occupational outcomes for consumers with Specific Learning Disabilities (SLDs). They found that African Americans with SLDs were most likely to be closed in service occupations (48.4%), followed by clerical occupations (16.7%), with 6.5% in professional/technical occupations. They reported that the rates of professional/technical occupations were higher (15%) in 1998 and attributed the difference to higher education levels. Dunham et al. (2000) also examined occupational outcomes for a small sample (n = 53) of consumers with borderline IQ and SLD from a Midwestern state VR agency. The most common job outcome for consumers was service occupations, followed by structural work. Other top occupations in rank order were processing and machine trades, clerical and sales, bench work, and professional.

Research by Whitfield (2009) focused on occupational outcomes for successfully closed consumers living in correctional facilities at time of application. The vast majority of individuals obtained service jobs, primarily as kitchen helpers, followed by structural work (primarily construction work). Another finding of interest is that the majority (96.2%) of the sample reported psychosocial, cognitive, or other mental impairments.

McMahon and colleagues (2008) have conducted research on disability-specific designations and employment discrimination complaints using Equal Employment Opportunity Commission (EEOC) data. In general, these studies suggested that allegations of discrimination vary, in part, based on the complainant's type of impairment and employer's industry. Thus, factors outside of the VR process may influence occupational outcomes after VR exit.

The literature on occupational outcomes can be used to understand the impact of VR services, barriers to employment, and the quality of employment obtained by consumers. However, few studies have used the SOC system or have reported earnings by occupational classification for VR consumers. This study used fiscal year 2008 RSA

data to examine SOC occupational outcomes across multiple disabilities and also compared occupational earnings for VR consumers with earnings of the GLF. Specifically, the authors posed three research questions:

1. What are the top 50 occupations for consumers who exited VR with an employment outcome?

2. How do median hourly wages paid to VR consumers placed in the 50 top occupations compare with wages paid to the GLF?

3. What are the top five occupations across 23 disability categories?

Method

Data Sources

The RSA 911 for fiscal year 2008 was used to identify consumers who exited with an employment outcome, as well as disability categories, median hourly wages at closure, and SOC titles. Wheaton and Kosciulek's (2004) SPSS syntax file was used to convert the raw RSA 911 data. Data from the BLS and Occupational Employment Statistics (OES) survey were used to determine the hourly wages for SOC titles in the general labor force. The OES survey is a semiannual mail survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. (Guam, Puerto Rico, and the Virgin Islands are also surveyed, but their data are not included in this release.) OES estimates are constructed from a sample of about 1.2 million establishments. Forms are mailed semiannually to a panel of approximately 200,000 sampled establishments, once in May and once in November. May 2009 estimates are based on responses from six semiannual panels collected over a three-year period: May 2009, November 2008, May 2008, November 2007, May 2007, and November 2006. The overall national response rate for the six panels is 78.2 percent based on establishments and 74.5 percent based on employment (BLS, 2009).

Sample Description

In 2008, there were 618,054 case closures in the VR system. Of this number, 196,311 cases were closed with a competitive employment outcome; these represent the sample for this study. Among the sample, 30.4% were employed at time of application to VR, and 69.5% were unemployed. The sample was 55.9% male and 44.1% female. The distribution by race/ethnicity was 67.2% White, 20.5% Black/African American, 9.1% Hispanic, 1.2% Asian, .8% American Indian, and .3% Hawaiian or Pacific Islander. The average age was 36 years.

Subgroup analyses of occupational outcomes were conducted for 20 disability categories comprising 1.0% or more of the sample. The subgroup analyses included consumers in the following categories: SLD (12.4%); depressive/mood disorder (10.3%); hearing loss, primary communication auditory (9.2%); mental retardation (8.8%); drug abuse or dependence (other than alcohol) (5.1%); blindness (2.7%); deafness, primary communication visual (2.7%); schizophrenia and other psychotic disorders (3.0%); ADHD (2.8%); alcohol abuse or dependence (2.3%); anxiety disorders (1.8%); personality disorders (1.6%); mental illness (not listed elsewhere) (1.6%); diabetes mellitus (1.6%); arthritis and rheumatism (1.5%); traumatic brain injury (1.5%); autism (1.1%); deafness, primary communication auditory (1.1%); hearing loss, primary communication visual (1.0%); and cerebral palsy (1.0%). In addition, three disability categories comprising less than 1% of the sample were included for comparison with the earlier research by Walls and Fullmer (1997), including spinal cord injury (.8%),

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amputation (.6%), and epilepsy (.7%).

Results

Descriptive statistics were used to examine the occupational outcomes for the overall sample of VR consumers and the general labor force, and illustrate the top occupational outcomes for each disability category included in the study. Occupations were rank-ordered by frequency of occurrence. Median hourly earnings were calculated for the top 50 SOC titles in VR using RSA 911 data. BLS data were used to identify the entry-level wages for the general labor force. The data on VR hourly wages were not adjusted for this study. The Statistical Analysis System (SAS) and Statistical Package for the Social Sciences (SPSS) were used to organize the data and generate descriptive statistics.

Table 1 describes the top 50 occupations for rehabilitants in fiscal year 2008. Like previous research, the analysis here shows that the most commonly held occupations after VR closure were service-related jobs, such as janitor, housekeeper, and stock clerk. The two highest-income jobs were registered nurse (\$22.00 per hour) and truck driver (\$13.75 per hour). The comparison of rehabilitants' wages with those of the GLF reported two indices of GLF wages. The first was the median wage for the GLF, and the second was the 10th percentile of the distribution of GLF wages used as an estimate of entry-level pay, since entry wages were not reported by the Department of Labor. Of the two indices, we suggest that our estimate for entry-level GLF wages—that is, earnings that are equal to the 10th percentile of the wage distribution— likely provides a better comparison of how rehabilitants' earnings relate to the general population.

Rehabilitant Median Wages Compared to GLF Median Wages

Participants who were exited with an employment outcome reported hourly wages that were lower than the median wages of the GLF for each of the top 50 occupations. The largest discrepancies in hourly wages were reported for managers, maintenance and repair workers, and registered nurses. For example, individuals in the GLF in the manager occupation earned over 3.5 times the hourly wages of VR consumers in the same occupational classification. For two occupational categories, (a) maintenance and repair work and (b) sales and related work, workers in the general labor force earned over two times the hourly wages of VR consumers who were closed in the same SOC code. Other large discrepancies in occupational earnings between GLF and VR consumers were reported for (a) executive secretaries and administrative assistants and (b) computer support specialists. The smallest discrepancies in occupational earnings were for food service-related occupations. There was less than a \$1.00 difference in hourly wages between GLF and VR consumers who reported SOC codes for waiters and waitresses, fast food cooks, dining room and cafeteria attendants, and combined food preparers and servers.

Rehabilitant Wages Compared to GLF Entry-level Wages

Considerably different results were obtained when comparing rehabilitants' wages to entry-level GLF wages. Table 1 indicates that rehabilitants' wages were similar to or higher than GLF entry-level wages for the majority of occupations. The most notable wage discrepancy was found for management occupations. Entry-level managers in the GLF earned nearly twice the median wages of VR consumers in this category. Table 2 shows by rank the five most common occupational outcomes for each of the 23 disability categories. Through VR services, only 21 of the top 50 rehabilitant jobs were ranked in the top five of placements made across 23 disabilities. For example, "janitors and cleaners" was the most common job category across disabilities, whereas "stock clerks & order fillers" and "office clerks, general" were the second and third most common. Furthermore, "janitors and cleaners" was ranked first for 9 of the 23 disabilities. The authors observed that jobs that were not ranked in the top five generally included those that required more training, offered higher wages, and were likely to have greater chances for advancement.

Discussion and Recommendations

Our analysis of the data indicated that consumers with disabilities were frequently placed in unskilled jobs with little opportunity for career development or advancement. As Walls and Fullmer (1997) noted, functional limitation—defined as the inability to perform an action or set of actions because of a physical, mental, or emotional restriction—was likely a stronger determinant of occupational outcome than disability category. They suggested emphasizing the greater influence of functional abilities rather than disability category, especially when in the job search and placement phase of rehabilitation. "Careful matching of a person's functional limitations with the requirement of the job should assist in training and placement decisions" (pp. 23–24). As they noted, the varieties of functional limitations associated with a disability category and the variables of the essential job functions, even within a single occupation, preclude stereotypic solutions. Furthermore, Walls and Fulmer concluded that reasonable accommodations assist in reducing employment barriers.

Our analysis of data also indicated that entry-level managers in the GLF earned nearly twice the median wages of VR consumers in this category. Though speculative, possible explanations for this discrepancy include higher education levels or established work histories with an employer for the GLF. Additional research would be needed to substantiate this result, however.

Implications for Practitioners

Rehabilitation counselors can expand job and career opportunities and maximize rehabilitation potential through careful analysis and understanding of consumers' functional limitations, using cost-effective reasonable accommodation, computer/assistive technology, and consumer advocacy. An understanding of clearly specified functional limitations may help a counselor to understand a consumer's actual limitation(s) and allow for the provision of more effective rehabilitation services (Brodwin, Parker, & DeLaGarza, 2010).

A counselor's knowledge of functional limitations may help a consumer to maximize potential for rehabilitation. Through enhanced rehabilitation potential, one may be able to (a) attain increased functioning and maximize physical, mental, and emotional growth; (b) have an enhanced sense of well being; and (c) have greater economic and overall independence. To assist consumers to secure employment in professional, skilled, and semiskilled work, rather than unskilled jobs, we suggest a more careful analysis of functional limitations. Brodwin et al. (2010) developed a list of 19 categories of functional limitation, expanding on the functional limitation categories described earlier by Wright (1980) and Mueller (1990). Examples of these 19 categories include (a) difficulty in interpreting information, (b) limitations of sight and total blindness, (c) limitation of stamina, (d) cognitive limitation, and (e) difficulty in handling and fingering.

Along with a better understanding of functional limitations, counselors should be aware of how assistive technology can help minimize limitations of function. For example, a counselor may use a combination of a scanner, speech synthesizer, and regular-print printer for a consumer who is totally blind, providing access to the majority of information used in employment and allowing the person to produce work in a format accessible to everyone at the worksite who may need it (Brodwin et al., 2010; Cornell University Program on Employment and Disability, 2000). Accommodations for visual impairments include both optical devices, such as magnifiers, specially coated lenses, and eyeglass telescopes, and nonoptical visual aids, including talking clocks and watches, talking calculators, closed-circuit televisions that enlarge print electronically, and PCs and peripherals with the capacity for print magnification, speech output, and optical scanning (Brodwin, Star, & Cardoso, 2007).

For consumers who are deaf or hard of hearing, hearing aids, telecommunication devices for the deaf, cochlear implants, electronic ears, amplified telephones, audio loops, and other telecommunication equipment may be useful technological devices. Employers may not understand hearing impairments and be unaware of the special technological advances available which enhance communication capability for consumers who have hearing loss (Falvo, 2009).

Counselors should also be aware of the wide range of accommodations available for consumers with an inability to use their upper extremities because of quadriplegia, amputation, stroke, congenital anomalies, cerebral palsy, or arthritis. Custom-designed

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prosthetic and orthotic devices can facilitate the performance of specific job tasks. "A detailed job task analysis helps the counselor provide recommendations to a consulting prosthetist or orthotist" (Brodwin, 2010, p. 307). Orthotic devices, such as a wrist-hand orthosis and/or a shoulder-elbow orthosis, may improve an employee's limited upper extremity functioning (Clawson, 2009).

Assistive technology in general and computers specifically are effective and powerful devices for restoring function within the work environment, enhancing quality of life, and removing barriers to employment (Brodwin et al., 2007). Computers in business and industry have enabled enhanced productivity for employees with disabilities, allowing them to compete with workers who do not have disabilities. "Technology removes limitations; what we as individuals with disabilities can do then depends strictly on our abilities, training, and experience (Bowe, 2000, p. vii)."

Accessing appropriate information about functional limitations and accommodations can be difficult for employers and people with disabilities. The best resource for information on targeted accommodation solutions is the Job Accommodation Network (JAN). JAN has served for more than 25 years and is the premier source of free, expert information on job accommodations for workers with disabilities. JAN's dedicated consultants respond to more than 38,000 inquiries annually from employers, service providers, job seekers, and employees with disabilities (and their families). JAN can be contacted by phone (800-526-7234, Voice; 877-781-9403 TTY), web (http://askJAN.org), email (JAN@askjan.org), and social media platforms (Facebook, Linkedln, Twitter, Blogs, Second Life, and You Tube).

These recommendations concerning counseling, accommodations, and the role of

assistive technology remain sound in spite of some potential limitations to this study's findings, which are related to RSA 911 data quality, BLS estimates, and unmeasured factors. The RSA 911 is a useful administrative data set; however, it is not a scientific or independently conducted survey. RSA 911 data are compiled by VR counselors and staff and through self-report. There is also the possibility of data-entry errors and coding mistakes. The GLF earning estimates are based on survey responses, which may include unmeasured error. In addition, other unmeasured variables outside the scope of data collected (such as employer demand, prior work history, or allegations of discrimination) potentially influence earnings and occupational outcomes. For example, research using EEOC data on workplace discrimination has indicated that individuals with autism were most likely to file discrimination complaints against retail industry employers (Van Wieren, Reid, & McMahon, 2008). In the present study, retail salesperson occupations were not in the top five outcomes for individuals with autism, as indicated in Table 2. Future research should consider these unmeasured factors and other covariates, including earnings at time of application, gender, education level, and public sources of support such as SSI and SSDI.

Rehabilitation counselors and administrators can use occupational outcomes data to inform career planning, assessment, and training. However, consumer choice and empowerment are also key considerations in career planning. The top occupations and wages described in this study should not be considered a restriction on an individual's career goals.

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COMPETITIVE EMPLOYMENT OUTCOMES

Table 1: Top 50 Occu	pational Classifications and Hourly	Wages for Successfull	v Closed VR Consumers

			% of	GLF		GLF 10th
			all	median	VR median	percentile
Standard Occupational Classification	SOC	Number	Status	hourly	hourly	hourly
	number	of cases	26	wages ^a	wages ^b	wages ^a
1. Janitors and Cleaners, Except Maids	372011	9,017	4.6	\$10.56	\$8.00	\$7.63
and Housekeeping Cleaners						
2. Stock Clerks and Order Fillers	435081	7,042	3.6	\$10.08	\$7.86	\$7.66
3. Office Clerks, General	439061	4,959	2.5	\$12.57	\$9.75	\$7.97
4. Cashiers	412011	4,388	2.2	\$8.57	\$7.50	\$7.15
5. Retail Salespersons	412031	4,331	2.2	\$9.74	\$8.00	\$7.41
6. Maintenance and Repair Workers,	499042	4,121	2.1	\$16.65	\$8.00	\$10.00
General						
7. Helpers—Production Workers	519198	3,971	2	\$10.75	\$8.25	\$7.89

			% of	GLF		GLF 10th
			all	median	VR median	percentile
Standard Occupational Classification	SOC	Number	Status	hourly	hourly	hourly
	number	of cases	26	wages ^a	wages ^b	wages ^a
8. Laborers and Freight, Stock, and	537062	3,805	1.9	\$11.11	\$8.00	\$7.89
Material Movers, Hand						
9. Customer Service Representatives	434051	3,568	1.8	\$14.56	\$9.00	\$9.33
10. Nursing Aides, Orderlies, and	311012	3,362	1.7	\$11.56	\$9.15	\$8.42
Attendants						
11. Food Preparation Workers	352021	3,192	1.6	\$9.15	\$7.50	\$7.39
12. Production Workers, All Other	519199	3,121	1.6	\$13.33	\$8.50	\$8.39
13. Sales and Related Workers, All	419099	3,082	1.6	\$16.91	\$8.00	\$8.63
Other						
14. Dishwashers	359021	2,984	1.5	\$8.54	\$7.17	\$7.27
15. Truck Drivers, Heavy and Tractor-	533032	2,824	1.4	\$18.14	\$13.75	\$11.35

			% of	GLF		GLF 10th
			all	median	VR median	percentile
Standard Occupational Classification	SOC	Number	Status	hourly	hourly	hourly
	number	of cases	26	wages ^a	wages ^b	wages ^a
Trailer						
16. Child Care Workers	399011	2,633	1.3	\$9.25	\$7.50	\$7.37
17. Combined Food Preparation and	353021	2,477	1.3	\$8.28	\$7.00	\$7.13
Serving Workers, Including Fast Food						
18. Landscaping and Groundskeeping	373011	2,435	1.2	\$11.29	\$8.00	\$8.06
Workers						
19. Maids and Housekeeping Cleaners	372012	2,403	1.2	\$9.26	\$7.76	\$7.41
20. Packers and Packagers, Hand	537064	2,306	1.2	\$9.36	\$7.50	\$7.50
21. Receptionists and Information Clerks	434171	1,916	1	\$12.05	\$9.00	\$8.26
22. Security Guards	339032	1,882	1	\$11.45	\$9.00	\$8.10
23. Dining Room and Cafeteria	359011	1,860	0.9	\$8.51	\$7.28	\$7.24

			% of	GLF		GLF 10th
			all	median	VR median	percentile
Standard Occupational Classification	SOC	Number	Status	hourly	hourly	hourly
	number	of cases	26	wages ^a	wages ^b	wages ^a
Attendants and Bartender Helpers						
24. Truck Drivers, Light or Delivery	533033	1,626	0.8	\$13.62	\$10.50	\$8.35
Services						
25. Cooks, Restaurant	352014	1,618	0.8	\$10.66	\$7.80	\$7.76
26. Teacher Assistants	259041	1,572	0.8	\$14.62c	\$7.50	\$10.17 ^c
27. Managers, All Other	119199	1,569	0.8	\$44.52	\$12.00	\$23.35
28. Registered Nurses	291111	1,517	0.8	\$30.65	\$22.00	\$21.14
29. Food Preparation and Serving	359099	1,495	0.8	\$9.54	\$7.50	\$7.70
Related Workers, All Other						
30. Automotive Service Technicians and	493023	1,494	0.8	\$17.03	\$10.00	\$9.54
Mechanics						

			% of	GLF		GLF 10th
			all	median	VR median	percentile
Standard Occupational Classification	SOC	Number	Status	hourly	hourly	hourly
	number	of cases	26	wages ^a	wages ^b	wages ^a
31. Social and Human Service Assistants	211093	1,413	0.7	\$13.44	\$10.20	\$8.80
32. Personal Care and Service Workers,	399099	1,399	0.7	\$9.69	\$7.60	\$7.57
All Other						
33. Sales Representatives, Services, All	413099	1,393	0.7	\$23.76	\$10.00	\$12.15
Other						
34. Home Health Aides	311011	1,389	0.7	\$9.85	\$8.33	\$7.67
35. Building Cleaning Workers, All	372019	1,297	0.7	\$13.16	\$8.00	\$8.56
Other						
36. Office and Administrative Support	439199	1,263	0.6	\$14.29	\$9.00	\$8.59
Workers, All Other						
37. Waiters and Waitresses	353031	1,239	0.6	\$8.50	\$8.00	\$7.17

			% of	GLF		GLF 10th
			all	median	VR median	percentile
Standard Occupational Classification	SOC	Number	Status	hourly	hourly	hourly
	number	of cases	26	wages ^a	wages ^b	wages ^a
38. Cooks, Fast Food	352011	1,221	0.6	\$8.52	\$7.00	\$7.19
39. Personal and Home Care Aides	399021	1,195	0.6	\$9.46	\$8.50	\$7.36
40. Hairdressers, Hairstylists, and	395012	1,177	0.6	\$11.21	\$8.75	\$7.68
Cosmetologists						
41. Welders, Cutters, Solderers and	514121	1,161	0.6	\$16.71	\$12.02	\$11.26
Brazers						
42. Executive Secretaries and	436011	1,138	0.6	\$20.03	\$12.00	\$13.36
Administrative Assistants						
43. Construction Laborers	472061	1,120	0.6	\$14.01	\$10.00	\$8.86
44. Teachers and Instructors, All Other	253099	1,074	0.5	\$20.51c	\$13.00	\$11.21 ^c
45. Bookkeeping, Accounting, and	433031	1,041	0.5	\$16.08	\$11.50	\$10.23

			% of	GLF		GLF 10th
			all	median	VR median	percentile
Standard Occupational Classification	SOC	Number	Status	hourly	hourly	hourly
	number	of cases	26	wages ^a	wages ^b	wages ^a
Auditing Clerks						
46. Carpenters	472031	999	0.5	\$18.98	\$12.00	\$11.83
47. Computer Support Specialists	151041	952	0.5	\$21.30	\$13.00	\$13.08
48. Healthcare Support Workers, All	319099	915	0.5	\$14.39	\$10.00	\$9.81
Other						
49. Secretaries, Except Legal, Medical,	436014	897	0.5	\$14.41	\$10.00	\$9.23
and Executive						
50. Locker Room, Coatroom, and	393093	871	0.4	\$9.49	\$7.27	\$7.50
Dressing Room Attendants						

^aMay 2009 BLS data retrieved on June 9, 2010. ^bData from 2008 RSA 911 data set. ^cEstimate based on 1,560 hours. For teachers and teaching assistants, the BLS reports annual wages for occupations that generally do not work year-round.

COMPETITIVE EMPLOYMENT OUTCOMES

Table 2. Top Five Occupations for 23 Disability Categories

Disability	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers-Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Alcohol			<u> </u>	<u> </u>		<u> </u>	<u> </u>		4	4	4	4	<u> </u>			<u> </u>	<u> </u>	<u> </u>			<u> </u>
Abuse or																					
Dependence																					
(N = 4,561)						3	1	2		5					4						
Amputations																					
(N = 1,123)			3				2						5							4	1
Anxiety																					
Disorders																					
(N = 3,619)	5						1					4	3							2	

Disability	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers-Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Arthritis &																					
Rheumatism																					
(N = 3,017)	3		2				4						1								5
ADHD																					
(N = 5,421)	5						2	4										3		1	
Autism																					
(N=2,077)					5		2			3				4						1	
Cerebral																					
Palsy (N =			3				4						1						5	2	

Disability 1,868)	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers—Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Depressive																					
& Other																					
Mood																					
Disorders																					
(N =																					
20,211)	4						1					3	2							5	
Diabetes																					
Mellitus (N	2		5				1					4	3								

Disability = 2,751)	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers—Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Drug Abuse or																					
Dependence,																					
Not Alcohol (N																					
= 10,030)						2	1	3							4						5
Epilepsy (N																					
= 1,369)			5				1						4					3		2	
Mental																					
Illness, Not	5						1			3			4							2	

Metric Cooks, Fast Food Cashiers Cooks, Fast Food Cashiers Cosk, Fast Food Ining & Cafeteria Attendants Cosk, Fast Food Cosk, Fast Food Cosk, Fast Food Cosk, Fast Food Cosk, Fast Food Ining & Cafeteria Attendants Maids & Housekeeping Cosk, Fast Food Cosk, Fast Food Cosk, Fast Food Cosk, Fast Food Ining & Cafeteria Attendants Maids & Housekeeping Flagescher Nursing Aides, Ordertics Meutal Nursing Aides, Ordertics Meutal Packers & Packagers, Hand Meutal Sales & Retardation Norsing Aides, Ordertics Stock Clerks & Order Filles Stock Clerks & Order Filles Stock Clerks & Order Filles																						
Listed Elsewhere (N = 3,134) Mental Retardation (N = 17,301) 5 3 1 4 2 Personality	Disability	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers		Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
(N = 3,134) Mental Retardation (N = 17,301) 5 3 1 4 2 Personality	Listed																					
Mental Retardation $(N =$ 4 2 17,301) 5 3 1 4 2 Personality 4 2 4 2	Elsewhere																					
Retardation (N = 17,301) 5 3 1 4 2 Personality V V V V V	(N = 3,134)																					
(N = 17,301) 5 3 1 4 2 Personality	Mental																					
17,301) 5 3 1 4 2 Personality 4 2	Retardation																					
Personality	(N =																					
	17,301)				5	3		1							4						2	
Disorders 5 4 3 2 1	Personality																					
	Disorders		5			4	3	2	1													

Disability (N = 3,169)	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers-Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Schizophrenia																					
& Other																					
Psychotic																					
Disorders (N =																					
5,896)	4				3		1	5												2	
Specific																					
Learning																					
Disabilities						3	2	5										4		1	

Disability (N = 24,271)	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers-Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Spinal Cord																					
Injury (N =																					
1,644)			1										2			4			3		5
Traumatic																					
Brain Injury																					
(N = 2,972)	3						1			5								4		2	
Blindness			1										5		4	2				3	

Disability (N = 5,223)	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers—Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Deafness,																					
Primary																					
Communicat																					
ion Visual																					
(N = 4,064)					5		2		4				3							1	
Deafness,																					
Primary																					
Communication							2	5		4			1							3	

Disability Auditory (N = 2 097)	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers-Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
2,097) Hearing Loss, Primary																					
Communication Visual (N =																					
1,973)	3						1						4					5		2	
Hearing Loss,																					
Primary											4		5				3	1			2

Disability Communication Auditory (N = 18,023)	Cashiers	Cooks, Fast Food	Customer Service Reps	Dining & Cafeteria Attendants	Dishwashers	Helpers-Production Workers	Janitors & Cleaners	Laborers & Freight Movers	Maids & Housekeeping	Maintenance & Repair Workers	Managers, All Other	Nursing Aides, Orderlies	Office Clerks, General	Packers & Packagers, Hand	Production Workers, All Others	Receptionists & Info Clerks	Registered Nurses	Retail Salespersons	Sales & Related, All Other	Stock Clerks & Order Fillers	Truck Drivers, Heavy
Total frequency of																					
occupations	9	1	7	1	5	4	20	7	1	5	1	3	14	2	3	2	1	6	2	16	5