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Employment Survey of Individuals Who Use Augmentative and Alternative Communication

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Document Abstract

The purpose of this platform is to present the findings of a pilot survey investigating employment experiences of persons who use AAC. Participants were recruited from a state office of Vocational Rehabilitation. Preliminary results include descriptions of demographics, disability type, physical abilities, professional services and service provider knowledge, communication preferences, employment description, and access. Supports and barriers to employment of individuals who use AAC and factors that predict rehabilitation outcomes for those individuals will be discussed. A model of rehabilitation and employment outcomes is proposed using the World Health Organization International Classification of Functioning, Disability, and Health (WHO ICF).

Research Description

Individuals with severe speech disabilities present distinct needs in all aspects of their lives. Communication and employment are two aspects where that uniqueness is evident. The American Speech-Language Hearing Association (ASHA) estimates that approximately two million Americans have such severe communication impairments that they are unable to use speech and or handwriting to meet their daily communication needs (ASHA, 2006). An augmentative and alternative communication (AAC) system is one method individuals with severe speech disabilities may use to accomplish the complex process of human communication (Beukelman & Mirenda, 1998). AAC refers to electronic or nonelectronic systems designed to meet the spoken communication needs of individuals (Vandervelden & Siegel, 1999). AAC encompasses sign language, picture communication boards and books, both digitized and synthesized speech output devices, or any combination of these (Pugh & Huebner, 2004). Thus, the primary role of AAC is to facilitate an individual's active participation in all desired activities (Beukelman & Mirenda, 1998).

The Americans with Disabilities Act of 1990 (ADA) mandates equal opportunities for individuals with disabilities in all facets of life, including employment. Despite this law, the National Organization on Disability (2000) estimates that more than 11.3 million people with significant disabilities are not employed. Similarly, employment remains a substantial barrier for many individuals who use AAC (McNaughton & Bryen, 2002). For example, Blackstone (1993) reported that only 14% of 5,333 people who rely on AAC worldwide were in some way employed. In a recent literature review of AAC and employment, Pugh & Capilouto (2007) suggested that while AAC is a support to employment, access in the form of reliable transportation, attendant care, and technology support are also necessary.

One responsibility of the World Health Organization (WHO) is to shape the world health research agenda. The WHO structure for disability and the basis for the scientific standardization of data on health and disability is the International Classification of Functioning, Disability, and Health (ICF). The purpose of this pilot study was to investigate the employment of individuals who use AAC and propose a model of employment for AAC users using the WHO ICF classification system.

Purpose

This purpose of this presentation is to report the preliminary results of a survey of the employment experiences, characteristics, and opinions of individuals who use AAC who have been served by vocational rehabilitation (VR) in a rural state. Further, we identify supports and barriers to the employment of individuals who use AAC. Factors that may help predict rehabilitation outcomes for individuals who use AAC are applied to the WHO ICF model in light of the most current literature.

Methods

Ten individuals who use AAC served as the participants for this initial research phase. Each participant completed an employment survey designed to address all domains of the WHO ICF model. Following initial contact, participants received a 48-item survey that included short answer questions as well as Likert-type questions. Participants had the option of completing a hard copy of each survey (with or without assistance) or using a web-based survey form created with Survey Monkey.com ®. Results were collected and tabulated using SPSS, v16. Additionally, themes from open-ended responses were coded and analyzed for themes and checked for reliability between the PI and faculty advisor.

Results

Participants ranged in age from 36 to 67 years ($X = 54.75$, $SD = 14.08$) and 80% were male. Eight percent of participants reported cerebral palsy as their primary disability with the remaining 20% sited cerebral vascular accident (CVA). Seventy-five percent of the respondents did not report a secondary disability while 20% reported CVA or seizure disorder. Participant educational level ranged from “not receiving a high school diploma” to “bachelor’s degree”.

Preliminary data analyses indicate that respondents felt they could tolerate four to eight hours of daily work and 80% revealed their gross physical coordination was “poor” or “awkward and unsteady”. All participants felt they could follow most instructions “fairly well”.

Professionally provided services were questioned as part of the survey. All responding individuals had previously received physical therapy, speech-language pathology, and rehabilitation counseling. The knowledge of the service providers was ranked on a scale of 1 to 5 (1 being poor, 5 being excellent) per discipline respectively: physical therapy, $X = 3.75$ (range 3-5); speech-language therapy, $X = 4.50$ (4-5); and rehabilitation counseling, $X = 3.75$ (range 2-5). None of the individuals surveyed were currently receiving physical therapy, occupational therapy, speech-language pathology, or rehabilitation counseling. None were currently receiving services related to AAC. One individual was participating in a job coaching situation.

When asked about preferred communication modes, all respondents indicated that they used multimodal forms of communication. However, preferred communication modes were equally distributed between speech, writing, sign language, and voice output communication aid (VOCA). AAC users reported using their system between “some” and “most of the time”. Fifty percent of the respondents reported that they used AAC at home, work, and in the community.

Although some individuals reported using AAC in the work environment, none were working at the time of the survey. All participants described employment dreams such as working for an architect or becoming known as an inventor. In addition, all participants indicated that their employment situation did not match their dream. At least 80% were not satisfied with their current employment situation. Fifty percent reported a minimum of one prior work experience and eighty percent reported that they had worked or would work for reasons other than pay. Personal satisfaction, experience, social interaction, and education were identified as specific reasons to work other than pay.

In this survey we were also interested in the age of exposure to AAC, education, and employment related training. Although participants rated the knowledge of individuals who provided services within the educational systems high, $X = 4.33$ (range 4 - 5), most individuals (80%) were not exposed to AAC until after the age of twelve. In addition, only 20% had received employment specific training.

Conclusions

Preliminary results confirm McNaughton & Bryen (2002) findings that attaining employment remains a substantial obstacle for individuals who use AAC. Participants in this study felt they had been served by knowledgeable providers, but they lacked adequate work experiences and employment specific training. Therefore, they were not employed. Additionally, the results may suggest that employers are reluctant to hire individuals who use AAC. Further, research into the attitudes of employers toward

individuals who use AAC and a more sensitive survey is needed. The ongoing survey will be modified to collect the additional information from future respondents.

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Figure 1. Employment survey questions/topics as applied to the WHO ICF model

