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Readiness to Change and Training Expectations Prior to a Training Workshop for Substance Abuse Clinicians

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Abstract

Understanding clinicians' readiness to change their clinical practice, as well as their training expectations prior to a clinical workshop, may be helpful for improving technology transfer in the substance user treatment field. This study aimed to explore both these areas prior to a workshop designed to offer a new clinical intervention for their practice. Fifty-four clinicians volunteered to participate in a Behavioral Couples Therapy (BCT) workshop. Using negative binomial regression models, significant associations were found between clinicians' readiness to change and training expectations. Participants were found to be highly motivated to learn new technologies and highly endorsed notions of adopting elements of BCT into their practice. There was greater caution with regard to committing to adopt the full protocol. Exploring some of the obstacles in adopting new treatment approaches by even the most motivated of clinicians could be a fruitful area for future research.

Keywords

evidence-based practices (EBPs); technology transfer

INTRODUCTION

There is a need to better understand the readiness of substance user clinicians to change their clinical practice as they adopt evidence-based interventions into routine practice. Despite considerable discussion and efforts (e.g., Condon, Miner, Balmer, & Pintello, 2008; Lamb, Greenlick, & McCarty, 1998), significant challenges remain to regular implementation of evidence-based practices (EBPs) by treatment practitioners (Miller, Sorensen, Selzer, & Brigham, 2006). It is a relevant concern as many programs struggle to respond to increased calls by oversight agencies and policymakers to adopt EBPs (McLellan, Carise, & Kleber, 2003).

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Declaration of Interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

Clinician Readiness to Change

While an organization's readiness to change (ORC; Simpson, Joe, & Rowan-Szal, 2007) is a crucial element in successful technology transfer, it is not necessarily sufficient for adoption of EBPs by individual clinicians (Lehman, Greener, & Simpson, 2002). The individual's intrinsic motivation to change and adopt EBPs is needed, even with organizational support. Understanding the individual clinician's readiness to change (RTC), that is, the combination of the perceived importance of the problem and self-confidence in the ability to change to resolve the problem (DiClemente, Schlundt, & Gemmell, 2004; Prochaska, DiClemente, & Norcross, 1992), is potentially an important factor. However, little work has explored the potential impact of clinicians' RTC on their likelihood of adopting new EBPs from a training experience. This is unfortunate, as a better understanding of a clinician's readiness to change their clinical practice could have a bearing on many aspects of how to offer and support technology transfer training.

The present research had two primary objectives. First, the study aimed to explore clinicians' self-reported RTC prior to a training workshop designed to offer a new clinical intervention for their practice. Second, the study examined the relationship between RTC and the clinicians' expectations of the training workshop. It was hypothesized that clinicians who report a higher degree of RTC will have higher expectations about what they want from the training workshop.

MATERIALS AND METHODS

Participants and Procedure

Participants were 54 clinicians who volunteered to take part in a free, two-day, Behavioral Couples Therapy (BCT) training workshop (McCrady&Epstein, 2009) and provided written informed consent. Study participants had to be 21 years of age or older, employed as a full- or part-time substance user treatment counselor, and have a certification or degree sufficient for practice (e.g., CASAC, Bachelor's, Master's, etc.). The 54 participants had a mean age of 46.49 years (standard deviation [SD] = 12.41) and were mostly female (70.37%). Participants identified their ethnic background as Caucasian (72.22%), African American (16.67%), Hispanic (5.55%), Asian (1.85%), Native American (1.85%), or other (1.85%). The majority of participants were married or co-habiting (66.67%); while just under a quarter (22.22%) identified themselves as single/never married; and the remaining participants (11.11%) reported being separated, divorced, or widowed. Participants reported working in their current position for a mean of 7.70 years (SD = 9.13). Table 1 contains additional participant demographic information.

Measures

No satisfactory existing measures were found that examined clinicians' preworkshop training RTC or training expectations. Adaptations were made to two existing measures to examine the research questions. The *Readiness to Change Questionnaire* was altered to ask questions related to self-assessments of clinical skills. The *What I Want from Treatment* questionnaire was altered to focus on expectations of acquisition of clinical skills or specific training benefits trainees had prior to workshop attendance.

Readiness to Change Questionnaire—Clinical Skills Adaptation (RCQ-CS)—

The Readiness to Change Questionnaire (RCQ; Rollnick, Heather, Gold, & Hall, 1992) is a self-administered 12-item measure based on the transtheoretical model. It was designed for individuals treated in medical settings who have not sought medical treatment for their alcohol use problems. As discussed above, the language of the RCQ was modified to refer to “clinical skills” rather than alcohol use (e.g., “I don’t think I drink too much” was changed to “I don’t think I need to improve my clinical skills”).

What I Want From Training—Adaptation (WWT)—On the basis of Brown and Miller’s “What I Want from Treatment” measure (WIWT; Brown & Miller, 1993), a subset of questions was modified to assess trainees’ training expectations. As with the RCQ-CS, the language of the WIWT was modified to refer to “clinical skills” rather than alcohol use (e.g., “I want help to stop drinking alcohol completely” was changed to “I want to learn how to help clients to stop drinking alcohol completely”). A total of 16 items were adapted from the WIWT, reflecting what the participants want to learn from a training workshop.

RESULTS

Analytic Approach

Factor analysis modeled with maximum likelihood estimation was used to examine the association among the 12 items of the RCQ-CS. Four factor analyses were conducted retaining between one and four factors. Each model used an orthogonal rotation. Cronbach’s alpha was used to examine the overall scale reliability as well as reliability of any subscales (if identified). As a preliminary examination of the validity, we compared the association between the RCQ-CS total score (and subscales, if identified) and two subscales of the WWT measure. Because the WWT subscales are limited range count variables (outcome range 1–16), negative binomial regression models are more appropriate compared with Ordinary Least Squares Regression models that assume normally distributed outcome variables (e.g., Byers, Allore, Gill, & Peduzzi, 2003; Gardner, Mulvey, & Shaw, 1995).

Factor Analysis With Maximum Likelihood Estimation and Negative Binomial Regression Models—

Factor analysis with maximum likelihood estimation was used to examine four possible solutions for the 12-item RCQ-CS. Interestingly, 10 of the 12 factors loaded in the same patterns as the original RCQ factors. Specifically, the first subscale (Action) included the same items (2, 6, 7, and 11) as the original RCQ. The second subscale (Contemplation; items 1, 3, 4, 8, 9, and 10) added two items (1 and 10) from the original Precontemplation subscale. And the third subscale (Precontemplation) included items 5 and 12. The coefficient alpha for each subscale was 0.53, 0.63, and 0.71, respectively.

Upon examination of the scree plot, the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), log-likelihood, and degrees of freedom, the most support was found for a one-factor solution. However, there was some limited support for the three-factor model. In terms of the one-factor solution, the Cronbach’s alpha was 0.73. Although the one-factor solution fits the data better in terms of scree plot, information criteria, and scale reliability, we have presented the three-factor solution to compare the performance of the RCQ-CS with the original measure that consisted of the three (Action, Contemplation,

and Precontemplation) subscales. However, given the overall better performance of the one-factor solution, only the association between the total RCQ-CS score and the two subscales of the WWT was examined further. Using negative binomial regression models, the association between the RCQ-CS total score and the WWT subscales was examined after controlling for the age and education of the clinicians. In the first regression model, there was a significant relation between the RCQ-CS total score and the WWT “General Benefit Subscale.” After controlling for clinician age and education, the risk ratio indicating the association between the RCQ total score and the WWT General Benefit Subscale was 1.02 (95% confidence interval [CI]: 1.01–1.03, $p < .05$). Thus, each 1-point increase in the RCQ-CS was associated with a 2% increase in the General Benefit Subscale of the WWT. In the second model, there was also a significant relation between the RCQ-CS total score and the WWT “BCT Skill Focus Subscale” (risk ratio=1.01; 95% CI: 1.01–1.03; $p<.05$). Table 2 details the results from the negative binomial regression models.

DISCUSSION

Training field clinicians in EBPs is an important element in overcoming the technology transfer problem in the substance user treatment field. Just as an ORC is a critical element in successful adoption of EBPs, individuals’ RTC and adopt new technologies is a precondition for successful technology transfer (e.g., Condon et al., 2008). The present study was one of the first to examine individual clinician’s self-reported readiness to change their clinical practice prior to a training workshop. Consistent with the main hypothesis, clinicians who reported a higher degree of RTC reported higher expectations about what they wanted from a training workshop.

The significant association between an increase in the RCQ-CS and a corresponding increase in both the General Benefit and the BCT Skill Focus subscales makes intuitive sense. As clinicians feel ready to change some aspects of their clinical practice, it stands to reason that they would like to learn about specific things in a training workshop. It is unclear how stable the scores are overtime. While that is less relevant for a workshop where individuals volunteer to participate, it may be of greater relevance when an intervention is brought into a clinical organization with the expectation that it will be adopted by all clinicians. As Rogers (2003) describes the sequential adoption of new technologies by individuals, it stands to reason that the RTC of innovators and opinion leaders would, by necessity, be greater earlier than that of average members of an organization. It is possible that the RTC of average members, and perhaps even skeptical late-adopters and traditionalists, would eventually increase as they accept and adopt a new innovation.

With regard to the clinicians’ readiness to change their clinical practice, the participants reported being highly motivated. Nearly all participants expressed the desire to improve their clinical skills and add new tools to their clinical repertoire. This is consistent with surveys that have suggested that an openness to learning new approaches and interventions is common among substance abuse clinicians (McGovern, Fox, Xie,&Drake, 2004).While it was encouraging to see that the participants were eager to learn new clinical information, it was not unexpected, given that the clinicians volunteered to participate in the workshop.

Responses to the WWT offered some unexpected results. Not surprising given the training focus, participants reported higher endorsement of the BCT Skill Focus Subscale than the General Benefit Subscale. However, items that correspond to a commitment to adopt the BCT protocol (e.g., “I want to begin to integrate behavioral couples therapy into my practice”) had the lowest endorsements. This was unanticipated, as there was clear endorsement of items that suggest participants were looking to add certain elements of BCT to their repertoire. As this measure was completed prior to training, the clear message was that participants in the workshop were interested in elements of BCT, but not in adopting the complete EBP protocol.

This is noteworthy, as an underlying assumption and main requirement of EBPs today is a full adoption of complete protocol. This points to an interesting problem when transferring EBPs into routine clinical practice. Not only is there is a differential in the ability and interest of treatment organizations and individual providers to adopt EBPs (e.g., Henggeler & Schoenwald, 2002), but field clinicians may be more interested in finding solutions to immediate problems and specific areas than in faithfully adopting entire EBPs as designed in the research setting. Previous findings that materials perceived to be highly relevant to the needs of clients will be judged to be more useful by clinicians (Bartholomew, Joe, Rowan-Szal, & Simpson, 2007) appear to be consistent with this notion.

Limitations

There are several limitations to this study. The sample is somewhat small, and the study would benefit if it were replicated at a larger scale. Regarding the study participants, as a group, they tended to have a higher level of education than might be expected for clinicians in the substance user treatment field. The study participants were volunteers who were interested in the training topic. This may, in part, limit the broad applicability of the results. While the study participants may indicate that they are highly motivated to change clinical behaviors, this may not truly reflect their ability to change. There is a need for longer-term research to assess the correlation between these two dynamics.

Additionally, the measures employed in this study were modified versions of existing measures used in clinical practice. While both the RCQ-CS and WWT were helpful tools, further research exploring these instruments or perhaps developing improved instruments specifically for use with training research would be desirable. Finally, it is also worth noting that BCT is somewhat unique among EBPs, in that a client or patient needs the participation of a spouse or significant other during treatment, which impacts broad applicability of results.

CONCLUSION

The transfer of EBPs from the research environment to routine clinical practice faces many barriers. Better understanding the issues around clinicians' readiness to change their clinical practice and expectations regarding training may prove helpful in lessening some of the impediments. Specifically designed and longer-term research is warranted to examine issues including clinician-level factors, such as individual RTC and training expectations, assessment of the dynamic between clinicians' motivation and ability to change clinical

behaviors, and development and refinement of assessment tools. In particular, exploring, via a qualitative study or with a larger quantitative sample, the factors behind why even highly motivated clinicians may be hesitant to adopt a complete EBP protocol would be valuable. Given the large investment in development of EBPs by the research community, continued exploration is a logical next step to ensure that research-developed interventions are optimally adopted and implemented by field clinicians.

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Biographies

Dr. Christopher Barrick, Ph.D., is a research scientist at the University at Buffalo's Research Institute on Addictions. His research interests include dissemination of evidence-based practices into clinical practice and use of technology in training and treatment. He has been Principal Investigator or Coinvestigator on multiple National Institutes of Health-funded research grants.

Dr. Gregory G. Homish, Ph.D., is an Assistant Professor at the University at Buffalo's Department of Community Health and Health Behavior. His research interests are broadly defined in three distinct areas: first, social networks and substance use, with a focus on marital relationships and substance use; second is the area of emergency preparedness; and third is quantitative research methods. He has been Principal Investigator on two grants.

GLOSSARY

Behavioral Coupes Therapy (BCT)

BCT is an outpatient treatment approach for individuals with alcohol use disorders and their partners/significant others. The BCT approach is founded on two assumptions: (a) partners/significant other behaviors and couple interactions can be triggers for drinking and (b) a positive close relationship can provide an important source of motivation to change drinking behavior.

**Readiness to Change
(RTC)**

RTC is an individual's intrinsic motivation to change behaviors. It is defined as the combination of the perceived importance of the problem and self-confidence in the ability to change to resolve the problem.

**Transtheoretical
Model of Change
(TTM)**

TTM offers a description of a temporal dimension of behavior change, where individuals move through five stages as they engage in behavior change: precontemplation, contemplation, preparation, action, and maintenance.

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TABLE 1

Additional demographic information

	Percent
Highest degree achieved	
Associate/professional degree	12.96
Bachelor degree	25.92
Graduate degree (e.g., M.A., Ph.D.)	61.11
Theoretical orientation	
Cognitive/behavioral	31.48
Disease model/12-step orientation	7.40
Eclectic/multimodal	40.74
Family systems	5.56
Motivational interviewing	11.11
Other	3.70

TABLE 2

Negative binomial regression models

Outcome: general benefit subscale	Odds ratio	95% confidence interval	
Total score	1.02 *	1.01	1.03
Age	1.00	0.99	1.01
Years of education	0.99	0.96	1.02
Outcome: BCT skill focus subscale			
Total score	1.01 *	1.01	1.03
Age	0.99	0.99	1.00
Years of education	0.99	0.96	1.02

*
 $p < .05$.