

Social-Cognitive Predictors of Readiness to Use Evidence-Based Practice: A Survey of Community-Based Rehabilitation Practitioners

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Abstract

Community-based rehabilitation organizations (CBRO) play an important role in providing rehabilitation and support services to individuals with disabilities. Increased utilization of CBROs by state vocational rehabilitation (VR) agencies requires a better understanding of how evidence-based practices (EBPs) are used in CBROs. The aim of the study was to examine the readiness of CBRO practitioners to implement EBP, based on social-cognitive predictors of confidence in knowledge and use of EBP, expected benefits of EBP, and perceived barriers and supports to use EBP. A total of 187 CBRO practitioners were surveyed using the Evidence-Based Practice CBRO (EBP-CBRO) survey. Participants were in moderate agreement that they were ready to implement EBP. They were moderately confident in their knowledge about EBP, in high agreement about the expected improvements by using EBP, and perceived low barriers and moderate supports to implementing EBP. The social-cognitive predictors accounted for 55% of the variance in readiness to implement EBP, with knowledge about EBP as the most significant predictor of readiness to use EBP. Social-cognitive theory is a useful framework for exploring CBRO practitioners' attitudes toward and knowledge of EBP. CBRO practitioners are in moderate agreement about readiness to use EBP. Improving practitioner confidence to use EBP might be the best means of increasing utilization.

Keywords

professional training, rehabilitation counselors, education/training for rehabilitation counseling, career/vocational

Community-based rehabilitation organizations (CBRO) provide a broad range of supportive and vocational services at community sites to multiple disability populations through fee and non-fee funding (Menz, Hagen-Foley, & Gerber, 2005). A national estimate found approximately 8,100 CBROs each serving on average 800 individuals with disabilities per day (Menz et al., 2005). CBROs represent an integral part of a broader network of psychosocial, vocational, and independent living services provided to people with disabilities and are increasingly used to support clients in the state-federal vocational rehabilitation (VR) program. Ensuring that the highest quality of services are provided to persons with disabilities who are consumers of VR and CBRO services is a paramount objective in the field of rehabilitation. The evidence-based practice (EBP) movement in rehabilitation seeks to provide efficacious and efficient rehabilitation services, and includes mandates that rehabilitation providers, including CBROs serving VR clients, must use

practices and interventions shown to be effective (Chan et al., 2010; Chan, Tarvydas, Blalock, Strauser, & Atkins, 2009; Rubin, Chan, & Thomas, 2003). Implementing techniques derived from model-driven research can provide clients with the best possible services and is central to fulfilling the intents of the EBP movement (Chan et al., 2009; Kosciulek, 2010).

CBROs are vital to the development, testing, and implementation of EBPs. As a major service provider for

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individuals with disabilities, a number of promising EBP techniques have developed out of and are firmly rooted within CBROs. As an example, the Program of Assertive Community Treatment (PACT) grew out of a need for community-based support services for individuals with severe mental illness (SMI). The PACT program has been supported as an evidence-based model of psychiatric rehabilitation (Bond, Drake, Mueser, & Latimer, 2001). Moreover, models of supported employment (SE) are widely endorsed by CBROs. The individual placement and support (IPS) model of SE developed for individuals with SMI has received considerable empirical support and adoption by CBROs (Becker & Drake, 1994; Bond, Drake, & Becker, 2008; Campbell, Bond, & Drake, 2011). The effectiveness of SE as a VR intervention for people with intellectual and developmental disabilities (ID/DD) has also been validated by Wehman, Chan, Ditchman, and Kang (2014). More generally, guiding principles of SE aim to serve individuals with the most severe disabilities by providing rapid job placement, on-the-job training, and individualized long-term supports (Wehman et al., 2014; Wehman et al., 1989). CBROs have the potential to provide comprehensive and ongoing supports for people with disabilities, based on empirical evidence. However, consideration of factors that facilitate the utilization of EBP in CBROs is warranted.

Implementing EBP within CBROs and VR, however, is not without obstacles and drawbacks (Chan et al., 2009). There are considerable challenges in accessing, learning, and implementing EBP. New knowledge of best practices is always being generated. Having the resources, time, and technical knowledge to stay informed of best practices is a complex task for any CBRO provider. As an example, a high volume of face-to-face client contact has been purported to leave providers with limited time for continuing education or advanced training in EBP (Corrigan, Steiner, McCracken, Blaser, & Barr, 2001; O'Donnell, 2004). Moreover, a lack of library and Internet resources, limited training in academic search strategies, and low agency support have also been reported as obstacles to implementing EBP (Bezyak, Kubota, & Rosenthal, 2010; Chronister, Chan, da Silva Cardoso, Lynch, & Rosenthal, 2008; Tansey, Bezyak, Chan, Leahy, & Lui, 2014). The ever-changing landscape of funding sources, policy mandates, and diversity of populations served might amplify these challenges among CBROs. Furthermore, insufficient academic preparation, limited motivation, interest, and poor confidence have also been identified as barriers to implementing EBP (Winch, Henderson, & Creedy, 2005). Emerging evidence shows that while rehabilitation practitioners hold positive attitudes toward EBP, a lack of knowledge about EBP and insufficient technical skills in interpretation of research findings are significant barriers to clinical application (Bezyak et al., 2010; Chronister et al., 2008). The diversity of educational backgrounds

and training of CBRO practitioners further complicates this task. It is crucial that EBP be implemented in accordance with empirical specifications to not only maintain efficacy but also reduce risk of harm to clients (Chan et al., 2009).

Examining how CBRO practitioners approach and understand EBP is a first step to enhancing appropriate use of EBP. Social-cognitive theory (SCT; Bandura, 1997) and the stages of change (SOC) model (Prochaska, DiClemente, & Norcross, 1992) offer two theoretical frameworks that can be integrated to assess the readiness of practitioners to adopt innovative practice. Chan, Bezyak, and Lui (2013) developed the Evidence-Based Practices in Vocational Rehabilitation (EBP-VR) survey to study the attitudes and knowledge of rehabilitation counselors toward implementing EBP in their work with state VR agency clients, building on the frameworks of SCT and SOC. SCT posits that readiness to implement EBP is the product of practitioner confidence in their knowledge and use of EBP, expected improvements to practice, and perceived barriers and supports to implementing EBP (Bandura, 1997; Tansey et al., 2014). The SOC conceptualizes behavior change as a process that occurs in distinct stages, which can be measured as readiness for implementing EBP and can be understood as a product of SCT predictors (Prochaska et al., 1992).

Most research to date has focused on the attitudes toward and knowledge of EBP among counselors in state VR agencies, and little is known regarding CBRO practitioners. Two related studies, one conducted by Tansey et al. (2014) and the other by Yaeda, Iwanaga, Fujikawa, Chan, and Bezyak (2015), found support for the utility of examining EBP in VR through a SCT and SOC framework. Attitudes toward EBP among VR counselors were consistent with previous findings in holding overall favorable views of EBP but limitations in familiarity with technical aspects that might limit appropriate use of EBP (Tansey et al., 2014). To advance optimal use of EBP in CBROs, it is critical to first determine the attitudes and level of understanding providers have about EBP. This study attempted to expand the measurement of readiness to implement EBP within a framework of SCT and SOC and to evaluate practitioners' readiness to implement EBP, based on confidence in knowledge and use of EBP, expected improvement to practice by using EBP, and perceived barriers and supports to utilizing EBP. In addition, this study examined the variance explained on readiness to implement EBP based on SCT predictors. Results offer insight into factors that could improve the utilization of EBP in CBROs and guide future research questions.

Method

Participants

Three CBRO-related associations were contacted for assistance in recruiting participants, including (a) Association of

People Supporting Employment First (APSE), (b) MARO (a Michigan-based association of community service providers), and (c) the Stout Vocational Rehabilitation Institute's (SVRI) Community-Based Rehabilitation Professionals Database. All three organizations posted a link to Survey Monkey (survey-monkey.com) containing the survey used in this study and made available to their members. Announcement emails were also sent out to members informing them about the survey. Usable responses were obtained from 187 practitioners out of 295 returned surveys (63.4% usability rate).

The majority of the sample was composed of women (67%). The sample was predominantly White (87%), followed by Black (4%), Hispanic/Latino American (3%), American Indian/Native American (0.5%), Asian American (0.5%), Other (4%), or did not report (2%). Ages of the respondents ranged from 25 to 74 ($M = 49.40$). Forty-eight (26%) were certified as a rehabilitation counselor. Sixty-seven (36%) participants completed a bachelor's degree, 89 (48%) completed a master's degree, 8 (4%) completed a doctorate degree, and 23 (12%) did not report. The average years of work experience in rehabilitation or human services were 21.12 years. Seventy-four (40%) participants were involved in direct consumer services; 100 (53%) were involved in management, administrative, and human resource roles; and 13 (7%) did not report a role. Forty-six (25%) did not attend training on EBP in the past 3 years, 73 (39%) attended one to three trainings, 14 (7%) attended four to five trainings, 42 (23%) attended more than five trainings, with 12 (6%) not reporting.

Measures

The Evidence-Based Practice in Community-Based Rehabilitation Organizations (EBP-CBRO) survey was adapted from the EBP-VR survey developed by Chan et al. (2013). The EBP-CBRO survey has five scales and 43 statements. Respondents rate their agreement with statements about readiness for implementing EBP, confidence in knowledge and use of EBP, expected improvements to practice using EBP, and perceived barriers and supports to using EBP. Statements were modified to be relevant to community-based rehabilitation practice and settings, and six items were added based on a comprehensive review of the rehabilitation literature regarding survey of EBP among CBROs and related practitioners (Bezyak et al., 2010).

Readiness for implementing EBP has 13 statements and assesses practitioner readiness to implement EBPs in CBRO practices or services in keeping with SOC theory. For instance, "I can see the value of EBP in the services that we provide," "I use EBP concepts in making decisions about services with my clients," and "I take research findings into consideration in helping consumers choose appropriate goals and services." Three items were added to address

perceived utility of EBP within CBRO settings, perceived benefits of EBP over professional experience, and attitudes toward learning about EBP during academic training.

Confidence in knowledge and use of EBP has nine statements to assess practitioner perceived ability to use EBP principles and processes. For example, how much do you agree that EBPs can apply to "Formulate appropriate clinical questions about the problems presented by the consumer," "Read and understand the best evidence information from systematic reviews/meta-analyses," and "Provide psychosocial interventions that have the highest level of scientific evidence and support."

Expected improvements to practice using EBP includes 11 statements that seek to assess the extent to which a practitioner perceives value and likely effect of EBPs in clinical practice. For instance, rate how much you agree that EBPs "Improve the quality of rehabilitation services for clients," "Empower consumers to exercise knowledgeable self-determination and informed choice," and "Protect clients from ineffective or harmful practices." One new item was added to address the perceived utility of EBP to improve utilization of CBRO resources.

Barriers and supports to implementing EBP includes six statements to assess perceived barriers to implementation of EBP and four statements to assess perceived supports to implementation of EBP. For instance, the respondents rate their agreement with statements such as "The use of EBP places too much demand on my role in serving our clients," "I do not have sufficient training to incorporate EBP in my practice," and "There is a lack of empirically validated programs and practices that I can use in my work with our clients." Two items were added to address perceived client interest and ability to participate in EBP to address the diversity of populations served within CBROs.

Respondents rated statements in *confidence in knowledge and use of EBP* on a 10-point Likert-type scale (0 = no confidence, 9 = complete confidence). Respondents rated their agreement with statements on *readiness for implementing EBP*, *expected improvements to practices using EBP*, and *barriers and supports to implementing EBP* on a 10-point Likert-type scale (0 = strongly disagree, 9 = strongly agree). High scores on these subscales indicate greater readiness of the respondent to use EBPs in clinical work with consumers, higher expectation that EBPs will positively affect outcomes, as well as more significant barriers to implementation of EBPs and better supports for implementation of EBPs.

Internal consistency reliability estimates (Cronbach's alphas) were computed for the five scales with the sample and yielded the following: *readiness for implementing EBP*, $\alpha = .89$; *confidence in knowledge and use of EBP*, $\alpha = .93$; *expected improvements to practices using EBP*, $\alpha = .97$; *barriers to implementing EBP*, $\alpha = .85$; and *supports to implementing EBP*, $\alpha = .77$.

Data Analysis

Descriptive statistics, *t* test, ANOVA, multiple regression, and estimates of internal consistency were computed using the Statistical Package for the Social Sciences (SPSS) version 22.0. A simple imputation using regression was used to replace missing values. This method is preferred over case deletion when less than 5% of items are missing to ensure that sample size and representativeness are intact (Fox-Wasylyshyn & El-Masri, 2005). Average ratings for the subscales were computed to estimate confidence and agreement of practitioners with statements. One-way ANOVA and post hoc comparisons using the Bonferroni method were computed to determine differences in average ratings of each subscale by number of trainings on EBP within the last 3 years. Independent samples *t* tests were used to examine differences in average rating by practitioner role (i.e., administrative, direct to consumer). Internal consistency reliability estimates (Cronbach's alphas) were calculated for each scale. Correlations were computed to determine whether measurement scales were related, and simultaneous multiple regression was used to determine the extent to which scales based on SCT constructs predict readiness to use EBP.

Results

Practitioner Ratings on the EBP-CBRO

Table 1 reports practitioner ratings for the 43 statements and average ratings for each of the EBP-CBRO subscales. Ratings are rank-ordered and grouped using the following ranges: (a) high agreement/confidence (7–9), (b) moderate agreement/confidence (4–6), and (c) low agreement/confidence (0–3).

Readiness for implementing EBP. Participants were in moderate agreement that they were ready to use EBP in their clinical settings ($M = 6.10$). Participants were in high agreement about the practical value of EBP ($M = 7.38$) and interested in learning more about EBP ($M = 7.11$). They were in the least agreement as to whether they learned the foundations of EBP in their academic training ($M = 4.13$). Group differences were also examined. Ratings differed by number of in-service training on EBP in the past 3 years, $F(3, 171) = 11.85, p < .001$. Participants with over five trainings ($M = 6.96$) had higher ratings compared with those with no training ($M = 5.19$) and one to three trainings ($M = 6.11$). Those with one to three trainings or four to five trainings ($M = 6.39$) also had higher ratings than those with no training. No differences were found by participant job role.

Confidence in knowledge and use of EBP. Participants were in moderate agreement with their confidence in knowledge and

use of EBP ($M = 6.44$). Participants were in high agreement that they had the confidence to use EBP in professional practice ($M = 7.21$); in providing counseling, job placement, and career development services that have the highest level of scientific evidence ($M = 7.15$); and using best evidence in making case planning decisions ($M = 7.15$). They were in the least agreement regarding confidence in providing psychosocial interventions that have the highest level of scientific evidence ($M = 5.82$) and in evaluating the validity and generalizability of research findings in making clinical decisions ($M = 5.79$). Group differences were also examined. Ratings differed by number of in-service training on EBP in the past 3 years, $F(3, 171) = 7.79, p < .001$. Participants with over five trainings ($M = 7.41$) had higher ratings compared with those with no training ($M = 5.63$) or one to three trainings ($M = 6.39$). No differences were found by participant job role.

Expected improvements to practices using EBP. Participants were in high agreement with the expected improvements to practice from using EBP ($M = 7.31$). Participants were especially high in agreement on items related to protecting clients from ineffective or harmful practices ($M = 7.86$), improving client satisfaction ($M = 7.73$), improving the working relationship with clients ($M = 7.65$), and empowering consumers to exercise self-determination and informed choice ($M = 7.65$). They were in the least agreement regarding EBP improving efficiency in utilization of organizational resources ($M = 6.72$) and psychosocial outcomes for clients ($M = 6.70$). Group differences were examined. Ratings differed by number of in-service training on EBP in the past 3 years, $F(3, 171) = 8.45, p < .001$. Participants with over five trainings ($M = 8.23$) and those with one to three trainings ($M = 7.31$) had higher expectations for improvement compared with those with no training ($M = 6.28$). Participant ratings did not differ by job role.

Barriers to implementing EBP. Participants were in low agreement that there were barriers to implementing EBP ($M = 2.71$). There was moderate agreement that there is a lack of sufficient training to incorporate EBP into practice ($M = 3.48$) and that there is a lack of empirically validated programs and practice that can work with client populations ($M = 3.34$). There was the least agreement that clients are not capable of participating in EBP ($M = 1.70$) and not having enough time to incorporate EBP ($M = 2.30$). Group differences were also examined. Ratings of barriers differed by number of in-service trainings on EBP in the past 3 years, $F(3, 171) = 3.09, p = .029$. Participants with over five trainings ($M = 2.19$) identified fewer barriers compared with those with no training ($M = 3.23$). No differences by practitioner job role were found.

Supports to implementing EBP. Participants were in moderate agreement that there were sufficient supports to utilize EBP

Table 1. Ratings From 187 CBRO Practitioners on the EBP-CBRO Survey Scales.

Scales and statements	Average ratings (SD)	Ranked item means within subscale	Levels of agreement or confidence
Readiness to implement EBP			
Average ratings of readiness to implement EBP, 13 items	6.10 (1.51)		Moderate
I believe EBP has practical value in the services and practice that I provide.	7.38 (2.02)	1	High
I am interested in learning more about EBP.	7.11 (1.87)	2	High
I can see the value of EBP in the services that we provide.	6.72 (1.92)	3	Moderate
EBP has the potential to help improve the effectiveness of service delivery practices.	6.68 (1.88)	4	Moderate
I use best EBP, programs, interventions, and services at my agency.	6.36 (1.95)	5	Moderate
I use EBP concepts in making decisions about services with my clients.	6.20 (2.08)	6	Moderate
I take research findings into consideration in helping consumers choose appropriate goals and services.	6.12 (2.28)	7	Moderate
I am using EBP in my role as a service provider for my clients.	6.12 (2.44)	8	Moderate
I enjoy reading empirical research articles from such fields as rehabilitation, health, and psychology.	6.03 (2.32)	9	Moderate
I have completed in-service training on topics related to best evidence strategies and practices.	5.79 (2.81)	10	Moderate
I use the Internet and academic databases to search for systematic review articles to help me select promising practices that are helpful for my clients.	5.54 (2.73)	11	Moderate
The use of strategies and services based on a professional's experiences is not more effective than EBP.	5.09 (2.10)	12	Moderate
I have learned foundations of EBP in my academic program.	4.13 (3.02)	13	Moderate
Confidence in knowledge and use of EBP			
Average rating for confidence in knowledge and use of EBP, 9 items	6.44 (1.82)		Moderate
Use an EBP approach (e.g., supported employment) in your professional practice.	7.21 (2.01)	1	High
Provide counseling, job placement, and career development services that have the highest level of scientific evidence and support.	7.15 (2.01)	2	High
Use current best evidence in making decisions about the planning and goal selection consistent with values and needs of individuals from diverse backgrounds.	7.15 (1.84)	2	High
Understand basic concepts of rehabilitation research design, methods, and statistics.	6.34 (2.27)	4	Moderate
Read and understand the best evidence information from systematic reviews and meta-analysis.	6.25 (2.30)	5	Moderate
Formulate appropriate clinical questions about the problems presented by the consumer.	6.23 (2.33)	6	Moderate
Search research databases to find empirically supported practice and interventions.	6.01 (2.53)	7	Moderate
Provide psychosocial interventions that have the highest level of scientific evidence and support.	5.82 (2.54)	8	Moderate
Critically evaluate the validity and generalizability of the research findings to make clinical decisions.	5.79 (2.58)	9	Moderate
Expected improvements to practices using EBP			
Average rating of agreement of expected improvements to practices using EBP, 11 items	7.31 (1.90)	1	High
Protect clients from ineffective or harmful practices.	7.86 (2.08)	1	High

(continued)

Table 1. (continued)

Scales and statements	Average ratings (SD)	Ranked item means within subscale	Levels of agreement or confidence
Improve client satisfaction.	7.73 (2.04)	2	High
Improve the working relationship you have with your clients.	7.65 (2.06)	3	High
Empower consumers to exercise knowledgeable self-determination and informed choice.	7.65 (2.06)	4	High
Improve employment rates and employment quality for clients.	7.55 (2.12)	5	High
Improve quality of rehabilitation services for clients.	7.35 (2.16)	6	High
Keep abreast on current best evidence related to assessment, planning, training, supports, job development, placement, and employment practices.	7.10 (2.19)	7	High
Help identify the most effective and efficient programs and services that are consistent with the cultural backgrounds of your clients.	7.07 (2.26)	8	High
Increase the probability of identifying best evidence services and strategies consistent with the values and needs of your clients.	7.01 (2.20)	9	High
Improve efficiency in utilization of scarce CBRO resources.	6.72 (2.40)	10	Moderate
Improve psychosocial outcomes for clients.	6.70 (2.38)	11	Moderate
Perceived barriers to EBP			
Average rating of perceived barriers to EBP, 6 items	2.71 (1.70)		Low
I do not have sufficient training to incorporate EBP in my practice.	3.48 (2.72)	4	Low
There is a lack of empirically validated programs and practices that I can use in my work with our clients.	3.34 (2.40)	5	Low
The clients are not interested in engaging in EBPs (e.g., vocational counseling).	2.95 (2.19)	7	Low
The use of EBP places too much demand on my role in serving our clients.	2.55 (2.07)	8	Low
I do not have time to incorporate EBP in my work.	2.30 (2.04)	9	Low
The clients are not capable of participating in EBPs (e.g., supported employment).	1.70 (2.10)	10	Low
Perceived supports to EBP			
Average rating of perceived supports to EBP, 4 items	5.10 (2.10)		Moderate
My employer has the interest and infrastructure (e.g., Internet, electronic library resources, and procedures) to support and encourage incorporating EBP.	5.71 (2.70)	6	Moderate
There is strong support and encouragement from senior management for EBP where I work.	5.25 (2.78)	3	Moderate
There is sufficient collective support for the use of EBP among my colleagues where I work.	4.91 (2.59)	2	Moderate
There are supervisors or counselors who are experienced in EBP in my agency whom I can talk to.	4.49 (2.96)	1	Moderate

Note. CBRO = community-based rehabilitation organizations; EBP = evidence-based practice.

($M = 5.10$). There was moderate agreement that their employers have the interest and infrastructure to support and encourage EBP ($M = 5.71$) and that senior management provides strong support and encouragement for EBP ($M = 5.25$). Participants were in the lowest agreement that there are supervisors or counselors who are experienced in EBP

whom they can consult with in the agency ($M = 4.49$). Group differences were also examined. Ratings of support differed by number of in-service training on EBP in the past 3 years, $F(3, 171) = 4.71, p = .003$. Participants with over five trainings ($M = 5.66$) and four to five trainings ($M = 5.98$) reported greater support than those with no training

Table 2. Social-Cognitive Predictors of Readiness for Implementation of EBP.

Dependent and predictor variables	M (SD)	Correlations				
		1	2	3	4	5
Dependent variable						
1. Readiness to use EBP	6.10 (1.51)	1.00	.64**	.58**	-.48**	.42**
Predictor variables						
2. Confidence in knowledge and use of EBP	6.44 (1.82)		1.00	.54**	-.41**	.29**
3. Expected improvements to practice	7.31 (1.90)			1.00	-.36**	.28**
4. Perceived barriers	2.71 (1.70)				1.00	-.23**
5. Perceived supports	5.10 (2.70)					1.00

Note. EBP = evidence-based practice.

**Correlation is significant at the .05 level (two-tailed).

($M = 4.25$). Level of supports also varied by agency roles, $t(172) = 2.08$, $p = .039$. Participants with administrative or managerial roles ($M = 5.35$) reported higher support than those with direct consumer roles ($M = 4.67$).

Relationship Between Social-Cognitive Predictors and SOC

Table 2 presents information on the intercorrelations between SCT predictors and the readiness for implementing EBP. All four predictors from the SCT framework correlated with the SOC measure as hypothesized: *confidence in knowledge and use of EBP*, *expected improvements to practice using EBP*, and *perceived supports* were positively correlated with *readiness for implementing EBP*, while *perceived Barriers* was negatively correlated with *readiness for implementing EBP*.

Finally, the simultaneous multiple regression model accounted for 56% of the variance in readiness to use EBP, $R = .75$, $R^2 = .56$, $f^2 = 1.26$, $F(4, 182) = 57.19$, $p < .001$. This is considered a large effect size (Cohen, 1992) and confirmed expectations based on theory and prior research with VR counselors. Standardized partial regression coefficients revealed that all four variables were statistically significant predictors of readiness to change, including (a) *confidence in knowledge and use of EBP*, $\beta = .37$, $t(186) = 6.01$, $p < .001$; (b) *expected improvements to practice from using EBP*, $\beta = .25$, $t(186) = 4.21$, $p < .001$; (c) *perceived barriers*, $\beta = -.19$, $t(186) = -3.43$, $p < .001$; and (d) *perceived supports*, $\beta = .20$, $t(186) = 3.87$, $p < .001$.

Discussion

The EBP movement has become a key priority in a wide array of health care professions, including rehabilitation counseling, by seeking to provide the most effective clinical services rooted in rigorous and sophisticated empirical evidence (Chan et al., 2009; Tansey et al., 2014; Yaeda et al., 2015). Given that CBROs represent one of the largest

providers of rehabilitation services, this study sought to examine CBRO practitioners' readiness to implement EBP by adapting the original EBP-VR survey used to assess SCT predictors of readiness to use EBP in rehabilitation counselors. The findings from the present study support that the SCT predictors are useful in understanding readiness to use EBP among CBRO practitioners. Scales within the EBP-CBRO survey had high internal consistency reliability coefficients.

Overall, this study found that CBRO practitioners were in moderate agreement that they were ready to implement EBP in their practice. As hypothesized, CBRO practitioners were moderately confident in their knowledge and use of EBP, suggesting that CBRO practitioners believe they have an acceptable level of technical and clinical skills needed to implement EBP. However, they were least confident in providing psychosocial interventions and in evaluating the validity and generalizability of research findings in making clinical decisions. CBRO practitioners were in high agreement about the expected improvements to practice by using EBP, suggesting that CBRO practitioners believe that EBP can improve rehabilitation outcomes. Yet they were in least agreement that EBP can improve psychosocial outcomes for clients, probably because CBROs have a strong emphasis on employment outcomes. Practitioners reported low barriers and moderate supports to implementing EBP, with the lowest agreement that they have available supervisors or counselors to talk to who are experienced in EBP. Findings from this study are generally commensurate with prior studies of rehabilitation counselors that indicate positive attitudes toward EBP yet insufficient technical skills and knowledge (Bezyak et al., 2010; Tansey et al., 2014; Yaeda et al., 2015).

Scores on these measures varied by the number of trainings on EBP attended within the past 3 years. CBRO practitioners with a greater number of trainings had higher confidence in their knowledge and use of EBP and higher agreement with the expected improvements to practice by using EBP, perceived support, and readiness to implement

EBP. These results suggest that participation in multiple EBP trainings is useful in raising practitioners' expectations for improvements in rehabilitation outcomes from using EBP, confidence in using EBP techniques, and overall readiness to use EBP.

A simultaneous multiple regression indicated that confidence in the use of EBP, expected improvements to practice from using EBP, and perceived barriers and supports were significant predictors of readiness to implement EBP. Agreement in confidence to use EBP was found to be the strongest predictor of readiness to use EBP. These findings suggest that increasing practitioner confidence might be the best way to enhance readiness to use EBPs in CBRO settings. Based on the aforementioned results, it may help to increase confidence in implementing EBP by providing a series of continuing education trainings. For CBRO practitioners, it may be important to help them understand the relationship between psychosocial adjustment and VR outcomes. It may also be useful to provide in-service trainings on psychosocial interventions given the limited confidence in this EBP domain. In addition, direct supervisors and senior management should attend in-service trainings to enhance their own knowledge and expertise as well as to foster an organizational climate for EBP.

This study was the first to examine CBRO practitioners' attitudes and knowledge toward EBP utilizing a conceptual framework based on SCT and SOC. The measures based on this framework are both reliable and useful in VR research. It is clear from these findings that CBRO practitioners hold generally favorable views of EBP techniques and believe that such practices are considered useful in improving rehabilitation outcomes. These findings also suggest that despite concerns regarding the wide variability in CBROs and the diversity in educational backgrounds among CBRO practitioners, there is generally support for the adoption of innovative practices across disciplines and CBRO roles. Most importantly, the present results suggest that continuing education and in-service training on EBP significantly improve practitioner confidence, expected benefits, and readiness to adopt EBP, highlighting the importance of continuing education/in-service training as a critical step toward advancing the utilization of EBP.

Limitations

There are several limitations related to this study. A small convenience sample of CBRO practitioners was used, limiting generalizability to other CBRO practitioners. While all participants identified themselves as CBRO practitioners, more than half were currently in administrative or managerial roles. Future studies should consider exclusively examining CBRO professionals working in direct service roles. In addition, a self-report survey was used, which can be susceptible to response set and social desirability bias.

Finally, the cross-sectional design of this study does not allow for statements of causation to be drawn between SOC and SCT measures.

Authors' Note

The ideas, opinions, and conclusions expressed in this article are those of the authors and do not represent recommendations, endorsements, or policies of the U.S. Department of Education.

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