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The Influence of Patient Readiness on Implementation of Evidence-Based PTSD Treatments in VA Residential Programs

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Abstract

Objective—Mental health provider perceptions of patient readiness for trauma-focused evidence-based treatments (EBTs) for posttraumatic stress disorder (PTSD) have been found to impact outpatient care in the Department of Veterans Affairs (VA).

Method—One hundred and seventy two mental health directors and providers from 36 VA residential PTSD treatment programs completed qualitative interviews regarding implementation of two EBTs, Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT). Perceptions of patients' "readiness" for PE and CPT, including how to define and assess this construct and how it influences implementation of these EBTs, were discussed.

Results—Patient readiness was identified as having three components: psychological and psychiatric stability, general readiness to change, and specific skills to manage trauma-focused EBTs (e.g., distress tolerance, affect regulation skills). Providers indicated that some patients who are deemed not ready are either screened out prior to entry or helped to get ready prior to or during their residential stay. Providers expressed difficulties predicting who is actually ready and described what they saw as differences between readiness for PE as compared to CPT.

Conclusions—The concept of readiness for trauma-focused EBTs impacted admission and access to services in the programs. Future research directions, such as empirically measuring readiness and formally assessing veterans' perceptions of and willingness to participate in these EBTs, are considered.

Keywords

evidence-based treatment; posttraumatic stress disorder; provider perspectives

For nearly a decade, the Department of Veterans Affairs (VA) has conducted a national training initiative in two trauma-focused evidence-based treatments (EBTs) for

posttraumatic stress disorder (PTSD; Karlin et al., 2010): Prolonged Exposure (PE: Foa, Hembree, & Rothbaum, 2007) and Cognitive Processing Therapy (CPT; Resick & Schnicke, 1993). Although all VA Medical Centers and large community-based outpatient clinics offer PE and CPT, implementation of these two treatments is relatively low in some VA outpatient specialized PTSD settings (Finley et al., 2015). For example, chart reviews from a subsample of veterans with PTSD seen at six New England clinics indicated that only 6.3% received at least one session of PE or CPT (Shiner et al., 2013). Similarly, in a single, large PTSD outpatient program in the Southwest, only 11% of veterans began either PE or CPT (Mott, Mondragon, et al., 2014). A study of VA residential settings found somewhat higher use. Of a group of 38 programs, 39% reported delivering CPT or PE to many or all their patients (Cook, Dinnen, Thompson, Simiola, & Schnurr, 2014). In an earlier wave of data collection, many providers indicated that they did not perceive any patient factors that dissuaded their use of either EBT but some noted three broad patient categories they believed might contribute to patients being less suitable candidates for the treatments: the presence of psychiatric comorbidities, cognitive limitations, and low levels of patient motivation (Cook, Dinnen, Simiola, Thompson, & Schnurr, 2014).

Although there are likely a number of potential reasons for low utilization rates of PE and CPT, including setting constraints and lack of dedicated time and resources (Cook, Dinnen, Coyne, et al., 2015; Cook, Dinnen, Thompson, et al., 2015), another determining factor may be provider perceptions of patients' readiness for trauma-focused EBTs. In a qualitative study designed to understand if and how PE and CPT were being delivered in PTSD specialized outpatient programs, Hamblen et al. (2015) found the concept of readiness for trauma-focused EBTs guided program development and veteran flow throughout the program. In fact, almost all programs offered preparatory groups that patients were required to complete prior to entry into PE or CPT in order to improve coping skills and symptom management, with the goal of increasing veterans' ability to tolerate and benefit from trauma-focused EBTs.

Similarly, in qualitative interviews with 22 outpatient clinicians in six New England VA PTSD clinics, the concept of patient readiness emerged as a factor influencing the use of EBTs for PTSD (Zubkoff, Carpenter-Song, Shiner, Ronconi, & Watts, 2015). Providers in these two studies spontaneously identified the perception of need for patient readiness for trauma-focused EBTs as critical to the delivery of PE and CPT. The concept of readiness however was not specifically a focus of either of the studies and thus participants were not specifically asked to give a definition of this construct nor were they asked to discuss determinants of patients' readiness to engage in EBTs.

A third study that was specifically focused on readiness identified similar themes. In a sample of 16 largely outpatient psychologists and social workers from two VA Medical Centers in the Northeast, participants identified willingness to engage, coping skills, and safety and stability as relevant aspects of patient readiness (Osei-Bonsu et al., in press). The findings from all three studies seem consistent but not overlapping with other definitions of readiness defined as a "patient's positive attitude and preparedness to enter a therapeutic relationship for the purpose of resolving problems" (Ogrodniczuk, Joyce, & Piper, 2009, p. 427). Similarly, Trusz, Wagner, Russo, Love, and Zatzick (2011) identified patient

engagement, clinical barriers such as severity and comorbidity, and logistical barriers as impediments to trauma treatment.

The studies described above were all conducted in outpatient settings. Residential PTSD treatment programs offer a unique setting that may remove some of the identified barriers to readiness. First, many patients have to apply to get in to residential programs and may be placed on a waitlist before receiving care. These patients may be more motivated to engage in treatment than those who seek outpatient care. Second, although patients in residential programs often have more severe PTSD and complicated life problems than outpatients (Walter, Varkovitzky, Owens, Lewis, & Chard, 2014), residential settings allow for an opportunity to closely monitor potential symptom exacerbations over the course of treatment. Therefore concerns about symptom worsening may not prevent providers in a residential setting from initiating an EBT. Finally, logistical barriers around work, childcare, and transportation are not relevant to inpatient settings. Thus, concerns about patient readiness may be a less influential determinant of providing an EBT in residential setting than these concerns appear to be in outpatient settings where there is less control over external stressors. Although the referral process, structure, and expectations of residential programs appear to differ from outpatient programs, at this time, empirical evidence on patient readiness in residential settings is not available.

As part of a national longitudinal investigation of the use of PE and CPT in VA PTSD residential treatment providers (Cook, Dinnen, Coyne, et al., 2015; Cook, Dinnen, Thompson et al., 2014), we assessed how providers conceptualize readiness for PE and CPT and how they assess patient's readiness before delivering care. Specifically, providers were asked to define readiness, how they determine and assess if a patient is ready for PE or CPT, how they address issues of readiness prior to and during residential stay, and in what ways readiness impacts implementation of trauma-focused EBTs in their settings. Learning how providers determine readiness and use readiness in making treatment decisions in residential settings can help advance knowledge on clinical practice patterns as well as data on the implementation of PE and CPT in VA health care. In addition, given that many of the residential programs do not provide PE or CPT to the majority of their patients (Cook et al., 2014), it is important to study factors that might contribute to why this may be. Knowledge of contributing factors, such as readiness, can provide information on how to intervene and improve the implementation of these EBTs.

Method

Participants

Providers were identified through program staffing lists and invited via email to take part in a confidential web-based survey and telephone-based interview. Providers who agreed to the interview were sent a form to consent for tele-recording. A total of 202 directors, providers, and staff from 36 residential PTSD programs (two programs closed during the course of the longitudinal study) were approached to participate in time point three of the study. One hundred and seventy-two (85.2%) completed the semi-structured telephone interview. Of those who did not participate in either the semi-structured interview or web-based survey, 11

did not respond to any attempts to contact, nine left their position or retired, and two refused participation. Eight providers completed the web-based survey only.

Just over half of the 172 providers were psychologists (n = 99, 57.6%). The remainder included social workers (n = 62, 36.0%), followed by psychiatrists (n = 4, 2.3%), nurses (n = 3, 1.7%) and other professionals (n = 4, 2.3%). Although study participation was not limited to those providers eligible to receive the EBT trainings through the VA (based on professional discipline and scope of practice), almost all interviewed (97.7%) met this criterion. About three quarters (76.7%) had received training in CPT and just over half (57.0%) had training in PE. Some providers reported receipt of formal training in one or the other EBT prior to the VA training initiative.

Procedure

This study was exempted for review by the Yale Human Research Protection Program and the VA Connecticut Health Care System Institutional Review Board. Thirty-eight VA residential treatment programs for PTSD participated in a formative evaluation of their programmatic services, including EBTs, between July 2008 and March 2011. Shortly thereafter a longitudinal mixed-methods investigation of these programs and their providers began specifically on the implementation and sustained use of PE and CPT. Across all time points (January 2010-March 2012, time one; January 2013-December 2013, time two; January 2014-December 2014, time three), participants were asked to complete a web-based survey and semi-structured telephone interview. Detailed descriptions as well as copies of the theoretically-derived survey and interview guide are reported elsewhere (Cook et al., 2012).

Data from this study comes from the qualitative interviews conducted at the third time point and was based on a new line of questioning that was not originally included in the previous waves but was added as a follow-up to previously reported findings (Cook, Dinnen, Thompson, Simiola, & Schnurr, 2014; Hamblen et al., 2015). During the qualitative interview, participants were asked about residential patients' readiness for trauma-focused EBTs. Specifically, everyone was asked the following questions, "There has been "talk" in the trauma field about "readiness" for PE and CPT. How do you define "readiness"? How do you know if a patient is ready or willing to do PE or CPT? How do you assess for that? What do you ask about or attend to? Are there any populations (or subsets of populations) that you would not use PE or CPT with? (e.g., Traumatic Brain Injury, comorbid disorders, etc.) Have you found that some patients are responding better than others to PE/CPT? If so, why might that be? Could you identify characteristics of those who do well and those who do not?" Interviews were digitally recorded with permission and ranged in length with the average lasting 40 minutes. All audio-files were transcribed using a professional transcriptionist and identified with a numerical code to protect participant identity.

Data Analysis—Transcriptions of all qualitative data were also entered into Atlas.ti, Version 6.0, a qualitative data analytic software package, for coding and analysis (Muhr, 2004). The qualitative coding methodology was rooted in grounded theory (Glaser & Strauss, 1967) and used procedures suggested by Palinkas et al. (2008). A priori codes (e.g.,

definition of readiness, indicators of readiness, assessment of readiness, etc.) were identified from the interview guide. Each transcript was then coded line-by-line by two of the authors (JC and VS) using both the a priori codes and emergent codes (open coding). The two coders met weekly to discuss the analytic progress, resolve coding discrepancies, refine the codebook, and reorganize codes into broader themes. These themes are presented below.

Results

The majority of providers stated that they believe patient readiness impacted the delivery of EBTs for PTSD, namely PE and CPT. The qualitative data below are organized according to providers' definitions of patient readiness, the determination of patient readiness prior to entry into the program, and what providers suggest a patient do to get ready for an EBT prior to admission. Providers also noted that readiness for PE and readiness for CPT seem different.

Definitions of Patient Readiness

Most providers identified several aspects of patient readiness, including specific skills to manage trauma-focused EBTs, psychiatric and external stability, and readiness to change.

Affect Management Skills—The most consistently mentioned aspect of patient readiness was having affect management skills, such as distress tolerance, grounding, or emotion regulation, to manage difficulties that may arise in participation of a trauma-focused EBT. Many providers echoed the importance of the patients' ability to regulate their emotions in order to participate in and benefit from these therapies. One provider stated, "Everybody that comes into the program is not ready for trauma processing... part of what we look at in terms of are they ready for those more intense sessions is have they been able to kind of step in the kiddie pool, walk towards the deep end, even though they might not be in the deep end, and how have they done in terms of their changes in emotional regulation and how they manage the triggers differently and those kind of things." Relatedly, another said, "Sometimes we see people whose ability to manage and regulate their emotions is so far off the center that it feels like they may need just more of that piece to begin with just to kind of get them some basic coping skills."

Psychiatric and External Stability—Most providers explained that psychiatric and external stability (safe and stable living situation) was also important in determining patients' readiness but they viewed these as "distractions" that might keep them from participation. Particularly, many providers stressed patient safety, "If every time they have an argument with somebody in their family or their significant other, they want to cut or they become suicidal or they have to run to a bottle, I'm not gonna do PE with them....I need to see them deal appropriate[ly], effectively with some difficult feelings without going to self-harm, self-injury, self-sabotaging kinds of things." One provider said, "Another factor is going to be their sobriety. I know that that's a touchy thing that everyone has a little different opinion about ... I don't like to start with people who are fresh off of really heavy drug or alcohol use ... maybe they need a couple of weeks just to settle and let the fog clear."

Another provider explained, "There's all the external pieces that we always look at...how

much alcohol and drugs are they using. Do they have support? Are they in any other kind of crisis going on and things like that." A third stated, "We don't really have sort of a checklist you are and you aren't appropriate, but we do look at things like Are they coming from inpatient psychiatry where they just had a lethal attempt?"

Providers generally acknowledged that these circumstances should not preclude veterans from engaging in trauma-focused EBTs but instead should be considered when determining if it is the right time for veterans to engage. Often times, because of the structure of the program (i.e. length of stay), veterans do not have an opportunity to delay treatment engagement. "I don't think you need a lot of readiness, but I think you need a little bit because if you come into our program and you're gonna do PE or CPT across eight weeks or six weeks, you know it's fast and furious and so it can feel I think in some ways, and we've seen this with some of our veterans, kind of like 'whoa, I don't know if I can do this."

Readiness to Change—Patient readiness to change was identified as a major contributor to readiness. One provider explained, "I could go back to Prochaska's model...the model of readiness and the stages of it. ... a person's motivation and hunger or how much they really want for change in their lives." Another provider said, "Ready to change is the biggest issue we have a certain number of guys who we work for three, four, five weeks on their ambivalence about changing in a seven week program." A number of providers commented on wishing their patients were more prepared for treatment, expressing concern that their patients had not benefitted from treatment as much as if they were more ready.

Determining Readiness

Programs need to determine if residential treatment is the appropriate next step for patients along a continuum of care options. For programs where participation in trauma-focused EBTs is mandatory (e.g., "The expectation here is that we do EBTs and these are the treatments we do"), there are a number of steps reportedly taken prior to admission to ensure that veterans are ready for treatment. These include program review of veteran health care charts, discussion with the outpatient therapist, and then a conversation directly with the patient. Candid and transparent descriptions of the residential program and treatment expectations are provided to veterans prior to admission to help veterans and programs assess readiness. For example, one provider shared, "We have very frank discussions when they come in ... we do these EBTs ... If that is not something you feel prepared for, let's look at getting you into a different program that may better suit your needs." Another explained, "When they're referred to the program, those are the kind of things we have in our referral package, this is what we do and so we have a treatment contract that they sign ahead of time."

Some of the programs get referrals from all across the country. In such cases, providers say that when patients are coming from outside the programs' immediate catchment area, providers may have a difficult time accessing veterans' chart. In those cases, decisions about readiness and appropriateness rely more heavily on speaking with patients' outpatient providers. It is expected that prior to admission, veterans have been told by the referring

clinician and made aware of the intensity of the work they will be expected to engage in (e.g., writing and/or talking about their traumatic experience(s)).

Some programs interview veterans who come in to the program to ensure they are prepared for the treatment. In other programs, the entire team reviews each veteran's application before that veteran is admitted. One provider shared how this information guides the team's determination of readiness, "At the time of reviewing the application, we have a pretty good sense of whether they have ever had any therapy, any exposure-based therapy, have they ever had any education. If we have someone that has never ever talked about their trauma, then there is feedback given to the referral that this is something that is expected. I tell them the veteran really needs to be prepared to do this when they come here."

Some providers acknowledged that it might be difficult for veterans to know if they are ready for trauma-focused EBTs if they have never tried them in the past. A few providers felt that patients were not given "enough credit" and that more veterans can do the treatments than are given the chance. As one provider shared, "I probably would've said something quite different six months ago but we have seen people come in directly from incarceration and with very few skills pick this up...so I would've said that maybe we need to wait on PE or maybe we need to wait on CPT until there's more of a skill base that you can approach this but we're seeing no. That they seem to be able to keep up and they're processing it at the level that they're intended and they're walking away with skills."

Providers suggested that a veteran's decision to enter residential treatment demonstrates commitment and readiness by saying, "I'm not quite as big on this idea that they have to have done certain things or checked certain boxes before I proceed with CPT or PE with them. Basically if I have a discussion with a patient, they're here in the residential program, they came here knowing that the focus of this treatment is to do sort of exposure type treatment for PTSD, I take that to mean that they're ready to do it."

Numerous providers reported continually discussing the assessment of readiness for traumafocused EBTs within residential programs. In general, they suggested that assessing and determining readiness is an important consideration, but one they are not entirely sure how to address given the limited empirical research to guide their decision-making. As one provider said, "Gosh that is such a ripe question right now because I think it's hard to tell." Another admitted to uncertainty stating, "I don't think I'm ever completely sure."

Enhancing Readiness

When indicators arise in the screening processes that suggest the veteran might not be ready or willing to engage in a trauma-focused EBT, the admission coordinator within the residential program can make recommendations for outpatient therapy prior to acceptance into the program. As stated by one provider, "If the veteran is not ready to [do] that, maybe they can be doing some more work [in] outpatient to get ready because we need to do those [trauma-focused EBTs] here and not use the time with skills." Providers will also help veterans find programs that might better suit their needs, to prepare them for later engagement in trauma-focused therapies, if it is determined that they are not a good fit for the available programming.

At times there are waiting periods between when a veteran is referred to residential treatment and when the veteran is admitted to the program. Some providers suggest to patients that they should educate themselves about trauma-focused EBTs and/or engage in some kind of coping skills groups prior to entry into the program as it may facilitate engagement in these therapies. For example, one provider informs veterans, "Here are some things you can do to get ready and they'll read up on PE or CPT or work on emotion regulation or work on relapse prevention, those things all in preparation for coming in to do the really hard work."

Many residential programs provide some kind of coping skills groups prior to or in conjunction with engagement in trauma-focused EBTs. A few programs work with veterans for upwards of four weeks while in the residential program before they begin CPT or PE to build the skills providers deem helpful for participation. Treatment modalities include Dialectical Behavioral Therapy (DBT; Linehan, 1993), Skills Training in Affect and Interpersonal Regulation (Cloitre, Koenen, & Cohen, 2006), Seeking Safety (Najavits, 2002), and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999), as well as grounding and relaxation, sleep hygiene, anger management, and mindfulness.

Many providers also use a variety of methods to increase EBT specific readiness once the veteran has entered the residential program. One program developed a *Readiness Group* where the veterans learn about the EBT, stages of change, and avoidance. According to the providers, this group incorporates motivational interviewing (Miller, 1983) to identify values and personal reasons that may increase willingness to participate in treatment. Similarly, another program uses the first week of programming to discuss similar information and to provide education about residential treatment, how residential differs from outpatient and veteran expectations and responsibilities.

General informational sessions about PE and CPT are also common. These include providing veterans with educational materials on PE and CPT such as videos and brochures and describing each treatment in depth. As one provider explained, these materials are meant to give the veteran a choice to participate in these treatments. Another way of educating veterans about PE and CPT is through peer modeling. Specifically, in programs that use rolling admission, residents who are further in the program act as peer models by providing encouragement, knowledge through experience, and assistance to those who were more recently admitted. As one provider explained, "They're amongst peers who are doing it, they're seeing role models."

Perceptions of Differences in Readiness for PE and CPT

Some providers expressed the belief that readiness for CPT and readiness for PE are different. As one provider explained, "For CPT there really is kind of a cognitive demand in being able to understand the concepts and do the worksheets ... For PE it's just more the motivation and willingness to really take that emotional risk-taking and be able to do it, or ready to do it outside of the session." Another compared readiness for PE versus CPT by stating, "So with CPT there's just more of this like psychoeducation piece and I think the emotional intensity of it is lower... it's easier for people to be ready for that and to take from it what they will. Um, with PE, in terms of readiness for that, probably some willingness to

like go there in session beforehand, adequate coping skills, like an ability to deal with some of the stress about using or sometimes sober."

Others identified indicators of readiness for CPT including the ability to understand the concepts of beliefs, emotions and consequences, and literacy. For PE, providers suggested readiness includes a willingness to talk about the traumatic experience, adequate coping skills, distress tolerance, and emotional stability. One provider explained how talking about the traumatic event, in detail and over long periods of time, was what required the most patient readiness, "In my opinion, the readiness really comes with the imaginal piece." Despite the differences reported by providers, there appears some overlap in readiness for PE and CPT. Indeed one provider expressed the importance of the therapeutic relationship in both treatment protocols saying, "I think you have to have a good rapport, a good working relationship with the veterans." A few providers also noted that CPT-Cognitive (the protocol version that does not include the trauma narrative) seemed to require less readiness than CPT or PE, though no provider spoke to the difference between readiness for group or individual CPT.

Discussion

A large sample of VA PTSD residential treatment providers across the U.S. were asked about their perceptions of patients' readiness for PE and CPT, including definitions and assessment of this construct and how it influenced implementation of these EBTs. In an earlier wave of data collection, many providers indicated that they did not perceive any patient factors that absolutely deterred their use of either EBT but mentioned there were some patient factors that dissuaded their use of the treatments. In this wave of data collection, many providers built on this sentiment by saying that they viewed these traumafocused EBTs as very effective interventions but echoed, "there's a right time for them where they (patients) can actually benefit from those treatments when they are offered, instead of kind of white knuckling it through."

Similar to the findings from VA outpatient settings (Hamblen et al., 2015), many residential programs advised veterans who were scheduled to come into their program to complete courses on coping skills prior to entry to prepare them to facilitate their engagement in trauma-focused EBTs while they were on the unit and/or offered coping skills groups to patients while they were in the program either prior to or during their participation in PE or CPT.

Most providers described patient readiness as including three components: specific skills to manage trauma-focused EBTs, psychiatric and external stability, and readiness to change. The current literature reports general consensus that the construct of readiness for EBTs is important in the treatment of PTSD, but most prior studies have not specifically asked providers how they define readiness (Couineau & Forbes, 2011; Hamblen et al., 2015; Zubkoff et al., 2015). Our results are consistent with findings from a predominately VA outpatient sample reported by Osei-Bonsu et al. (in press), who found that providers defined readiness as willingness to engage, having coping skills, and safety and stability. The

similarity of findings between this small regional sample and our large national sample gives broad support for the general definition among both residential and outpatient providers.

In our sample, having affect management skills was the most commonly mentioned factor of patient readiness deemed important for participation for a trauma-focused EBT. Our finding is consistent with results of an expert opinion survey on the treatment of complex PTSD (Cloitre et al., 2011) and with some empirical findings among selected samples. In a randomized controlled trial for women with child abuse related PTSD, Cloitre et al. (2010) compared three treatment conditions: an initial preparatory phase of STAIR followed by exposure therapy, supportive counseling followed by exposure, and skills training followed by supportive counseling. Those who received STAIR prior to exposure had improved PTSD outcomes and less drop-out, however the study did not include a condition where women went directly into exposure therapy. Results from an uncontrolled pilot suggest that DBT can be used to enhance engagement in PE among suicidal women with borderline personality disorder and PTSD (Harned, Korslund, Foa, & Linehan, 2012) and others have proposed ACT as a way to enhance engagement in PE among PTSD patients (Thompson, Luoma, & LeJeune, 2013). However, to date there is no empirical evidence that PTSD patients who have poor affect management skills have worse outcomes in trauma-focused EBTs.

Psychiatric and external stability was another commonly-identified aspect of readiness. This echoes findings from an earlier wave of data collection in which providers reported that the presence of certain comorbidities (e.g., substance dependence, dissociation, self-injurious behaviors, personality disorders) was a dissuading patient factor to the use of PE and CPT (Cook, Dinnen, Simiola et al., 2014). Additionally here providers mentioned recent suicidality and severe psychosocial stressors, such as ongoing legal involvement, might impact the timing of when they would encourage the patient to participate in an EBT. However, reviews of the literature indicate that PTSD patients with a variety of comorbidities can benefit from PE and CPT (e.g., Wachen, Dondanville, Macdonald, & Resick, in press; van Minnen, Harned, Zoellner, & Mills, 2012).

Providers also indicated that patient willingness to change may also influence EBT engagement. This has been echoed in previous work with traumatized individuals. For example, Rosen et al. (2001) investigated the existence of subgroups for readiness to change within combat PTSD patients with alcohol or anger problems. Those who failed to recognize their problems were less likely to be motivated to change or benefit from skill-building interventions and more likely to relapse. Similarly, Rooney and colleagues (2007) found that less readiness was associated with less improvement in veterans being treated for PTSD using a manualized cognitive-behavioral approach.

While most providers echoed the difficulty of defining and assessing readiness, a few did not view readiness as a major factor to engaging in these EBTs. Some providers stated that their perceptions of readiness shifted over time, particularly after seeing patients succeed who they might have otherwise thought were not "ready" for treatment. Others expressed that perceptions of readiness appear to differ for PE and CPT. Specifically, CPT (particularly CPT-Cognitive) was seen as less emotionally intensive than PE, which requires vivid, repeated exposures to traumatic memories.

Education, consultation, or practical hands-on experience may positively influence provider perceptions of patient readiness for trauma-focused EBTs. For example it may be helpful to regularly inform providers of the ongoing robust research findings on PE and CPT and teach them how to explain these treatments effectively to patients. Relatedly, one innovative way to increase engagement in EBTs for PTSD is to work directly with patient and provider dyads through shared decision-making (Mott, Stanley, Street, Grady, & Teng, 2014). Mott, Stanley et al. (2014) developed and pilot-tested a brief shared decision-making intervention to assist providers in explaining the EBT treatment rationale to their patients along with a framework for treatment decisions. In their pilot trial with 27 Iraq and Afghanistan War Veterans, a greater proportion of those who participated in a 30-minute shared decisionmaking session, preferred an EBT and received an adequate (9 sessions) dose of psychotherapy, as opposed to those in the usual care condition. Similarly, Grasso, Ford, and Lindhiem (2016) created a decision-support tool to help clinicians and traumatized patients as a practical means of comparing treatment options. Even decision aids alone can be beneficial. Watts, Schnurr, Zayed, Young-Xu, and Llewellyn-Thomas (2015) developed a treatment decision aid for PTSD patients and found that those who were randomized to use the aid were more likely than those randomized to usual care to engage in an EBT for PTSD.

There are several contraindications to PE and CPT that have been stated by treatment developers suggesting that patients require a certain level of stabilization and functioning to engage in trauma-focused EBTs (Foa et al., 2007; Resick, Monson, & Chard, 2008). Despite this, there are no formalized methods for evaluating readiness to engage in trauma-focused EBTs. Two-related readiness measures have been developed, one identifying potential barriers to and willingness for acute trauma survivors to engage in cognitive-behavioral therapy for PTSD (Trusz et al., 2011) and the other to assess motivational readiness for individuals with PTSD and substance use disorder to engage in treatment (Hunt, Kyle, Coffey, & Schumacher, 2006). Neither deal specifically with readiness for trauma processing per se.

Several limitations are noteworthy. The use of provider self-report may be impacted by decision-making biases, such as confirmation bias, lack of knowledge, and demand characteristics. Indeed, some research suggests that health care professionals in general are imperfect in understanding their practice behaviors (Garb, 2005). In addition, this study focused on residential PTSD treatment programs, which denotes a relatively small and unique faction of VA care, treating the most chronic and severe patients. Residential programs provide a protective environment where barriers to EBTs are fewer than a less structured or supportive setting such as outpatient. Despite this, findings here generally overlap with those from VA outpatient settings. Replication in other settings is needed before generalizations can be made.

Our data are specific to VA residential programs, but intensive community outpatient programs, private residential programs, and Department of Defense programs may find the results informative for their own delivery of EBTs for patients with PTSD. Studies of service utilization in recent veterans indicate that about 61% have engaged in services through VA since 2001 (VA Office of Public Health and Environmental Hazards, 2015). This suggests that large numbers of veterans may be receiving mental health services in non-VA settings

by civilian providers, who likely lack in-depth understanding of EBTs for PTSD. As such, understanding of providers' perceptions of patient readiness for trauma-focused EBTs from front-line VA providers may help to guide non-VA programming.

Future investigations would benefit from triangulation of provider reports with actual observation, cross-check of records or formal assessment of patients' readiness. One way to address this might be to give veterans a readiness for trauma-focused EBT measure (e.g., Trusz et al., 2011) or provide a checklist of potential factors that could contribute to readiness (e.g. comorbidities, psychiatric stability) prior to entry into the program and see if that predicts engagement, completion, and outcomes associated with EBTs. Given the similarities of findings between residential and outpatient settings (e.g., Hamblen et al., 2015; Osei-Bonsu et al., in press) studying how readiness predicts treatment outcomes could widely influence the implementation of these EBTs. Importantly, research might investigate patients' perceptions of their readiness and preferences for trauma treatments. For example, examining potential changes in readiness over time, particularly after discussion of treatment options, seems an important avenue for future examination. Data from a mixed-method investigation (Schumm, Walter, Bartone, & Chard, 2015) indicate that pre-treatment educational approaches informing veterans more specifically about EBTs for PTSD may increase consumer demand and engagement for these treatment options. Along with efforts to enhance decision making about treatment for PTSD (e.g., Mott, Stanley et al., 2014; Watts et al., 2015), these strategies could help to optimize the delivery of effective treatment for PTSD.

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