

REHABILITATION COUNSELOR KNOWLEDGE AND EXPERIENCE WITH WHEELED
MOBILITY DEVICES

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Rehabilitation counselors work with the clients' family, friends, and employer to increase employment opportunities by means of their roles as counselor, coordinator, and consultant. Increasing employment opportunities often includes purchasing and learning to use assistive technology devices, equipment modification, improving accessibility, etc. The objective of this research is to examine knowledge and experience of OVR counselors in a common area of assistive technology: wheeled mobility device. A survey, given to public rehabilitation counselors in Pennsylvania, obtained information about counselors' caseloads, their knowledge of wheeled mobility and their use of good evaluation and selection strategies. This study shows that counselors with in-depth knowledge of AT devices seem more likely to: (1) support their clients in making informed choices about their technology needs, (2) consider the relationship between wheelchair features and job demands, and (3) listen to their clients' opinion. Further study is needed on the relationship between OVR counselors' knowledge about AT devices and factors that influence recommending or purchasing wheeled mobility devices.

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1. STATEMENT OF THE PROBLEM

In today's society, technology at its best is used as a medium to bring people together. It enhances our ability to communicate information and enhance service delivery at our homes and places of employment. It impacts the delivery of healthcare and human services. Technology not only enhances human performance but also increases and speeds up productivity (Farmer & Farmer, 2002). Technology supports important functions in the lives of individuals with disabilities.

1.1. TECHNOLOGY AND DISABILITY

Persons with disability often describe assistive technology (AT) as the primary “facilitator of interaction with their external surroundings” (Calloway & Shaffer, 1996; Rubin & Roessler, 2001). With the introduction of AT, a person with a disability can look forward to becoming actively involved in academic and employment activities; performing activities of daily living; having access to peers, role models and mentors; and having the ability to advocate for self and/or others (Lamb, 2003). In addition, an individual's ability to participate in community and recreational activities is made possible through the use of AT. Studies have shown that those who are employed or attending school depend on AT for their independence, productivity, and integration into society (Calloway & Shaffer, 1996; Rollins, 1999; Rubin & Roessler, 2001).

Despite the ADA's mandate for equal opportunity in private and public settings and the prevalence of disabilities in all age groups, many individuals with disabilities

experience difficulty in job and school placements (Bat-Chava, Deignan & Martin, 2002). It is believed that the ability to use advanced AT facilitates inclusion and independence in all types of settings (Calloway & Shaffer, 1996). Since AT is known to play such an important role in compensating for missing performance skills and enabling independence and inclusion, it is important that rehabilitation counselor know about this important new resource for their customers. Education and training of rehabilitation professionals in applying AT enables them to better meet the needs of individuals with disabilities, acquire new funding resources, and provide the appropriate supports (Calloway & Shaffer, 1996).

1.2. THE ROLE OF THE REHABILITATION PROFESSIONAL AND SUPPORT OF AT

Knowledge among rehabilitation professionals on matching AT to the abilities and needs of individuals with disability within a specific context is lacking. Research has shown that when rehabilitation professionals select the wrong AT, the outcome is poor (Driscoll, Rodger & de Jonge, 2001; Kittel, Marco & Stewart, 2002). If rehabilitation counselors do not consult with AT users before and after buying AT products, these products will be abandoned. This is confirmed by Kittel et al (2002) where high levels of dissatisfaction were said to be the reason wheelchair users abandoned their wheelchairs within a 12-month period. When an individual abandons a wheelchair selected and measured to meet his or her needs, there is a loss of opportunity to improve quality of life (Kittel, Marco & Stewart, 2002) as well as waste of human and financial resources. The individuals' abilities to contribute and participate in life remained the same as before AT use.

According to Seale et al (2002), there are two reasons rehabilitation counselors should include users in the AT decision-making process. First, including users in the early stages of product research connects the AT to their views and experience. It also assures that an AT device solves more problems than it creates. Second, it helps to eliminate the notion that disability is a condition that AT can fix. Technology should be used to compensate for disability not fix it. Involving clients in the assessment promotes better understanding of product options and supports more realistic expectations for the contribution of AT as one of many self-help strategies (Seale, McCreadie, Turner-Smith & Tinker, 2002).

The obstacle that potential AT users eminently face is inability to afford AT devices with the necessary features (Bowie, 1995). They often turn to government and private programs for assistance. These programs make decisions regarding what types of products they will reimburse (Bowie, 1995). Some of these agencies do not keep up with current AT and their purchase decisions are based on cost rather on the benefit of the consumer. For instance, the Centers for Medicare and Medicaid Services (CMS) do not pay for technology devices that are marketed to the general public. Medicare only funds “durable medical equipment” for use in the home that is deemed necessary by a physician. Medicaid, on the other hand, is more flexible because states have more control over product funding. For this reason, consumer advocacy groups and rehabilitation professionals have been more successful in over-turning funding denials with Medicaid.

The rehabilitation counselors’ knowledge of AT, understanding of the law, and ability to implement regulations is crucial in obtaining funds (Bowie, 1995; Solarz, 1990). The amount set aside for AT devices determines the level of monetary support that

individuals with disabilities obtain throughout the selection process (Dewsbury, Clarke, Rouncefield, Sommerville, Taylor & Edge, 2003). Dewsbury et al (2003) found that if funding for the purchase of AT is minimized, the device will either be less dependable or have fewer features.

Assistive technology devices are important supports in employment settings. Counselors' support can be a bridge between persons with disabilities and employers. This highlights the need for rehabilitation counselors to offer support throughout the AT selection and implementation process and to design strategies to ensure that accommodations in the workplace are successful (Stika, 1997). Rehabilitation counselors can promote communication, support delivery of rehabilitation services in the quest for self-advocacy, and educate both parties about the rights of individuals with disabilities under the ADA. After securing jobs for clients, rehabilitation counselors must work to support both employers' goals for productivity and consumer satisfaction. They must be sensitive to the demands, expectations, and concerns of employment and/or school settings (Rollins, 1999). Rehabilitation counselors are in a position to address education, training, and re-training of individuals with disabilities as well as attitudinal barriers and negative stereotypes (Rollins, 1999). They must support both the individuals with disabilities and employers negotiate job demands and responsibilities.

2. BACKGROUND AND SIGNIFICANCE

2.1. THE FIELD OF REHABILITATION

Rehabilitation is a “comprehensive sequences of services, mutually planned by the consumer and the rehabilitation counselor, to maximize employment, independence, integration, and participation of people with disabilities in the workplace and their community” (Rubin & Roessler, 2001). Its origins can be traced back to the last part of the nineteenth century when a large number of unskilled, rural youth began moving to the city. The need for vocational training to place unskilled workers in an employment setting led to the implementation of the Smith-Hughes Act in 1917 (Rubin & Roessler, 2001). The Smith-Hughes Act made monies accessible to states on a matching basis for vocational educational programs (Rubin & Roessler, 2001). The Vocational Rehabilitation Act of 1954 gave federal grants to universities for training persons interested in pursuing a career in rehabilitation counseling.

Rehabilitation philosophy has evolved through various models of rehabilitation service delivery. These include: (1) the idea of zero-exclusion, which states that no person should be excluded from services regardless of the severity of their disability (Higgins, 1985); (2) the recognition of the ecological model of rehabilitation, which acknowledges the impact of the environment on individuals and the importance of

environmental modification (Cormier & Cormier, 1998; Rubin & Roessler, 2001); (3) the contribution of post employment services and supportive employment (Rubin & Roessler, 2001);(4) the need for client advocacy (Rubin & Roessler, 2001); (5) the empowerment of the client (Cormier & Cormier, 1998; Rubin & Roessler, 2001); (6) the client’s rights to make his or her own choices (Goodwin, 1992); and (7) the recognition that individuals with disabilities are the best judges of their interests and have the right to participate in the political and economic existence of their communities (Bitter, 1979).

2.1.1. The Influence of the Rehabilitation Field on Legislation

As the numbers of advocacy organizations have increased, so has the influence of rehabilitation philosophy on public policy and legislation. These policies and laws play an important part in the lives of people with disabilities through the provision of rehabilitation services and education, authorization of financial support, and promotion of civil rights (Rubin & Roessler, 2001). One important provider of rehabilitation services is the rehabilitation counselor. Rehabilitation counselors work towards the “reintegration of self-image and reformulation of personal goals to enhance the person’s work adjustment and motivation” (Rubin & Roessler, 2001).

Rehabilitation counselors work in settings that span state and federal vocational rehabilitation agencies (public sector), community-based rehabilitation centers and supported employment programs (private-nonprofit sector), and worker’s compensation and insurance rehabilitation agencies (private-for profit sector) (Parker & Szmanski, 1998). Opportunities also exist in areas like substance abuse facilities; correctional facilities; disability management and employee assistance programs in industries,

schools, hospitals, and clinics; student service units at colleges and universities; job training centers; residential and independent living centers; private or public employment agencies; and private practice (Parker & Szmanski, 1998). Since 1998, employment opportunities for rehabilitation counselors have expanded to include one-stop career centers, Veterans Administration, and state “Tech Act” projects.

2.1.2. The Roles and Functions of the Rehabilitation Counselor

Counseling professionals often debate the roles and functions of a rehabilitation counselor. These debates have focused on what counselors say they do as opposed to what they actually do. A study done by Muthard and Salomone (1969) reports that one-third of the rehabilitation time is dedicated to counseling and guidance; one-third to clerical work, planning, recording, and placement; and one-third to professional growth, public relations, reporting, resources development, travel, and supervisory administrative duties. Others also found that rehabilitation counselors spend the majority of their time on administrative obligations rather than on client counseling and guidance. (Rubin, Richardson, & Bolton, 1973; Rubin & Roessler, 2001).

Despite the fact that other responsibilities claim the most time, rehabilitation counselors believe their counseling and guidance role is most important. Rehabilitation counselors use an intake interview to ascertain clients’ eligibility for vocational services (Rubin & Roessler, 2001). In this counselor role, they must then assess the impact of disability on each client to determine what intervention will follow (Cormier & Cormier, 1998). Rehabilitation counselors incorporate affective, vocational, and placement counseling to help clients enter the workplace (Rubin & Roessler, 2001). They educate,

formulate plans and develop jobs and placements activities on behalf of their clients.

Good communication and negotiation skills are used to effectively demand services for their clients.

In addition to being good counselors, coordinators and consultants, they must also be knowledgeable about the tools a person with a disability needs in order to become an effective employee and/or student. A person with severe disabilities requires assistive technology to successfully function in employment and/or school settings. Since AT requires an accessible and inclusive environment, counselors work with clients' family, friends and employers to increase accessibility and opportunity for their clients. This includes proposing the implementation of equipment modifications, assistive technology devices and so on (Cormier & Cormier, 1998; McCue, 1989; Rubin & Roessler, 2001).

This model that combines rehabilitation and AT for different forms of disability dates back to the post World War II years, which included the polio epidemic in the 1950s, birth defects due to use of thalidomide by pregnant in the 1960s, and injuries sustained by soldiers in the Vietnam War of 1970s (Lenker, 2000). The need for solutions prompted the United States Department of Health, Education, and Welfare and the Veteran Administration to develop Rehabilitation Engineering Centers (RECs) nationwide during the 1970s. In 1979 the Rehabilitation Engineering Society of North American (RESNA) was formed as a result of the joining of RECs and a group of engineers and clinicians. RESNA has since changed its name to Rehabilitation Engineering and Assistive Technology Society of North America to reflect the broader professional background of its members. The importance of AT in rehabilitation practices and training is seen in the reauthorization of the Rehabilitation Act in 1986. The

reauthorization of the Rehabilitation Act encouraged the use of technology by rehabilitation professionals in acquiring and retaining employment. The Rehabilitation Act also encouraged the use of rehabilitation engineering in the development and distribution of AT devices in order to address issues such as education, employment, independent living, and integration into the community for persons with disabilities (<http://www.techconnections.org/legislation/RehabAct/Q1-4.cfm>).

The Rehab Act was followed by the implementation of the Technology-related Assistance for Individual with Disabilities Act (Tech Act) in 1988, which is now managed by the U.S. Department of Education, Office of Special Education and Rehabilitation Services (OSERS) through the National Institute on Disability and Rehabilitation Research (NIDRR). The Tech Act used the words “assistive technology device” and “assistive technology services” to describe resources and services needed by individuals with disabilities. Initially, the AT device was defined as “any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capacities of individuals with disabilities” (P.L. 100-407). According to the Tech Act, AT service was “any service that directly assists an individual with a disability in the selection acquisition or use of an assistive technology device” (P.L. 100-407). The need to expand on the Tech Act gave way to the implementation of the Assistive Technology Act (AT Act) of 1998. The objective of the AT Act was to provide states with grant to address the assistive technology needs of individuals with disabilities.

2.2. THE BARRIERS TO ASSISTIVE TECHNOLOGY USE

2.2.1. Lack of consumer awareness.

Individuals with disabilities are aware of their need for AT but often have insufficient knowledge concerning the types of technology available to effectively enhance their personal and professional life (Driscoll, Rodger & de Jonge, 2001). Inadequate knowledge of the capability of their technology and insufficient training in how to use it causes them to struggle with the implementation of their AT devices (Driscoll, Rodger & de Jonge, 2001; Kittel, Marco & Stewart, 2002). They are conscious of their need for AT as an instrument for enhancing their functioning abilities; however, they have had minimal experiences with the possibilities of technology, so they accept limitations or make do with their current AT devices (Driscoll, Rodger & de Jonge, 2001). Some consumers' lack of knowledge regarding AT devices, services, and how to access those services is complicated by their limited knowledge of the kinds of assistance needed and supports necessary to integrate the technologies (Cowan & Turner-Smith, 1999; Driscoll, Rodger & de Jonge, 2001).

A report by the National Council on Disability and Social Security Administration states that the goal of using AT to prepare individuals with disabilities for education and employment is not being accomplished (National Council on Disability & Social Security Administration, 2000). The barriers to technology access for persons with disabilities include the lack of knowledge concerning existing laws and policies on assistive

technology and accessible electronic and information technology, lack of funding for assistive technology, lack of management of public and insurance companies, and lack of trained professional to evaluate AT (National Council on Disability, 2000; Solarz, 1990). Consumers also benefit from interaction with experienced consumers to gain an understanding of the challenges of integrating AT devices into academic and employment settings (Driscoll, Rodger & de Jonge, 2001).

2.2.2. Lack of knowledge by rehabilitation counselors.

There are some areas of AT integration that are directly affected by rehabilitation counselor's lack of knowledge. They seem unable to encourage persons with disabilities to identify work accommodations, or to engage them in social competence programs designed to assist them in requesting accommodations from their employers and/or insurance companies (Driscoll, Rodger & de Jonge, 2001). Most rehabilitation counselors do not know how to gain knowledge and keep current on high tech or AT devices (Rollins, 1999). They are also not likely to spend time or involve family members and/or caretakers of a disabled person in the wheelchair selection and prescription process (Kittel, Marco & Stewart, 2002; Judge, 2002).

When a group of rehabilitation counselors were asked to describe their personal and professional experience with AT approximately 35% reported that they had little or no experience with it (Sax, 2002). Sax suggested that the nature of caseloads and/or having someone in the office with AT specialization to refer cases to create this lack of experience. Those counselors with AT experience mostly concentrated on one area of AT devices, e.g. that used by individuals who are deaf or blind. The other 65% reported

experience with acquiring and/or recommending AT devices such wheelchairs, driving modifications, home modification, adaptive computer access, recreational tools, Augmentative and Alternative Communication (AAC), hearing aids, vision aids, and low tech for Activities for Daily Living (ADLs).

Given the fact that AT is crucial in the American workplace especially for persons with disabilities, lack of knowledge by counselors with goal of employment is devastating. AT is essential for completing work and employment related tasks in addition to enabling independence, productivity, socialization, communication, and control of external environment (DeRuyter, 2002). Stika (1997) states that lack of AT or information about AT for the workplace limits career opportunities for individuals with disabilities.

2.2.3. Lack of knowledge by employers.

Most employers know that technology enhances employees' work performance. They also recognize the benefits of AT services in supporting employees with disabilities but, are less knowledgeable about where those services exist (Driscoll, Rodger & de Jonge, 2001). Employers' lack of knowledge often results in fear that the AT technology might disrupt the work environment (Pell, Gillies & Carss, 1997). Some employers believe it is the obligation of the employee to be knowledgeable about and access needed services (Driscoll, Rodger & de Jonge, 2001). A study done by Steinfeld and Angelo (1992) reveals that employers willingness to be educated on issues significant to the integration of AT in the workplace will not only maximize the success of the system but also empower employees to succeed in the workplace (Steinfeld, & Angelo, 1992).

2.2.4. Focus of the Study

Currently, Council On Rehabilitation Education (CORE) standards recognize AT as one of the knowledge areas necessary for the Rehabilitation Counselor Education (RCE) program, however the standards do not specify the level of training required in rehabilitation counselor education. Rehabilitation counselors' abilities to make decisions and effectively serve their clients in the purchase of AT depends on their AT training and experience. The responsibility of seeking AT training rests with rehabilitation professionals as most people who need rehabilitation services have no experience or knowledge of AT. They rely on the expertise and judgment of rehabilitation professionals. For rehabilitation counselors to recommend AT that facilitates rehabilitation, they should have in-depth knowledge of AT devices, the functional abilities of their clients, and resources available. They should get extensive pre-service or continuing education training in AT before taking on the role of AT evaluator. When given AT training, it is assumed that rehabilitation counselors are able to support individuals with disabilities in making informed choices and decisions about their technology needs.

The most commonly used form of AT for individuals with disabilities seeking a return to work is the wheelchair. According to the National Institute on Disability and Rehabilitation Research (NIDRR), 27.4% of mobility device users participate in the labor force and 20.4% are wheelchair users (Disability Statistics Report, 2000). Wheelchairs have become increasingly complex since the 1970's. Alternatives in frame design, options in control interfaces, cushion, power seating, and transport safety have made the

process of selecting a wheelchair much more complex. Many of the architectural modifications described in the ADA are made to cover the needs of people who use wheelchairs. Because wheelchairs are a highly used form of AT, this research study will investigate the knowledge and experience of Pennsylvania Office of Vocational Rehabilitation (OVR) counselors in the area of wheeled mobility.

3. METHOD

3.1. STATEMENT OF THE RESEARCH QUESTION

In order to accomplish the goal of this study several research questions were developed.

These research questions are:

1. Do rehabilitation counselor certification, education and experience affect the process of recommending wheeled mobility devices to vocational rehabilitation clients? Does the amount of AT training and experience affect the amount of rehabilitation counselor involvement in the AT selection process?
2. Does knowledge of AT devices and technology services affect rehabilitation counselor's decision-making skills concerning assessment and purchase of wheeled mobility devices for their clients?

3.1.1. Survey Research

This study used a questionnaire to investigate knowledge and practices of Pennsylvania OVR counselors regarding wheeled mobility. The questionnaire was designed based on a review of the literature and the experience of the researchers (Buning, 2001).

3.1.2. *Research Design*

A descriptive study using a cross-sectional design was used to explore whether there is a relationship between the responses of counselors and three characteristics of OVR counselors: holding a rehabilitation counseling masters' degree, having a CRC certification, and years of experience. These independent variables were used to explore differences in variables such as knowledge about WMD, decision-making practices, inclusion of the customer, etc.

3.1.3. *Survey Development*

The questionnaire for this study was divided into two main sections. The first section included: (a) counselors' caseload description (b) a self-assessment of knowledge about wheeled mobility devices (WMD), and (c) decision-making practices. The second section requests counselors' demographic data regarding place of employment, geographic location, level of education, educational focus, and number of years with CRC certification. The questions use either a checkbox or a fill-in-the-blank format. For checkbox questions, counselors were asked to either check *all* responses that apply to them or to choose one answer from several choices. Fill-in the blank questions, typically for numerical or categorical data. (See Appendix A for a copy of the questionnaire).

3.1.4. *Inclusion and Exclusion Criteria*

Participants were Pennsylvania OVR rehabilitation counselors currently practicing rehabilitation counseling. A self-report was used to determine participants' educational level, certification, and years of experience. Participants did not necessarily have clients who are wheelchair and/or scooter users. No participants were excluded due to lack of formal education/training in the use of AT.

3.1.5. Procedure

This study received approval from the University of Pittsburgh IRB and the Pennsylvania OVR Director of the Bureau of Program Operations in Harrisburg, PA. The Director of the Bureau of Program Operations, Roger Barton, was first contacted through electronic mail (email) about recruiting OVR counselors for a research study. He took on the role of electronically distributing study documents (a cover letter, study abstract and blank survey form) to each of the 15 district offices in the state OVR system.

Upon approval, an electronic mail message with study documents was sent to all 15 district offices managers. The electronic mail instructed each district manager to pick a coordinator among staff members, who was to be responsible for distributing and collecting the finished surveys. The coordinators were asked to count the number of counselors in their office with customers who use WMD and make a list for their use that contained each counselor's name. The coordinator was then asked to photocopy the correct number of questionnaires and mark each questionnaire with a number: 1, 2, 3, etc. and distribute the questionnaire to each counselor on their list. The counselors were given 2 weeks to complete the questionnaire. The coordinator was asked to remind the counselors about collecting the completed questionnaires 3 days before the due date. The

coordinator was asked to mail or fax the completed questionnaire to the study facility. A follow up telephone call was made to district offices whose questionnaires were late.

3.1.6. Data Collection and Analysis

The returned survey responses were sorted into district offices. The data were then, entered into Statistical Package for the Social Sciences (SPSS), version 12.0 for Windows, coded, and checked for accuracy of data entry and missing values. The numerical coding was to enable the researcher categorize participants' responses into district offices. All the missing items were substituted with the group mean for those items (Portney & Watkins, 2000).

Statistical analyses were conducted using SPSS (SPSS Inc., Chicago, IL, USA). Descriptive statistics were used to summarize study demographic, caseloads, knowledge of WMD, and how counselors make decisions regarding WMD. Chi-square analyses were conducted to determine whether there is a difference in counselors' education, certification, and years of experience and their knowledge of WMD. In addition, the chi-square analysis was used to examine whether counselors' education, certification, and years of experience had any impact on their involvement in WMD purchasing process. A p value of less than 0.05 was identified for all analyses.

4. RESULTS

4.1. CONSELOR DEMOGRAPHIC AND CASELOADS

A total of 87 counselors from a total of 374 possible OVR counselors returned a completed questionnaire, representing a response rate of 23%. Although Dillman (1978) considers a return rate higher than 60% acceptable, that return rate was not possible with this study. The response rate was highest from the Johnstown district office (15/24 or a return rate of 63%) and lowest from the Wilkes Barre (1/24 or 4.2%) and Pittsburgh offices (5/56 or 9%).

Counselors from the 15 district offices ranged in age from 25 to 62. This sample was skewed toward female counselors (55%), with more than 5 years of experience (68%), with either a completed master's degree or a master's degree in process (72%), and counselors with a rehabilitation counseling certificate or a certificate in process (67%). These counselors reported having a total of 653 clients who use a wheelchair in their caseloads. Of that number, 466 of their clients used a wheelchair full-time and 187 used a wheelchair some of the time. Three hundred and twenty-four of the clients used power wheelchairs, 230 used manual wheelchairs, and 106 used both manual and power wheelchairs. The following table presents some of this data as a summary.

Table 1: Summary of data from the four OVR district offices used in this study

Variable	Category	Number	Percentage
Gender	Male	38	44
	Female	48	56
Age	25 to 34	23	28
	35 to 44	14	17
	45 to 54	34	42
	55 years and over	11	13
Years of RC practice	Less than 5 years	28	33
	More than 5 years	58	67
MS in rehabilitation counseling	Yes	42	48
	Working/Planning on it	21	24
	Not working on it	24	28
Certificate in rehabilitation counselor	Yes	31	36
	Working/Planning on it	27	31
	Not working on it	29	33
District office	Allentown	2	2
	Altoona	8	9
	Dubois	3	3
	Erie	11	13
	Harrisburg	7	8
	Johnstown	15	17
	New Castle	6	7
	Norristown	5	6
	Philadelphia	5	6
	Pittsburgh	5	6
	Reading	2	2
	Washington	5	6
	Wilkes Barre	1	1
	Williamsport	2	2
	York	10	12
Caseload population	Sensory disabilities	59	68
	Physical disabilities	81	93
	Cognitive disabilities	80	92
	Psychiatric disabilities	73	84
	Drug and Alcohol	60	69
	Developmental	76	87

4.2. HOW COUNSELORS MAKE DECISIONS REGARDING MOBILITY DEVICES

A frequency analysis was conducted to illustrate counselors' response to questions about the process of getting a WMD for their customers. A frequency analysis revealed that 94% of counselors reported that they consult OT or PT when requesting wheelchair evaluation, 61% said a rehabilitation technology supplier, 55% said consumers or family members, and 41% said a rehabilitation engineer. When asked to identify methods used to pick the evaluation team, 60% reported that they consult approved vendors, 58% said they consult their colleagues, and 43% said they use the recommendation of the rehabilitation hospital. The responses of how counselors pick their evaluation team are reported in Table 2.

Table 2: Self report of how counselors pick their evaluation team

Method for Picking evaluation team	Yes	No
1. I use the recommendation that was made by the rehabilitation hospital	*37 (43%)	50 (57%)
2. I always use Hiram G. Andrews	10 (12%)	77 (88%)
3. I choose from a list of approved vendors for this service	*52 (60%)	35 (40%)
4. I get recommendation from colleagues	*50 (58%)	37 (42%)
5. I rely on my personal experience	34 (39%)	34 (60%)
6. I use a listing of credentialed providers like OTR, PT or ATP (Assistive Technology Practitioners	29 (33%)	58 (67%)
7. Other (Please specify)	10 (12%)	77 (88%)

*Keys: * = top three methods for picking evaluation team*

4.2.1. Educational and Making Decisions about WMD

One of the purposes of this study was to determine the relationship between counselors' educational degree and self assessment of their knowledge of WMDs. Chi-square test was used to determine if there was a statistically significant relationship between educational levels and whether or not counselors considered individual factors in decisions regarding WMD. This analysis revealed a significant difference between counselors holding a rehabilitation counseling masters' degree and those working on it or not working on it. Sixty one percent of counselors with masters' in rehabilitation counseling compared to those without (25% "working on it" and 14 % "not working on it") reported that they consult the expertise of a rehabilitation engineer when requesting wheelchair evaluation.

4.2.2. Certification and Making Decisions Regarding WMD

To examine the relationship between counselors' certification and whether or not counselors considered individual factors in decisions based on their knowledge of WMD, a chi-square test was used. The chi-square analysis showed a significant difference between counselors with a CRC certification and those working on it or those not working on it. Forty seven percent of counselors with CRC certification compared to 38% of counselors working on it or 14 % not working on it reported that they consult rehabilitation engineering services when requesting wheelchair evaluation.

4.2.3. Experience and Making Decisions about WMD

To examine the impact of counselors' experience on whether or not they considered factors in making decisions regarding WMD, chi-square test was used. This analysis

revealed no significant difference between counselors with more than 5 years experience and those with less than 5 years experience.

4.3. COUNSELORS' DEGREE OF INVOLVEMENT IN THE WHEELCHAIR PURCHASING PROCESS

A frequency analysis showed that 35% of counselors reported they were totally involved in the purchasing process, 46% said they were somewhat involved, and 18% said they were minimally involved. Eighty nine percent of counselors reported that they involve clients and/or caretakers in decision-making concerning the selection of wheelchair compared to 9% who said it depends on the client or 1% who said that consumers and/or caretakers were not involved. The responses of counselors and consumers involvement in the wheelchair purchasing process are reported in Tables 3 and 4. When asked to identify methods they use to learn about wheeled mobility devices, 97% reported that they learned from colleagues, 94% reported from clients/customers, 78% reported from specialist's reports, and 56 % reported from trial and error. These results are reported in Table 5.

Next, the relationship between methods of learning about WMD and the level of counselors' involvement in the wheelchair purchase process was evaluated using a chi-square test. This analysis did not show a relationship between the various methods counselors use to learn about WMD and their involvement in the wheelchair purchasing process.

Table 3: Counselors' report of consumer and caretaker involvement in the wheelchair purchasing process

Variable	Totally involved	Somewhat Involved	Minimally Involved
1. Masters' in rehabilitation counseling	34 (45%)	7 (78%)	0 (0%)
2. Working on masters' in rehab. counseling	19 (25%)	1 (11%)	0 (0%)
3. Not working on masters' in rehab. counseling	22 (29%)	1 (11%)	0 (0%)
1. CRC certification	26 (35%)	5 (56%)	0 (0%)
2. Working on CRC certification	25 (33%)	2 (22%)	0 (0%)
3. Not working on CRC certification	24 (32%)	2 (22%)	0 (0%)
1. Less than 5 years experience	22 (29%)	4 (44%)	0 (0%)
2. More than 5 years experience	52 (69%)	5 (56%)	0 (0%)

Table 4: Self report of counselors' involvement in the wheelchair purchasing process

Variable	Totally involved	Somewhat Involved	Minimally Involved
1. Masters' in rehabilitation counseling	13 (43%)	21 (53%)	8 (50%)
2. Working on masters' in rehab. counseling	5 (17%)	11 (28%)	5 (31%)
3. Not working on masters' in rehab. counseling	12 (40%)	8 (20%)	3 (19%)
1. CRC certification	8 (27%)	20 (50%)	3 (19%)
2. Working on CRC certification	9 (30%)	11 (28%)	7 (44%)
3. Not working on CRC certification	13 (43%)	9 (23%)	6 (38%)
1. Less than 5 years experience	5 (16.7%)	14 (35%)	8 (50%)
2. More than 5 years experience	24 (80%)	26 (65%)	8 (50%)

Table 5: Self report of how counselors learned about mobility devices

Method of learning	Yes	No
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Method of learning	Yes	No
1. Talking to colleagues	*84 (97%)	3 (3%)
2. Talking to my customers	*82 (94%)	5 (6%)
3. Trial and error or experience	*49 (56%)	38 (44%)
4. Searching on the Internet	22 (25%)	65 (75%)
5. Reports that come back from specialists	*68 (78%)	19 (22%)
6. Wheelchair magazines and other print resources	11 (13%)	76 (87%)
7. Workshops or training sessions given by professionals	36 (41%)	51 (59%)
8. Newsletters from rehabilitation sources	17 (20%)	70 (80%)
9. Reading advertisements	12 (14%)	75 (86%)
10. Graduate or undergraduate education in this topic	19 (22%)	68 (78%)
11. Other (Vendors, in-service training, TV ads and sales representatives, self use, doctors and OTs, and consumers equipment)	14 (16%)	73 (84%)

Keys: * = top four categories

4.4. COUNSELORS' CURRENT KNOWLEDGE OF WMD AND DECISIONS REGARDING PURCHASE

Counselors provided a variety of responses regarding their self-rated knowledge of wheelchairs. The majority of counselors stated that they have limited knowledge of wheeled mobility topics. The responses for counselors' current knowledge of wheeled mobility devices are shown in Table 6.

Table 6: Counselors' report of the current knowledge of topics related to making a good match between consumers and their mobility devices

Counselors' Knowledge of WC-Related topics	Extensive	Limited /None
1. Features that make a wheelchair comfortable	12 (14%)	74 (86%)
2. Ways of preventing wheelchair injury	13 (15%)	72 (84%)
3. Techniques for transporting wheelchairs safely to and from work	16 (19%)	70 (81%)

Counselors' Knowledge of WC-Related topics	Extensive	Limited /None
4. Types of wheelchair features that are important for long term health	11 (13%)	75 (87%)
5. Choosing a wheelchair that allows users to do things that are important in life and at work	16 (19%)	70 (81%)
6. Various ways to pay for a wheelchair	24 (28%)	60 (71%)
7. RC contribution to the wheelchair selection process	13 (15%)	72 (84%)
8. The value of getting a "client-centered" assessment	44 (51%)	42 (49%)
9. Ways to make a home or workplace "wheelchair accessible"	26 (30%)	60 (70%)

A chi-square test was used to test the relationship between counselors' current knowledge of wheeled mobility and factors that influence their decision to fund wheelchair. There were a number of statistically significant findings. The analysis revealed that 87% of counselors with limited or no knowledge of "features that make a wheelchair comfortable" compared to 14% with extensive knowledge of this topic reported that their decision to pay for a wheelchair was influenced by "wheelchair safety" ($p=.008$).

Eighty one percent of counselors with limited or no knowledge of "techniques for transporting wheelchairs safely to and from work" compared to 19% with extensive knowledge reported that "wheelchair safety" influenced their decision to pay for a wheelchair ($p=.045$). Eighty one percent of counselors with limited or no knowledge of "techniques for transporting wheelchairs safely to and from work" compared to 19% with extensive knowledge reported that "compatible with transportation" influenced their decision to pay for a wheelchair ($p=.047$).

Eighty seven percent of counselors with limited or no knowledge of “types of wheelchair features that are important for long term health” compared to 12% with extensive knowledge reported that “wheelchair safety” influenced their decision to pay for a wheelchair ($p=.033$). Eighty one percent of counselors with limited or no knowledge of “wheelchair that allows users to do things that are important in life and at work” compared to 19% with extensive knowledge reported that “wheelchair safety” influenced their decision to pay for a wheelchair ($p=.015$).

Seventy percent of counselors with limited or no knowledge of the value of getting a “client-centered” assessment” compared to 30% with extensive knowledge reported that “wheelchair safety” influenced their decision to pay for a wheelchair ($p=.009$).

4.4.1. Counselors’ Knowledge of WMD and Rank of Most Important Wheelchair Features

To test the correlation between counselors’ knowledge of WMD and their ranking of important wheelchair features, the Spearman’s rho test was used. The Spearman’s rho was used to demonstrate if a positive relationship exist between counselors’ knowledge of WMD and their ranking of each wheelchair features. The Spearman’s rho showed a significant correlation between counselors with knowledge of “ways to make a home or workplace wheelchair accessible” and their ranking of “wheelchair safety” (Spearman's $[\rho] = 0.25$; $p=.017$). The Spearman’s rho showed a significant correlation between counselors with knowledge of “types of wheelchair features that are important for long term health” and their ranking of “wheelchair durability” (Spearman's $[\rho] = 0.22$;

p=.041). In addition, Spearman’s correlation was used to test the relationship between average knowledge of wheelchair and their ranking of most important features when choosing a wheelchair. There was no significant correlation between these factors.

4.4.2. *The Influence of Counselors’ Educational Needs on their Decisions*

Table 7 summarizes counselors’ indications of their educational needs. The top 5 areas of educational need among counselors were: matching wheelchair features and environments (67%), injury prevention (59%), wheelchair components/ features (59%), transporting wheelchairs (55%), and seating and positioning (54%). All of the above topics were chosen by more than half of the study participants.

Table 7: Self-report of areas of where counselors’ need more education

Areas in which additional education is desired	Yes	No
1. Seating and positioning	*47 (54%)	40 (46%)
2. Wheelchair Components/ Features	*51 (59%)	36 (41%)
3. Injury Prevention	*51 (59%)	36 (41%)
4. Transporting Wheelchairs	*48 (55%)	39 (45%)
5. Wheelchair Standards	43 (49%)	44 (51%)
6. Funding Wheelchairs	46 (53%)	41 (47%)
7. Workplace Accessibility	41 (47%)	46 (53%)
8. Home Accessibility	39 (45%)	48 (55%)
9. Matching wheelchair features and environments	*58 (67%)	29 (33%)
10. Other	39 (45%)	48 (55%)

Keys: * = top five areas of educational needs.

Table 8 summarizes factors that influence counselors’ decision to pay for a wheelchair. The top 3 factors that influence counselors’ decision regarding WMD were:

strength of the evaluator’s recommendation (80%), relationship between wheelchair features and job demands (79%), and client’s opinion (72%). All of the above topics were chosen by more than half of the study participants.

Table 8: Counselors’ report of the factors that influence their decision to pay for a wheelchair.

Factor	Yes	No
1. Price or cost	30 (35%)	57 (65%)
2. Availability of additional funding	39 (45%)	48 (55%)
3. Strength of the evaluator’s recommendation	*70 (80%)	17 (20%)
4. Relationship between wheelchair features and job demands	*69 (79%)	18 (21%)
5. Getting an opinion from a more experienced counselor	20 (23%)	67 (77%)
6. Client’s opinion	*63 (72%)	24 (28%)
7. Family member’s opinion	20 (23%)	67 (77%)

Keys: * = top three factors that influence WMD decision.

A significantly higher ($p=.027$) percentage of counselors reported needing more education on “injury prevention” (80%) than not (20%) indicated that they “asked the opinion of a more experienced counselors” in deciding whether to pay for a wheelchair.

A significantly higher ($p=.042$) percentage of counselors who said they needed more education on “wheelchair standards” (61%) than counselors who did not (39%) indicated that “availability of additional funding” influenced their decision to pay for a wheelchair.

A significantly higher ($p=.047$) percentage of counselors who said they needed more education on “matching wheelchair features and environment” (85%) than counselors who did not (15%) indicated that “getting an opinion from a more experienced counselors” influenced their decision to pay for a wheelchair.

4.4.3. Counselors' Educational Needs and Rank of Most Important Wheelchair

Features

To test the correlation between counselors' educational needs and ranking of important wheelchair features, Spearman's rho test was used. Spearman's rho was used in order to determine if a positive relationship existed between educational needs and the ranking of wheelchair features. Spearman's rho showed a significant correlation between counselors with educational needs in the area of "funding wheelchair" and their ranking of "wheelchair dependability" (Spearman's $[\rho] = 0.29$; $p = .005$) and "wheelchair repairability" (Spearman's $[\rho] = 0.23$; $p = .032$).

Spearman's rho showed a significant correlation between counselors with educational needs in the area of "workplace accessibility" and their ranking of "wheelchair compatibility with daily environment" (Spearman's $[\rho] = 0.21$; $p = .049$). Spearman's rho showed a significant correlation between counselors with educational needs in the area of "wheelchair standards" and their ranking of "wheelchair compatibility with daily environment" (Spearman's $[\rho] = 0.31$; $p = .003$) and "compatible with transportation" (Spearman's $[\rho] = 0.21$; $p = .046$).

Spearman's rho test showed a significant correlation between counselors with educational needs in the area of "home accessibility" and their ranking of wheelchair features that are "effective in enabling the client to accomplish task" (Spearman's $[\rho] = 0.23$; $p = .029$) and "compatible with daily environment" (Spearman's $[\rho] = 0.22$; $p = .037$). Spearman's rho showed a significant correlation between counselors with educational needs in the area of "matching wheelchair features and environment" and

their ranking of “effective in enabling the client to accomplish task” (Spearman's $[\rho] = 0.22$; $p=.037$) and “compatible with daily environment” (Spearman's $[\rho] = 0.29$; $p=.005$).

Spearman's rho test showed a significant correlation between counselors with educational needs in “other” area and their ranking of wheelchair features that are “wheelchair operability” (Spearman's $[\rho] = 0.23$; $p=.026$) and “compatible with transportation” (Spearman's $[\rho] = 0.25$; $p=.020$). A Spearman's correlation was used to determine the relationship between total number of the areas that counselors said they needed more education and ranking of most important features when selecting a wheelchair indicated a significant correlation. A relationship existed between total number of the areas that counselors reported that they needed more education and ranking of wheelchair features that are “compatible with daily environment” (Spearman's $[\rho] = 0.25$; $p=.019$).

5. DISCUSSION

The purpose of this study was to assess the importance of OVR counselors' education, certification, and years of practice in the area of wheeled mobility devices. The literature search for this study revealed very little information on counselors' current knowledge about WMD and their practices. This was also true for factors that influence rehabilitation counselors' decision to fund a wheelchair.

5.1. KNOWLEDGE OF ASSISTIVE TECHNOLOGY

Previous studies have shown a strong relationship between counselors' lack of AT knowledge and limited career opportunities for persons with disabilities (Kittel, Marco & Stewart, 2002; DeRuyter, 2002; Driscoll, Rodger & de Jonge, 2001; Stika, 1997).

Additionally, studies have reported that rehabilitation counselors do not know how to gain knowledge on AT devices (Rollins, 1999) nor do they know how to make decisions regarding wheeled mobility devices (Kittel, Marco & Stewart, 2002; Judge, 2002).

Published studies on the influence of rehabilitation counselors' education, certification, and years of experience and on decision-making regarding wheeled mobility were not found.

Because of this limited information, the first goal of this study was to ask if rehabilitation counselor's certification, education and/or experience influenced their

decision to pay for wheeled mobility devices for their clients. The results of this study seem to indicate that there is no relationship between how counselors make decisions regarding wheeled mobility devices and their levels of education, having a certification, or years of experience.

There are some possible explanations for these results. One explanation is that most schools with masters programs in rehabilitation counseling do not provide educational courses on using AT to meet the needs of their clients. The use of AT to enhance the lives of persons with disabilities has received minimal recognition in the rehabilitation counseling curriculums (Enders & Hall, 1990). This might be attributed to the fact that counselors' assume that the basic knowledge of AT is out of their service areas and personal expertise (Justeen & Menlove, 1994). The certified rehabilitation counselor exam focuses on counselors' knowledge of counseling techniques, placements, public relations, resources development and administrative duties, but not assistive technology.

However, this result did find a significant relationship between counselors' decision to consult a rehabilitation engineer when requesting wheelchair evaluation and their levels of education or having a certification. An explanation for this might be that the term "rehabilitation engineering" services is used in Rehab Act and Vocational Rehabilitation legislation. It is reasonable to say that these counselors wanted someone with that professional expertise in AT to consult with. The other possible choice they could have made on that questionnaire item is the rehabilitation technology supplier or RTS but that role or individual is known to have a bias and a "sales" approach to AT products.

5.1.1. Rehabilitation Counselors' Involvement in the AT Selection Process

The second question in this study was to determine if the amount of AT training and experience affects counselors involvement in the AT selection process. The current study found no relationship between methods for learning about AT devices and their amount of involvement in the AT selection and/or purchasing process. On the question of the impact of experience on counselors' involvement, this study found no relationship between years of experience and their involvement in purchasing and/or selecting wheeled mobility devices. This result might be explained by the fact that most counselors in this study reported having limited or no pre-service or continuing education instruction in the features of WMDs.

5.1.2. Rehabilitation Counselors' WMD Decision-Making Skills

The third purpose of this research was to establish whether knowledge of AT devices and technology services affects rehabilitation counselors' decision-making skills. The results of this research found no significant correlation between average knowledge of WMD and their ranking of wheelchair features. However, this study did find a significant correlation between knowledge of specific wheelchair topics and ranking of particular wheelchair features. Significant correlation existed between counselors with limited or no knowledge of "features that make a wheelchair comfortable" and their ranking of "wheelchair safety" as more important. Also, counselors with limited or no knowledge of the value of getting a "client-centered assessment" ranked "wheelchair safety" as more important.

The observed correlation between these factors could be explained by the fact that counselors with limited or no knowledge of a particular area of wheeled mobility will likely rank safety and dependability features more highly than those they do not know. Counselors do not want unsafe or failure-prone products to cause further health or employability problems for their clients. On the question of counselors' educational needs, this study found a significant relationship between total numbers of areas on which counselors reported they needed more education and their ranking of wheelchair features that are "compatible with daily environment." Also, the results of this study showed a significant correlation between need for more knowledge of certain wheelchair topics and ranking of specific features.

For instance, counselors who needed more education on "funding wheelchair" ranked their need for more education on "wheelchair dependability" and "wheelchair repairability" as more important. Counselors who needed more education on "wheelchair standards" ranked wheelchair features that are "compatibility with environment" and "compatibility with transportation" as more important when choosing a wheelchair. A possible explanation for this might be that counselors with knowledge of "wheelchair standards" want to know how those standards will affect the client ability to function in his or her chosen environment. In addition, knowledge of "wheelchair standard" is crucial when purchasing a vehicle that will be use to transport a wheelchair or a wheelchair that will be used in public transportation.

5.2. LIMITATIONS

The first limitation of this study is that the overall response rate of 23% is not representative of OVR counselors in Pennsylvania. Many factors could have influenced the low return rate. Counselors usually have large caseloads and there is a disincentive to spend time completing a survey when performance is rated on getting “closure” or placing a person in a job. Also, some district offices have assigned specific counselors responsibility of consumers who use wheelchairs and thus these offices would have a lower response rate since only certain counselors would reply.

Another limitation of this study is the sample size. It is not possible to make the claim that the 87 participants from the 15 district offices reflect the diversity of counselors in all Pennsylvania OVR offices or that study findings apply to all rehabilitation counselors in the OVR system. The findings must be interpreted with caution.

The third limitation is that results from this study were based on counselors’ self-report rather than on absolute or measured knowledge. Despite anonymity, counselors may not fully report information regarding their knowledge for fear that it would reflect badly on their district office or their professionalism. However, self report surveys when used to examine personality characteristics shows stability and generalization across conditions (Moskowitz 1986). Having basic knowledge of topics related to mobility devices versus being well informed about topics related to mobility devices are very different things. For instance, a counselor might have a general idea of what wheelchair standard means but has no knowledge of ANSI/RESNA or ISO Wheelchair Standards.

The final limitation is that we had missing data for some questions. This may, in

part, be related to the fact that participating counselors were unable to recall information from their caseloads. Another possible explanation is that they did not understand the questions.

5.3. IMPLICATIONS

This study indicates that the ability of OVR counselors to make decisions and effectively assist their clients in the purchase of mobility devices depends on their knowledge of AT devices and experience. Counselors who report that they have in-depth knowledge of AT devices and the functional abilities of their clients seem more likely to: (1) support their clients in making informed choices about their technology needs, (2) consider the relationship between wheelchair features and job demands, and (3) listen to their clients' opinion. The results show that most counselors would benefit from additional education in assistive technology topics related to their caseloads.

This study suggests increase need for continuing education in the topic of WMDs. Rehabilitation counselors can increase their knowledge of AT by taking courses that provide hands on experience in the use of AT devices. They can maximize their professional skills by attending AT training program or conferences sponsored by organization such as RESNA, NIDRR, and California State University Northridge (CSUN) center on disabilities. The findings of this study reveal that most rehabilitation counselors rely on the AT evaluator's recommendation when paying for a wheelchair. It can thus be suggested that counselors take the time to find a good AT evaluator and use them to learn more about this topic.

5.4. FUTURE WORKS

More research on this topic needs to be done before the relationship between education, certification, and years of experience is clearly understood. Further investigation of the relationship between OVR counselors' knowledge about AT devices and factors that influence recommending or purchasing wheeled mobility devices is needed. In the future, it might be possible to use a standard measuring tool to measure counselors' knowledge of AT devices rather than using self-report. Future studies, which take into account counselors knowledge of AT and their ability to place clients into academic and employment settings, will need to be addressed.

APPENDIX A

QUESTIONNAIRE

How to complete this questionnaire:

You can use this questionnaire in one of two ways. You can open it as a MS Word document and type your answers after the question. Or, the document can be printed, photocopied and distributed to you as a “hard copy.” Please answer all of the questions. There is no way to identify you based on your responses. All information will be used as part of group data. This questionnaire should take about 10 minutes to complete.

About your Caseload

How many of your customers use wheelchairs fulltime?

How many use wheelchair some of the time?

Of those groups, how many use manual wheelchairs?

Of those groups, how many use power wheelchairs?

How many use both power and manual wheelchair?

How many of your customers who are wheelchair users are currently employed?

How many of your customers who are wheelchair users are preparing or looking for employment?

What are the issues that you were working on with these customers?

- Getting a wheeled mobility assessment
- Getting new wheelchair
- Repairing a wheelchair
- Adding features to a wheelchair
- Making home accessible
- Making training or workplace accessible
- Making educational site accessible

- Job training
- Job development

From September 2003 to the present, I estimate that I have spent the following on purchasing new wheelchairs

- Less than \$100,000
- More than \$100,000

From September 2003 to the present, I estimate that I have spent the following on wheelchair related services (evaluation, accessibility, repairs, etc.)

- Less than \$50,000
- More than \$50,000

Your knowledge about wheeled mobility devices

Check all the ways that you have learned about wheelchairs and scooters:

- Talking to colleagues
- Talking to my customers
- Trial and error or experience
- Searching on the Internet
- Reports that come back from specialists
- Wheelchair magazines and other print resources
- Workshops or training sessions given by professionals
- Newsletters from rehabilitation sources
- Reading advertisements
- Graduate or undergraduate education in this topic
- Other (please fill in) _____

Rate your current knowledge on the following wheelchair related topics?

Table A1: Wheelchair related topics

Topic	Extensive	Limited	None
Features that make a wheelchair comfortable			
Ways of preventing wheelchair injury			
Techniques for transporting wheelchairs safely to and from work			
Types of wheelchair features that are important for long term health			
Choosing a wheelchair that allows			

Topic	Extensive	Limited	None
users to do things that are important in life and at work			
Various ways to pay for a wheelchair			
RC contribution to the wheelchair selection process			
The value of getting a “client-centered” assessment			
Ways to make a home or workplace “wheelchair accessible”			

Do you need more education in the following areas?

- | | |
|---|---|
| <input type="checkbox"/> Seating and positioning | <input type="checkbox"/> Funding Wheelchairs |
| <input type="checkbox"/> Wheelchair Components/
Features | <input type="checkbox"/> Workplace Accessibility |
| <input type="checkbox"/> Injury Prevention | <input type="checkbox"/> Home Accessibility |
| <input type="checkbox"/> Transporting Wheelchairs | <input type="checkbox"/> Matching wheelchair
features and environments |
| <input type="checkbox"/> Wheelchair Standards | <input type="checkbox"/> Other (please fill _____) |

I could learn best from

- A workshop
- A formal course
- An online course
- A mentor
- A print resource designed for training counselors
- Other (Please fill in)

How you make decisions regarding mobility devices

Do you (or the person who works with your wheelchair-using customer) involve them or their family in decision-making concerning the selection of a wheelchair?

- Yes No
- It depends on the client

If yes, how much are your customers included in wheelchair decisions?

- Totally included
- Somewhat included
- Minimally included

How involved are you in the wheelchair purchasing process

- Totally involved
- Somewhat involved
- Minimally involved

When requesting wheelchair evaluation what kinds of people do you consult?

- A consumer/family member/an advocate
- An Occupational Therapist or a Physical Therapist
- A Rehabilitation Engineer
- A rehabilitation technology supplier (someone who sells wheelchairs)

How do you pick your evaluation team? (Check those that apply)

- I use the recommendation that was made by the rehabilitation hospital
- I always use Hiram G. Andrews
- I choose from a list of approved vendors for this service
- I get recommendation from colleagues
- I rely on my personal experience
- I use a listing of credentialed providers like OTR, PT or ATP
(Assistive Technology Practitioners)
- Other (Please specify)

According to your opinion, rank the following in order of importance when choosing a wheelchair. Make 1 the most important feature and go from there.

- Safety
- Operability (ability to control and use the wheelchair)
- Durability
- Dependability
- Repairability
- Matches the customers' needs
- Effective in enabling the client to accomplish tasks
- Compatible with daily environments
- Compatible with transportation

Which of the following factors influence your decision to pay for a wheelchair?
(Check all that apply)

- Price or cost
- Availability of additional funding
- Strength of the evaluator's recommendation
- Relationship between wheelchair features and job demands
- Getting an opinion from a more experienced counselor
- Client's opinion
- Family member's opinion

About you

Age ___ years

I am: Male Female

I have practiced rehabilitation counseling for
 Less than 1 year 1-5 years 5-10 years More than 10 years

Do you have a masters in rehabilitation counseling:

No Yes

If yes, your Graduation Year ___/___/___ School name _____

If no, are you working on it: Yes No

I am a certified rehabilitation counselor:

No Yes If yes, year certified ___/___/___

If no, are you planning on or working toward getting certified:

Yes No

Check your district office

Allentown

Johnstown

Reading

Altoona

New Castle

Washington

Dubois

Norristown

Wilkes Barre

Erie

Philadelphia

Williamsport

Harrisburg

Pittsburgh

Which of the following populations are in your caseload

Sensory disabilities

Physical disabilities

Cognitive disabilities

Psychiatric disabilities

Drug and Alcohol

Developmental disabilities

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