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# HOW STAFFING PATTERNS IMPACT EMPLOYMENT OUTCOMES ACROSS DIVERSE D/HH CONSUMERS

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## Introduction: Needs for Rehabilitation Counselors for the Deaf

Hearing loss comprises the largest chronic disability group in the U.S. (Dew, 1999) with prevalence rates that increase greatly with age. The U.S. Census (2006) reported that 2.3% of individuals 25-64 years identified themselves as having a hearing loss, a rate that increased to 12.3% for those aged 65 and older. The Job Accommodations Network also found that requests for accommodations due to hearing loss were the single largest category (Dowler & Walls, 1996).

Based on these demographics, rehabilitation services are, or will be, needed by a relative large proportion of U.S. workers. However, providing services for this population may be compromised by personnel shortages. Anderson, Boone, and Watson (2003) found that 30.2% of states reported significant shortages of personnel to work with Deaf consumers and 20.9% had significant shortages for Hard of Hearing (HH) consumers. A greater number of states reported moderate-level shortages: 58.1% of states for Deaf consumers and 53.5% for HH consumers.

With the aging of the "Baby Boom" population, the number of workers who require accommodations as a result of age-related hearing loss (presbycusis) can be expected to increase substantially. Although the recent economic difficulties may leave more workers without jobs, these and other workers may be eligible for vocational rehabilitation services due to their presbycusis. In addition, these individuals may choose to remain working because of reduced retirement funds and retirement savings, but now need rehabilitation assistance. The existing personnel shortages are likely to be exacerbated by these demographic and economic factors.

## Diversity in the Population

The Deaf and HH (DHH) population is relatively diverse. In addition to ethnic and racial diversity that is increasing throughout the U.S., there are four subgroups within the DHH population that have very different rehabilitation service needs: Deaf, hard of hearing (HH), late-deafened (LD), and low-functioning deaf (LFD). Each presents unique circumstances and issues for rehabilitation counselors, in addition to the employment and disability issues that bring them to rehabilitation offices. Individuals born deaf typically have hearing parents (92%), and only approximately 4% have two Deaf or HH parents (Mitchell & Karchmer, 2004). Most hearing parents do not know sign language, often resulting in inadequate acquisition of a primary language (Bosso, 2008; Case, 2008). This frequently leads to limited English language fluency with concomitant poor literacy and academic achievement (Marshark, 2000; Moore, P., 2008; Moores, 2001; Scheetz, 2001; Schirmer, 2001). Most hearing parents prefer their children to lipread and use hearing aids, or to use an English-based sign language system. Those born to Deaf parents typically belong to the Deaf community and value American Sign Language (ASL) and socializing with other Deaf individuals (Lane, Hoffmeister, & Bahan, 1996). Those born to hearing parents may have a range of evolving Deaf identities depending upon introductions to and involvement with the Deaf community and ASL. Many spend early adult years still deciding about their comfort levels in the Deaf or hearing worlds. For rehabilitation counselors, limited English literacy and academic achievement, potentially diverse identities, and a range of communication preferences can be very challenging.

HH individuals represent approximately 96% of the DHH population (Bat-Chava, Deignan, & Martin, 2002). Israelite, Ower, and Goldstein (2000) found HH individuals to be unclear or to have mixed identities between Deaf and hearing worlds. Identity for HH individuals often is much less clear because although they can interact more easily with the hearing individuals, it is often difficult in group settings or noisy environments. HH individuals' struggles can lead to depression and social isolation (Schroedel, Kelley, & Conway, 2002; Schroedel, Watson, & Ashmore, 2003). In addition, they are frequently placed in general education classrooms with minimal supports and receive minimal, if any, special career or transition preparation (Punch, Hyde, & Creed, 2004). Rehabilitation counselors may need to help these individuals address emotional, academic, and identity issues in additional to helping them identify and set realistic career and work goals.

Those deafened in adulthood (late-deafened, LD) often struggle with communication in addition to adjusting to impact of substantial hearing loss on their lifestyle, career, and professional goals (Bat-Chava et al., 2002). This often occurs at that point when colleagues are being promoted and are advancing in their careers. These individuals often know little about how to effectively accommodate hearing loss or the devices that would offer optimal supports. At a time when others can utilize their networks of family and friends to support them, their hearing loss typically creates communication barriers that negatively impact interpersonal relationships and socialization.

LFD individuals often read at third grade or lower, and may have other disabilities. Often, they receive "custodial" education with little attention to learning (Ewing & Jones, 2003). They typically have minimal academic success; often have behavioral problems; need long-term supports and services; and are at risk for being undertrained, undereducated, and underemployed (Harmon Carr, & Johnson, 1998, Wheeler-Scruggs, 2003). In addition, they may have limited sign language fluency and are unable to successfully use interpreters. For rehabilitation counselors, this group has some substantial barriers that can greatly limit the range of potential services from which they are able to benefit.

## Rehabilitation Implications

These four diverse DHH subgroups offer a range of identity, communication, training, and employment challenges to rehabilitation counselors. Overall, identification with the Deaf community has been positively related to self-esteem, although those *not* proud of this identification had lower self-esteem (Bat-Chava, 1994). Another challenge is that of those with childhood hearing loss, in 2002 only 66.97% graduated with a diploma and 10.5% dropped out (U.S. Department of Education, 2004). In 2005-2006 the drop out rate improved to 8.84%; however, only 45.33% of the DHH population graduated with a diploma (OSEP/Westat, 2007). This group also has a history of poor academic achievement with a mean reading level for 18 year old DHH students at the 4.0 grade level (Traxler, 2000). The median mathematics achievement score for *problem solving* at the age of 18 years for DHH students is slightly below fifth grade, and the median *mathematics procedures* scores are slightly higher, near sixth grade for 18-year-olds. Another challenge is that nearly 40% of the K-12 DHH population has one or more additional disabilities (Gallaudet Research Institute, 2008).

Employment rates also appear to differ among these four subgroups. For

example, DHH consumers are significantly more likely to achieve competitive jobs, and to have significantly higher income levels after receiving college/ university training, business/vocational training, on-the-job training, or job placement. However, HH and LD individuals were competitively employed at a significantly lower rate than Deaf consumers, and it was the Deaf consumers who received these listed services, at a significantly higher rate than LD or HH (Moore, C., 2001, 2002). HH cases closed for positive competitive employment occur at a significantly lower rate than for Deaf consumers (Moore, 2001).

The National Longitudinal Transition Study results also showed differential success rates between Deaf and HH individuals (Blackorby, & Wagner, 1996). HH individuals three to five after high school were less often competitively employed (-6.5%) that those within two years of leaving high school. In comparison, Deaf individuals gained +6.3% in rate of competitive employment over this same time. HH individuals also had lower earning gains. Between two and three to five years out of high school, HH individuals increased 26.2% in earning $6.00/hour or more, while Deaf individuals increased 41.4% despite having a much lower initial rate. All individuals with disabilities increased 30.8%, indicating that HH were below this median.

These differential employment outcomes suggest a potential lack of equity of services among the DHH subgroups. One possible answer is results of a survey by Stauffer and Boone (2006). Across 42 states, 85% served HH and LD consumers with general counselors rather than by Rehabilitation Counselors for the Deaf (RCDs). Lower competitive employment rates may due to counselors who are not prepared to address the substantial barriers and the diversity within and across these groups. These results suggest needs for RCDs to address this diverse population and ensure equitable services and employment outcomes. The HH and LD consumers may be able to communicate more easily with general counselors, but employment data suggest that this is insufficient to guarantee equal employment outcomes.

At a time when vocational rehabilitation is facing budget cuts and workers are facing job loss, the number of aging workers is increasing, as is the potential number of consumers with hearing loss. As the population of the U.S. also becomes more ethnically diverse, these individuals also are at greater risk of having fewer positive academic and adult outcomes (Anderson & Grace, 1991; Cohen, 1991; Rodriquez & Santiviago, 1991).

Although technology is improving the type and quality of accommodations available for individuals with hearing loss, Scherich (1996) found that 62% of DHH workers rated present accommodations as not appropriate or not meeting their needs. Many felt they had inadequate equipment (65%) with inadequate worksite awareness (16%), and 74% of workers wished to have different accommodations but were unsure of what was better. ADA requires workers to ask and recommend devices; yet, particularly among the LD population, they are unlikely to know what they need or that they have rights to request such devices.

## Conclusions

Employment demographics indicate a need for well-trained rehabilitation counselors to serve the diverse DHH subgroups. Deaf and HH consumers struggle with academic achievement which may be exacerbated with diplomas that are linked to passing grade level tests; lower recent graduation rates suggest this is occurring at present. LFD consumers remain a challenging group that often requires multiple and long-term services. HH and LD Consumers have lower competitive employment rates and postsecondary attendance than Deaf consumers. They are more likely to be placed with general counselors who may not be aware of substantial, but often masked, communication, identify, and interpersonal issues. HH and LD have potential for more positive outcomes but HH often have been integrated in typical classrooms and environments. LD have acquired job skills and a career path but now face employment issues in addition to substantial communication, interpersonal, and adjustment issues. Each unique subgroup requires sensitive and well-trained counselors. DHH consumers very much need well-trained RCDs and, if assigned to general counselors, support and oversight from RCDs and other knowledgeable individuals to ensure equitable employment outcomes.

*Author comment on the presentation*

*The numbers of RCDs and other counselors who shared their stories of dedication to their consumers was very impressive and inspiring. These told of their respect for the consumers' struggles: with accepting their hearing loss; with accepting their needs for accommodations, not as an indicator of "weakness" but as an effective success strategy; and with seeing hearing loss as a personal characteristic but no longer a barrier. These stories told of the patience, and of sensitivity, to helping them move forward after experiencing*

*disability-related "failure". Thank you to everyone for sharing and dedicating yourselves to working with these important, and often underserved, groups within the DHH population.*

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## References

Anderson, G. B., Boone, S. E. , & Watson, D. (2003). Impact of federal legislation and policy on VR services for consumers who are dear or hard of hearing: Perspectives of agency administrators and program specialists. *American Annals of the Deaf, 148,* 315-322.

Anderson, G. B., & Grace, C. A. (1991). Black deaf adolescents: A diverse and underserved population. *The Volta Review, 93*, 73-86.

Bat-Chava, Y. (1994). Group identification and self-esteem of deaf adults. *Personality and Social Psychology Bulletin, 20*, 292-502.

Bat-Chava, Y., Deignan, E., & Martin, D. (2002). Rehabilitation Counselors' Knowledge of Hearing Loss and Assistive Technology. *Journal of Rehabilitation, 68*, 33-44.

Blackorby, J., & Wagner, M. (1996). Longitudinal postschool outcomes of youth with disabilities: Findings from the national longitudinal transition study. *Exceptional Children, 62,* 399-413.

Bosso, E. (2008). Testing, accountability, and equity for deaf students in Delaware. In R. C. Johnson & R. E. Mitchell (Eds.), *Testing deaf students in an age of accountability* (pp. 167-180). Washington, DC: Gallaudet University.

Case, B. J.. (2008). Accommodations to improve instruction and assessment of deaf students. In R. C. Johnson & R. E. Mitchell (Eds.), *Testing deaf students in an age of accountability* (pp. 51-62). Washington, DC: Gallaudet University.

Dew, D. W. (Ed.). (1999). *Serving individuals who are low-functioning deaf. Report from the study group, 25th Institute on Rehabilitation Issues.* Washington, DC: George Washington Univ., Regional Rehabilitation Continuing Education Program.

Dowler, D. L., & Walls, R. T. (1996). Accommodating specific job functions for people with hearing impairments. *Journal of Rehabilitation, 62,* 35-43.

Ewing, K. M., & Jones, T. W. (2003). An educational rationale for deaf students with multiple disabilities. *American Annals of the Deaf, 148*, 267-271.

Gallaudet Research Institute (2008). *Regional and National Summary Report of Data from the 2007-08 Annual Survey of Deaf and Hard of Hearing Children and Youth.* Washington, DC: GRI, Gallaudet University.

Harmon, M., Carr, N., & Johnson, T. (1998). Services to low functioning deaf and hard of hearing persons. *1998 PEPNet Conference Proceedings: Empowerment Through Partnerships*. April 29-May 2, 1998. Retrieved 6/28/08 from http://www.pepnet.org/confpast/1998/pdf/harmon.pdf

Israelite, N., Ower, J., & Goldstein, G. (2002). Hard-of-hearing adolescents and identity construction: Influences of school experiences, peers, and teachers. *The Journal of Deaf Studies and Deaf Education, 7,* 134-148.

Lane, H., Hoffmeister, R., & Bahan, B. (1996). *A journey into the Deaf-World.* San Diego: DawnSignPress.

Marschark, M. (2000). Education and development of deaf children—or is it development and education? In P. E. Spencer, C. J. Erting, & M. Marshark (Eds.), *The deaf child in the family and at school: Essays in honor of Kathryn P. Meadow-Orlans* (pp. 275-291). Mahwah, NJ: Lawrence Erlbaum Assoc.

Mitchell, R. E., & Karchmer, M. A. (2004). Chasing the mythical ten percent: Parental hearing status of deaf and hard of hearing students in the United States. *Sign Language Studies, 4,* 138-163.

Moore, C. L. (2001). Disparities in job placement outcomes among deaf, late-deafened, and hard-of-hearing consumers. *Rehabilitation Counseling Bulletin, 44,* 144-150.

Moore, C. L. (2002). Relationship of consumer characteristics and service provision to income of successfully rehabilitated individuals who are deaf. *Rehabilitation Counseling Bulletin, 45,* 233-239.

Moore, P. (2008). The Potential Harm to Deaf Students of High Stakes Testing in California. In R. C. Johnson & R. E. Mitchell (Eds.), *Testing deaf students in an age of accountability* (pp. 181-). Washington, DC: Gallaudet University.

Moores, D. F. (2001). *Educating the deaf: Psychology, principles, and practices* (5th ed.). Boston: Houghton Mifflin.

OSEP/Westat. (2007). Annual Report Tables (IDEA). Retreived 5/24/09 from https://www.ideadata.org/arc_toc8.asp#partbLRE

Punch, R., Hyde, M., & Creed, P. A. (2004). Issues in the school-to-work transition of hard of hearing adolescents. *American Annals of the Deaf, 149,* 28-38.

Scheetz, N. A. (2001). *Orientation to deafness* (2nd ed.). Boston: Allyn and Bacon.

Scherich, D. L. (1996). Job accommodations in the workplace for persons who are deaf or hard of hearing: Current practices and recommendations. *Journal of Rehabilitation, 62*, 27-35.

Schirmer, B. R. (2000*). Language and literacy development in children who are deaf* (2nd ed.). Boston: Allyn and Bacon.

Schroedel, J. G., Kelley, C., & Conway, P. (2002). Where are all the hard of hearing students? Some tips for enhancing services by postsecondary and rehabilitation professionals. In K. G. Jursik (Ed.), PEPNet 2002: *Diverse voices, one goal: Conference proceedings* (pp. 105-111). Knoxville, TN: University of Tennessee, Postsecondary Education Consortium.

Schroedel, J. G., Watson, D., & Ashmore, D. H. (2003). A national research agenda for the postsecondary education of deaf and hard of hearing students: A road map for the future. *American Annals of the Deaf, 148,* 67-73.

Stauffer, L. M., & Boone, S. (2006, Dec.). *Survey of state staffing patterns, issues, CSPD, and related outcomes for consumers who are deaf, deaf-blind, hard of hearing & late deafened. Final technical report*

*to the CSAVR committee on services to consumers who are deaf, deaf-blind, hard of hearing & late deafened.* Little Rock, AR: University of Arkansas Rehabilitation Research & Training Center for Persons who are Deaf or Hard of Hearing.

Traxler, C. B. (2000). The Stanford Achievement Test, 9th edition: National norming and performance standards for deaf and hard-of-hearing students. *Journal of Deaf Studies and Deaf Education, 5*, 337-348.

U.S. Census Bureau. (2006). *Americans with disabilities: 2002; Household economic studies.* Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. Retrieved May 24, 2009 from www.census.gov/prod/2006pubs/p70-107.pdf

U.S. Department of Education. (2004).Twenty-sixth annual report to Congress on the implementation of the Individuals with Disabilities Education Act. Washington, DC: author. Retrieved May 24, 2009 from http://www.ed.gov/about/reports/annual/osep/2004/index.html

Wheeler-Scruggs, K. (2003). Discerning characteristics and risk factors of people who are deaf and low functioning. *Journal of Rehabilitation, 69*, 39-46.