Moving employment research into practice: Knowledge and application of evidence-based practices by state vocational rehabilitation agency staff

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Abstract. The objective of this study was to identify barriers and facilitators to the use of evidence by professional staff of state Vocational Rehabilitation (VR) agencies. Data were collected via an online survey administered to 355 staff at three state VR departments. Over half of respondents could locate and comprehend research findings. Evidence-based practice (EBP) was not widely encouraged, but there was a positive relationship between the agency having sufficient funds and its support for EBP (r = 0.27, p = 0.001). The top two sources of information respondents used on the job were professional collaboration and the Internet, but not social media. State VR agencies tend not to expect that counselors will use EBP and provide limited incentives for them to do so. While VR staff value research and are open to trying new strategies based on research, translating evidence into usable and accessible products and developing efficient delivery strategies present challenges that the authors intend to investigate further in upcoming research. Knowledge translation strategies need to be developed for this audience.

Keywords: Vocational rehabilitation, vocational rehabilitation counselors, evidence-based research, knowledge translation, employment, people with disabilities

1. Introduction

With the volume of new research that is available and the extraordinarily large caseloads being supported by vocational rehabilitation (VR) counselors, there is a greater need than ever for evidenced-based research that will facilitate quality placements. There are three main issues currently facing counselors in order for them to achieve successful closures. First, businesses may be reluctant to hire if the economy is bad, and their need for new employees is limited. Second, the volume and complexity of individuals that are on VR caseloads is large and growing. Most VR counselors have a growing and diverse group of clients that include all types and levels of disabilities as well as those from ethnic and minority backgrounds. Third, the best ways to solve these challenges are not easy to find. Evidence-based research may provide the solutions but may not be readily accessible to counselors. While there is increasing knowledge on how to facilitate employment...
and provide appropriate supports, this knowledge often takes time to be translated in a way that counselors can use. It is essential for researchers to understand just how much and at what level VR counselors have access to evidence-based research, understand its value, and integrate it into their work practices.

Knowledge translation (KT) as defined in NIDRR’s 2006 Long-Range Plan “refers to the multidimensional, active process of ensuring that new knowledge gained through the course of research ultimately improves the lives of people with disabilities, and furthers their participation in society. The process is active, as it not only accumulates information, but it also filters the information for relevance and appropriateness, and recasts that information in language useful and accessible for the intended audience.” NIDRR’s vision of KT is that it is a highly complex, nonlinear, interactive process, critically dependent on the beliefs, values, circumstances, and needs of the intended users (Federal Register, 2006). Users must be consulted during each phase of research including shaping the research questions, customizing the message format and the utilization strategies. This approach to research has been termed “integrated KT” (Kitson & Bishy, 2008; LaPaaige, 2010; Tetroe, 2007).

Integrated KT, as opposed to research that is primarily driven by researchers, is a collaborative process. Graham and his colleagues (2006) defined integrated KT as part of the “Knowledge to Action Model.” Using a Knowledge to Action Model, the first phase involves “knowledge creation,” when users and researchers work together to identify research gaps, conduct research, and then synthesize the findings with other evidence. In the second phase, which is referred to as the “action cycle,” users and researchers work together to identify strategies to move the research into practice. This includes identifying key messages and formats (Graham et al., 2006). Grol and Grimshaw (2003) also stress that no one KT strategy will result in change for all settings, and strategies must be matched to the message and the desired change. Sudsawad (2007) identified a number of questions to answer when identifying KT strategies for disseminating research knowledge to include the following.

- What is the most appropriate mode of interaction: written or oral, formal or informal?
- What level of detail will the user group want to see?
- How much information can the user group assimilate per interaction?

SEDL and Virginia Commonwealth University are partners in the Knowledge Translation for Employment Research (KTER) Center currently funded by the National Institute on Disability and Rehabilitation Research (NIDRR). As part of this partnership, the KTER Center conducted a study on what state vocational rehabilitation (VR) counselors and other VR professional staff know about evidence-based practice (EBP) in VR, and how they use the information in their jobs. The survey research asked the question: What do state VR counselors and other professional staff know about evidence-based practice and how do they use this information? The results of this study will guide researchers in partnering with VR counselors to use research information in practice to address the unemployment rate of individuals with disabilities.

2. Methods

2.1. Sample

Data were collected from 355 employees of three state VR departments. Each state was located in a different region of the country with 29% (n = 103) of participants from the East, 11.3% (n = 40) from the South, and 59.7% (n = 212) from the Southwest. The sample consisted of 256 (72.1%) females, 85 (23.9%) males, and 14 (3.9%) preferred not to identify gender. Most (87.3%) participants had a Master’s degree with 91.1% of participants having at least one graduate degree, 7.9% having a Bachelor’s degree, and 2.3% having high school diploma or post-secondary education. The mean number of years in VR was 11.57 years (SD = 9.54). The majority (83.5%, n = 293) of participants were vocational counselors. Other VR staff represented were VR technicians, unit supervisors, area supervisors, area directors, program administration staff, VR consultants, VR evaluators, VR specialists, support staff, and consumer case coordinators. Most participants (81.4%, n = 289) were not in supervisory positions.

2.2. Survey instrument

A questionnaire, Making Research Work for VR Agencies, was developed for this survey of state VR professionals (Murphy, Graham, Revell, West, Inge, & Markle, 2011). The instrument was based on extant knowledge translation literature (Dobbins, et al., 2009; Estabrooks, Squires, Cummings, Birdsell, & Norton,
data into the online form. The e-mail specified a date by which the VR counselors and staff were asked to submit their responses. The state VR agencies were asked to send two follow-up emails: one within one week and another two weeks after the initial request. In the Southwestern state, $10 VISA cash gift cards were offered to the first 20 people to respond after the first invitation. The first 15 people to respond after each of the two subsequent reminders were similarly offered a $10 gift card. This incentive was not allowed in the other two states, either by state ethics regulations or agency preference.

3. Results

3.1. VR professionals understanding of EBP

Participants were requested to provide a definition of EBP. VCU staff coded these definitions into categories (see Table 1). The majority of the participants defined EBP in ways that were categorized using the labels “Research-based” (45.6%), “Documented Evidence” (18.3%), “Proven Effective” (15.2%) and “Practice or Experience” (8.5%).

“Research-based” definitions mentioned systematic data collection, testing hypotheses, and/or statistics; a few also defined EBP in terms of randomized controlled trials, experimental design, or double-blind trials. Responses coded as “Documented Evidence” characterized EBP as being based on data from some source with evidence available to support conclusions, but no indication that EBP was systematic or research-oriented. The “Proven Effective” category consisted of responses where the participant perceived a practice as being used effectively. Similar to “Documented Evidence”, there was no mention of a systematic process or any research used to support the perception that the practice was effective and some respondents indicated that “evidence” was their own “practice or experience.”

<table>
<thead>
<tr>
<th>Categories</th>
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</tr>
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<tbody>
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<tr>
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Table 1: Defining evidence-based practice
3.2. Use of EBP in VR

The majority (84.2%) of VR staff reported that they value research for practice. Over three-fourths (76.3%) of them indicated that they understood how to interpret research literature and evaluate the information in their job. Further, 68.5% reported understanding how to evaluate research quality, 62.5% indicated they understood research results, 57.5% considered themselves skilled in using research in their job, and 52.9% considered available research as representative of their consumers. Over two-thirds (68.2%) of participants reported independently seeking out research literature and over half (53.8%) indicated that they put the latest research into practice. However, 40.5% of VR participants reported reading available research as representative of their consumers. The majority (68.5%) of participants reported not having sufficient resources to implement EBP. Further analysis indicated a positive relationship between the agency having sufficient funds and the agency being open to EBP (r = 0.27, p = 0.001), allowing time to read EBP literature (r = 0.35, p = 0.001), and providing technology to access EBP information (r = 0.38, p = 0.001). Agency values EBP (r = 0.40, p = 0.001). Agency having sufficient funds was also related to supervisors expecting participants to use EBP (r = 0.33, p = 0.001), encouraging participants to keep up with EBP literature (r = 0.45, p = 0.001), and expecting participants to use EBP in program planning (r = 0.48, p = 0.001).

There were no significant differences among the states on encouragement of EBP. F (2, 350) = 0.439, p = 0.645. However, both senior VR counselors (p = 0.0049) and VR supervisors (p = 0.0041) tended to feel more strongly that the agency facilitates EBP than did VR counselors.

3.3. Agency encouragement of EBP

A series of items requested participants to rate the degree to which their state VR agency values and encourages use of EBP when serving clients. Responses indicated that EBP was not widely encouraged with 48.2% of participants reporting that their agency valued EBP. Only 38% of the participants indicated that their supervisor expected them to use EBP in service delivery, and 36.1% in making planning decisions. Specifically, 38.6% of VR counselors, 23% of senior VR counselors, 33.3% of unit supervisors, and 71.2% of area supervisors reported that their supervisors expected them to use research in program planning. When asked whether EBP was discussed in meetings, 46.2% of participants reported that their offices were open to discussing EBP in meetings. 44.8% said there were opportunities in their unit/office to discuss EBP. 39.7% reported that there were in-service opportunities in their unit/office to discuss the latest EBP, and 43.9% reported that their agency allows them time to find and read the latest EBP information. One factor that may be related to the low response in the use of EBP is that only 46.8% of participants reported that their agency had sufficient resources to implement EBP. Further analysis indicated a positive relationship between the agency having sufficient funds and the agency being open to EBP (r = 0.27, p = 0.001), allowing time to read EBP literature (r = 0.35, p = 0.001), and providing technology to access EBP information (r = 0.38, p = 0.001). Agency values EBP (r = 0.40, p = 0.001). Agency having sufficient funds was also related to supervisors expecting participants to use EBP (r = 0.33, p = 0.001), encouraging participants to keep up with EBP literature (r = 0.45, p = 0.001), and expecting participants to use EBP in program planning (r = 0.48, p = 0.001).

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3.4. Sources of information used in relation to their jobs

Interaction. When asked whether “the following interactions offer information that you can use to do your job better,” participants reported that collaborating with other professionals (95.5%), meeting with consumers (91.3%), having informal conversations at their offices (87%) or with consumers’ families (84.6%), attending formal agency-wide meetings (83.1%), attending unit/office meetings (80.3%), and one-on-one meetings with their supervisor (77.1%) were helpful.

Training. When asked which “training activities” provided helpful information for their work, VR respondents indicated face-to-face training/workshops located outside the agency (92.7%), in-service training/workshops within the office or agency (90.7%), training conferences (85.1%), university training education (84.9%), university course work (78.5%), online training courses (73.5%), and training webinars (70.4%) offered usable information.

Resources. Respondents reported a variety of resources offered job-related information, including
internet search sources (95.8%), job websites for opportunities for consumers (90.7%), online policies and procedures manuals (85.4%), electronic case management systems (79%), academic journals (76.9%), clinical practice guidelines (76.4%), print policies and manuals (75.8%), textbooks (75.7%), government databases (75.2%), computerized assessment resources (74.2%), and library resources (62.3%). VR participants accessed online (58.9%) and print (58.3%) trade association publications, online discussion boards (56.1%), and bulletin board resources (50.7%). Resources that few VR participants found to be job-related were social media such as YouTube (27.4%), Facebook (23%), LinkedIn (23%), and Twitter (12.8%).

Professional networking. VR counselors and senior VR counselors agreed that the following types of people and entities provided professionally-related support: the VR state agency (94.2%), information from unit/office (92.8%), third-party community partners (82.1%), job placement specialists within the community (81%), job placement specialist within VR agency (75%), researchers (73.3%), counselors in other state VR agencies (70%), Rehabilitation Services Administration (63.4%), and Social Security Administration employees (52.2%).

Gender differences. Two gender differences were found related to use of informational resources. First, female VR staff tended to agree more that online resources offered useful information than did male VR staff \( p = 0.0031 \). Female VR staff were also more likely to strongly believe that they gain information from interactions with consumers and their families than did male VR staff \( p < 0.0001 \).

4. Discussion

The nation’s unemployment rate has hovered near the 10% rate for over a year with an underemployment rate that is closer to 17% affecting over 27 million Americans. Individuals with disabilities are among the most severely affected. Findings from the National Organization on Disability (NOD) and Louis Harris Polls on Employment of People with Disabilities in 2004 and most recently, 2010, illustrate that even more individuals with disabilities are not achieving employment outcomes. The 2010 report reveals that 21% of people with disabilities report living in poverty (34% versus 15%). People with disabilities are still twice as likely to have inadequate transportation (34% versus 16%) and a much higher percentage goes without needed health care (19% versus 10%; Kessler/NOD, 2010). In today’s economy, the role of VR counselors is more important than ever. They provide the bridge for unemployed individuals with disabilities to gain employment, and they must have access to evidence-based practices that facilitate employment outcomes.

There were limitations to this study, and caution is encouraged when applying these findings to other VR agencies not included in the study. First, the sample only included three state VR agencies. Second, the VR agency staff chose either to complete or not complete the survey resulting in relatively low response rates. Only 40 surveys were returned from the Southern state. The response rate from the Southwestern state was 16.3% and 20.6% from the Mid-Atlantic state. However, the findings do offer preliminary information on how VR agencies use evidence-based practice research that will be used to guide the KTER Center as it pursues its research agenda.

The majority of respondents understood the fundamentals of what constitutes “evidence” in evidence-based practice. The three most commonly cited definition components, i.e., “Research-based,” “Documented Evidence,” and “Proven Effective,” were used by over 87% of respondents. Moreover, over half indicated comfort in being able to locate, read, and comprehend research findings.

Far fewer respondents indicated that they actually used research findings and EBP in performance of their duties with clients, such as developing Individual Plans for Employment (IPEs). In addition, many reported that they had too little time to search and review the research on VR practices, and they found academic research difficult to translate into effective practices. Thus, the primary modes for obtaining research information were non-academic and informal, such as workshops, in-service training, online web courses and webinars, and communications with other professionals, consumers, family members, and others.

VR agencies were generally portrayed as passive regarding EBP, rather than actively encouraging, monitoring, and enforcing the use of EBP with their program clients. The findings from this study also indicate that state VR agencies tend not to expect that counselors will review and use EBP in their duties and provide limited incentives for them to do so. The majority of respondents consistently indicated that their state VR
agency as a service entity did not value EBP, nor were there institutional expectations (and presumably no policy directives) that EBP would be utilized in service delivery. Funding and resource availability appear to be critical in driving agency values, expectations, and practices related to EBP. Interestingly, senior VR counselors and supervisors were more likely to report that the agency facilitated EBP than did VR counselors, suggesting possible disconnection or miscommunication across staff levels.

VR counselors have large, diverse client caseloads in most, if not all, state VR systems. Evidenced-based practices frequently focus on specific populations and utilize sophisticated research protocols. For many VR staff, a particular EBP might only impact a small percentage of individuals on a general caseload. Even for counselors with a more specialized caseload that focuses on individuals more closely aligned with a particular evidenced-based practice, the VR staff might not have access at the community level to replications of the systemic and direct service practices identified in the research. Despite their value in improving rehabilitation outcomes, the research findings might be perceived as having limited applied value to many VR staff that have little time for activities outside of direct client contact.

For example, the Individualized Placement and Support (IPS) model of supported employment is a well-documented evidenced-based practice that combines eight core principles into a framework for building an effective program of employment supports for individuals with severe mental illness (Swanson et al., 2008). Programs that follow the IPS model closely consistently achieve significantly better employment outcomes than programs that utilize other approaches (Bond, Drake, & Becker 2008; McGuire et al., 2011). For staff of a state vocational rehabilitation agency serving persons with severe mental illness, knowledge about the IPS model could be of substantial value in improving rehabilitation programming approach to serving persons with mental illness. In-depth community-level program development is generally not a primary responsibility of a vocational rehabilitation counselor, particularly a counselor managing a general caseload that serves individuals with a diverse disability history. They have little time for activities outside of direct client contact, such as seeking out and reviewing research on the IPS model that would impact a very small percentage of their caseloads. Therefore, research on the IPS model must be translated into resources that are readily accessible for counselors who have limited time to devote to becoming well informed on IPS as an evidenced-based practice.

The findings from this study indicate that state VR agencies tend not to expect that counselors will review and use EBP in their duties and provide limited incentives for them to do so. While VR staff as a group value research and are open to trying new strategies based on research findings, translating the research into usable information, accessible products, and efficient delivery strategies (and promoting use of EBP at the state policy level as well) will present challenges. Since many found academic research difficult to translate into effective practices, the KTER Center and other researchers must facilitate use of research by developing clear and concise resource documents for VR counselors. In addition, inadequate time was reported as a factor in the use of EBP, which indicates that resources must be easily accessible and provide “sound bites” of documented evidence that can be used on the job. Finally, the primary modes for obtaining research information were non-academic and informal. The KTER Center needs to take this into consideration when providing EBP information to VR counselors. Strategies included workshops, in-service training, online web courses and webinars, and communications with other professionals, consumers, family members, and others. Consideration regarding length of time needed to devote to the workshop, in-service training, or online distance education options also must be addressed based on the finding that VR counselors have limited time to access EBP information.

Results from this study will guide additional research by the KTER Center. Specifically, EBP gathered during systematic reviews being completed by the Center will guide the development of knowledge translation resources for VR counselors. These resources will be used in a research study to determine what strategies work best to transfer evidence to practice in VR contexts.

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