CONSEQUENCES OF COMPLETING A COMPREHENSIVE AT SELECTION ASSESSMENT

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ABSTRACT

Purpose: To examine how student rehabilitation counselors view the use of a comprehensive assistive technology (AT) assessment process.
Methods: 24 graduate students enrolled in an online course, *Applications of Rehabilitation Technology*, at San Diego State University were required to use the Matching Person and Technology (MPT) process with a minimum of one consumer (focus individual) each and write a report on the outcomes and participate in group discussions of their experiences.
Results: The counselors overwhelmingly felt the MPT process was very useful and helped achieve improved outcomes. Many needed to devote two sessions to completing the process with their consumers.
Conclusion: The adage, "You can have it good, you can have it cheap, you can have it fast – pick any two" was shown to be true in this study. Use of the comprehensive MPT assessment process is not always necessary, and sections of forms have been independently validated for purposes of streamlining the process. For complex situations, the process was judged to be valuable in building rapport, discovering consumer priorities and heretofore unrecognized needs, narrowing choices, and determining strategies for moving forward.

INTRODUCTION

Person-centered rehabilitation services encourage the active involvement and participation of the consumer in all phases of the service selection and delivery continuum. The involvement of the consumer requires training and supports for professionals in how to best manage and accomplish consumer engagement. One resource for achieving this is use of the *Matching Person & Technology (MPT) Assessment process*.

RESEARCH QUESTIONS

1. In today's fast-paced and crowded service system with an abundance of requirements and restrictions, would rehabilitation counselors value and use a comprehensive AT selection process and assessment forms?

2. What forms and aspects of the process were viewed as most and least useful?

METHODS

Participants were all students enrolled in the Spring 2018 course, *Applications of Rehabilitation Technology, one* of the required courses in the Masters of Science degree in Rehabilitation Counseling program at San Diego State University. About half of the students are employed by state VR agencies pursuing their Master of Science degree to achieve certification. The course was developed by the first author (Sax, 2002). The 15-week online course is interactive, using mediated technology (e.g., discussion boards, weblectures, video- and audio-streaming). The purpose of the course is to equip rehabilitation professionals with the knowledge and skills to support a consumer-driven process for assessing AT needs. Course content includes research and resources on acquisition and funding of AT devices and services, and strategies for interdisciplinary and collaborative approaches for effectively integrating assistive technology into the user's life. The major course project (representing 45% of the students' course grade) requires students to identify an individual who is interested in and may benefit from the use of assistive technology, and to help them make informed decisions on the assistive technology devices that best fits his or her needs, ideally with an outcome of an AT solution by the semester's end. The project steps for this study were:

1. Identify an individual with a disability who who may benefit from the use of AT and obtain their consent to participate.
2. Use the MPT assessments to interview the individual (and significant others as appropriate) to help identify a desired activity and to determine incentives and disincentives for using AT.

MATERIALS

Tables 1 and 2 give information on the MPT model and assessment process.

Steps in the MPT Assessment Process

1. ***Initial Worksheet*** to identify initial goals and areas to strengthen through the use of a technology (or other support/strategy) or environmental accommodation
2. ***History of Support Use*** to determine supports used in the past, satisfaction with those supports, and why a new type of support may be better than alternatives.
3. ***Survey of Technology Use*** to learn about past and present experiences with the use of a variety of technologies.
4. ***Assistive Technology Device Predisposition Assessment***[*] to inquire into subjective satisfaction with key Body Functions (9 items), where the most positive change is desired (12 items), Personal Factors and psychosocial characteristics (33 items), and opinions regarding their expectations of benefit (realization of benefit at follow-up) from use of a particular assistive device (12 items). The scales are: view of capabilities, subjective quality of life, family support, support from friends, mood and temperament, autonomy and self-determination, self-esteem, and readiness for technology use. The final section allows for the comparison of competing devices and rates the device and person match. The ATD PA (professional form) allows the professional to determine and evaluate incentives and disincentives to the use of the device by a particular person.
5. Trial use of the AT being considered.
6. Identification of factors that may indicate problems with acceptance of or realization of benefit from use of the technology.
7. Identification of specific intervention strategies and an action plan.
8. Follow-up.
9.

- There are also forms for educational, workplace, and healthcare technologies

| Table 2: Facts about the MPT Assessment Process |

- Derived from consumer-identified reasons for technology use (optimal to partial/reluctant) and non-use (avoidance to abandonment/discard)
- Developed by research grant funding from NIH, CDC, NSF
- Translated into seven languages[1] and psychometrically validated by researchers in multiple countries
- Model has been independently replicated by other researchers
- Derivatives include a version for special education students, service animals
- Serves as the model in the *Assistive Technology Assessment Handbook*[2]
- Compatible with the WHO's International Classification of Functioning, Disability and Health (ICF)[3]
- Used as the fundamental model, assessment and approach in two major research programs: *Project Career* (NIDILRR) and *Aphrodite* (Ireland)
- Has been the subject of 4 doctoral dissertations, 4 books, numerous book chapters, as well as innumerable research articles, proceedings and presentations
- Any single measure can be used alone and each measure is composed of separate scales, which may be used as stand-alone measures
- Reviewed in *14th Mental Measurements Yearbook and Tests in Print* (buros.org) and *Rehabilitation Measures Database* (www.sralab.org/rehabilitation-measures)

RESULTS

Two research questions guided this study and both were answered as follows:

1. Would rehabilitation counselors value and use a comprehensive AT selection process and assessment forms?

The students overwhelming said they would continue to use the MPT process and forms. Sample comments are:

It was a great way to organize and obtain the consumer's opinion. It was definitely something I wish I had used in the past.

The MPT assessment provided such a great framework to put the focus individual in the driver seat to drive the process. The MPT assessment was really useful at the beginning of the project because it really helps clarify the focus individual's concerns and goals.

My focus individual for my tech team project is one of my close friends of many years whom I thought I knew really well. I found the MPT process provided insight into her life that I never considered before.

Some technologies may seem sensible and perfect for a certain individual, but that does not guarantee that the individual will respond positively. I would like to use this model in the future when considering certain technologies, because I have had experiences where technology that sounded great to me differs from the technology that is recommended by our AT vendors.

Using the MPT surveys definitely takes a lot of the "guess work" out of selecting AT, and strongly encourages us to work closely with the client. Although it is more detailed, and therefore more challenging and time consuming, it increases the likelihood that AT will actually be used to its fullest potential.

…an individual with a disability is not only about the physical aspects. Rather, there is "also the often unexamined emotional and social issues encountered by a person with disabilities."

I personally, wouldn't streamline the MPT process because by doing so, one might miss important details on the focus individual's life. The MPT assessment process is a valuable tool in my toolbox, I do foresee myself utilizing them in the future.

2. What forms and aspects of the process were viewed as most and least useful?

The students varied in how useful they perceived particular forms to be but this depended on the particular consumer they were working with. In general, they believed the entire process was useful. Sample comments are:

I now understand why the forms and assessment are important to focus on each piece of the individual's life. Depending on the degree of the disability, the questions on these forms are valuable to determine the needs of the client.

The MPT process does take time to ask all of the questions on the initial worksheet, the history of support use and the survey of technology use. I scheduled two appointments to meet with the client so that she wasn't bombarded with answering too many questions in one sitting.

There were situations where students found one form to be especially useful. Examples are:

The ATD PA, under the personal/social characteristics section articulated the words to help define the way my focus individual was feeling. Granted he is a Gulf War Veteran-he keeps to himself; the results from the report revealed that he was suffering silently. But asking him to choose between the positive and negative statements allowed him to open up, and I wouldn't have known this about him hadn't it been for the project results. I think it would be a helpful tool to help individuals who have a hard time expressing themselves to be heard.

One form I felt was very beneficial was the Survey of Technology Use because it showed how comfortable the focus individual would be using technologies.

I came away from this project with so much. I will start with this; not all people who are blind like to use Braille! My focus individual was a stranger to me, so when we filled out Forms 1 and 2 of the MPT paperwork, I learned much

about her, but also about stereotypes (including my own).

I do agree that some of the process can be time consuming and may not be feasible with every client, but then, not every client we work with will require AT.

The assessment and survey forms could be used when working with clients during the plan development meetings. In cases where a client needs AT these can be woven into conversations about goals and trainings as part of the rapport building process. In the long run, this process is another aspect of empowering a client with information about their choices and allowing them to use informed choice to make their decisions about what AT might be the best fit for their individual needs.

DISCUSSION

Rehabilitation counseling students often express some anxiety or fear about taking the required course in assistive technology. During the introductory discussion board for this online course, students who use AT themselves or have in some other way had first-hand experience with AT talk about being much more comfortable than those who are less familiar with AT in general. The responses to the study questions revealed an increased comfort level with engaging in the AT assessment and investigation process. Learning to use the MPT assessment strategies and forms seemed to increase their confidence in exploring AT solutions in collaboration with the AT user.

CONCLUSION

The adage, "You can have it good, you can have it cheap, you can have it fast – pick any two" was shown to be true in this study. Use of the comprehensive MPT assessment process is not always necessary, and sections of forms have been independently validated for purposes of streamlining the process. For complex situations, the process was judged to be valuable in building rapport, discovering consumer priorities and heretofore unrecognized needs, narrowing choices, and determining strategies for moving forward.

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