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ARTICLES

Integrated Trauma Treatment in Drug Court: Combining EMDR Therapy and Seeking Safety

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Trauma and co-occurring substance use disorders are disproportionately prevalent in individuals involved in the criminal justice system. The Thurston County Drug Court Program (TCDCP) in Washington State conducted a preliminary study with 220 participants arrested for nonviolent, felony drug-related crimes. All TCDCP participants were required to engage in a structured 12- to 18-month 3-phase program referred to as *Program as Usual* (PAU). Data was collected from 2004 to 2009 to investigate the efficacy of adding an "Integrated Trauma Treatment Program" (ITTP) component for those endorsing a Criterion A trauma history (68% of TCDCP). The ITTP combined 2 empirically supported trauma therapies in a phased, integrated approach: mandatory Seeking Safety groups followed by voluntary, individual eye movement desensitization and reprocessing (EMDR) therapy. The investigators hypothesized that trauma-specific treatment might improve existing program outcomes, including higher graduation rates and lower postprogram recidivism. One hundred twelve of the initial 150 participants endorsing trauma completed the Seeking Safety groups and were offered individual EMDR therapy. Of those 112, those who selected EMDR therapy ($n = 65$) graduated at a rate of 91%; those who declined ($n = 47$) graduated at 57%. Recidivism rates also differed among TCDCP graduates: PAU, 10%; graduates selecting EMDR therapy, 12%; and graduates declining EMDR, 33%. This article summarizes the literature, describes the ITTP program, reports on graduation rates and recidivism outcomes, and discusses possible differences between those who selected and those who declined EMDR therapy. The authors discuss the benefits of including EMDR therapy in drug court programs with recommendations for future research.

Keywords: trauma; eye movement desensitization and reprocessing (EMDR); Seeking Safety (SS); substance use disorder (SUD); drug court; recidivism

During the past 20 years, therapeutic courts have been developed as an alternative to incarceration and have been implemented in the form of adult and juvenile drug courts, mental health, tribal, family, and more recently,

veterans courts. These programs implement collaborations between criminal justice and treatment professionals. Drug courts are intended to break the cycle of substance abuse, addiction, and crime in a more effective and cost-efficient manner than

incarceration for substance-related offenses (Hudleston, Marlowe, & Casebolt, 2008; Marlowe, 2010). Although drug courts are more effective in reducing recidivism than no treatment, many participants still fail to complete and graduate from the programs.

According to a report by the U.S. Government Accountability Office (2005), drug court program completion rates range from 27% to 66% nationally. A meta-analysis of 66 drug court programs (Latimer, Morton-Bourgon, & Chrétien, 2006) concluded that although drug courts can effectively reduce recidivism, the average attrition rate from the programs was 45%. One reason participants fail to complete the program is because other unaddressed comorbid mental health problems are not sufficiently identified or treated in current drug court programs (Marlowe & Meyer, 2011; Substance Abuse and Mental Health Services Administration [SAMHSA], 2003). Therefore, identifying and resolving the specific factors that interfere with program completion and graduation is a significant challenge.

Comorbid Substance Use Disorder and Trauma Histories in the Criminal Justice System

One study examining lifetime trauma exposure among 319 women recruited from drug court programs reported that 91% endorsed experiencing one or more traumatic events: 20% met criteria for post-traumatic stress disorder (PTSD), 71% had trauma exposure without PTSD, and 9% did not endorse any traumatic events (Sartor et al., 2012). Another study describing the prevalence of adverse childhood events among 742 male and female prisoners showed that the impact of these experiences on traumatic distress was “strong and cumulative” for both men and women (Messina, Grella, Burdon, & Prendergast, 2007). In a sample of 139 men and 60 women in prison-based substance abuse treatment (Kubiak, 2004), more than half met criteria for lifetime PTSD, compared to 8% in the general population (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Women with PTSD were more likely to relapse, and men with PTSD were more likely to recidivate than those without PTSD (Kubiak, 2004). Richman, Moore, Barrett, and Young (2014) reported potential predictors of participant mental health on graduation in an adult drug court program serving female drug court offenders with prescription drug-related offenses. Their findings indicated that participants with more traumas are less likely to graduate.

Why is there such a strong correlation between substance use disorder (SUD) and trauma? The Adverse Childhood Experiences (ACE) Study (Felitti et al., 1998), conducted collaboratively between Kaiser Permanente San Diego and the Centers for Disease Control and Prevention, evaluated the impact of 10 categories of adverse experiences before the age of 18 years on future mental and physical health. The 10 categories included physical, emotional, and sexual abuse; parental mental illness, divorce, or incarceration; substance abuse; domestic violence; and/or emotional/physical neglect. The study conclusively demonstrated that ACEs are correlated with several serious mental and physical health consequences including significantly increased risk of substance abuse such as alcoholism, smoking, and intravenous drug use in a dose-specific relationship, that is, the greater the number of ACEs before the age of 18 years, the higher the incidence of addictive behaviors (Felitti et al., 1998). Two other studies reported that more common life experiences, which do not rise to the level of Criterion A trauma, such as unemployment or chronic illness, still result in significant symptoms, many comparable to those seen in diagnosed PTSD, interfering with overall life functioning (Mol et al., 2005; Robinson & Larson, 2010).

Khantzian (1985) suggested that the chronic use and abuse of substances was purposeful “self-medication” for distress. Mood disorders such as depression, anxiety, bipolar disorder, and panic disorder not only contribute to substance use initiation but relapse as well (Bradizza, Stasiewicz, & Paas, 2006). Furthermore, criminal behaviors are viewed in part as maladaptive patterns of thinking and conduct, often with traumatic origins (Cuadra, Jaffe, Thomas, & DiLillo, 2014; Greenwald, 2002; Hodas, 2006).

The symptoms of individuals with this comorbidity tend to be more severe and more refractory to treatment than those suffering from either of these disorders alone (Jacobsen, Southwick, & Kosten, 2001), and PTSD is known to negatively affect outcomes in SUD treatment (Hien et al., 2010; McCauley, Killeen, Gros, Brady, & Back, 2012; Ouimette & Brown, 2003). A secondary analysis of the National Institute on Drug Abuse concluded that reductions in PTSD symptom severity were more likely to be associated with substance use improvement (reduction in use) when integrated into substance abuse treatment but showed minimal evidence of substance use reduction improving PTSD symptoms (Hien et al., 2010).

This research suggests a self-medication model of substance abuse, which hypothesizes that individuals use mood-altering chemicals to cope with

posttraumatic stress symptoms. This theory supports the importance of using integrated interventions for overall improved treatment outcomes (Hien et al., 2010; McCauley et al., 2012; SAMHSA, 2005).

Recommendations for Treating Co-Occurring Disorders in a Drug Court Program

Intensive programs such as drug courts are expected to have the greatest effects for high-risk offenders who have more severe antisocial backgrounds or poorer prognoses for success in standard treatments (Andrews & Bonta, 2003; Taxman & Marlowe, 2006). In a report to congress, SAMHSA (2002) stated that unaddressed mental health problems are the leading cause of substance use relapse. Treating mental health and substance abuse in an integrated way, individually tailored to the participant's needs, is now considered "best practice" for co-occurring disorders in drug court programs (National Association of Drug Court Professionals [NADCP], 2013; Steadman et al., 2013; SAMHSA, 2005). Given the known correlates between trauma and SUD, adding trauma-specific treatment to drug court programs could potentially lead to improved program retention, increased graduation rates, and greater reduction in recidivism. Both Seeking Safety (SS) and eye movement desensitization and reprocessing (EMDR) therapy are trauma-specific treatments.

Because the treatment of trauma in substance abusing populations continues to evoke controversy regarding timing and risk for relapse, it should be noted that drug court programs provide an ideal container for long-term treatment in a highly structured, clinically and judicially supervised environment.

Integrated Trauma Treatment in a Drug Court Program

The incidence of a trauma history co-occurring with SUDs is disproportionately high in individuals entering the criminal justice system (Baillargeon, Binswanger, Penn, Williams, & Murray, 2009; Kubiak, Arfken, Swartz, & Koch, 2006; Messina et al., 2007; Osher, D'Amora, Plotkin, Jarrett, & Eggleston, 2012; Peters, Kremling, Bekman, & Caudy, 2012). This study documents the implementation of an Integrated Trauma Treatment Program (ITTP) in the Thurston County (Washington State) Drug Court Program (TCDCP) between 2004 and 2009. Participants who self-reported trauma histories were entered into a phased ITTP using two empirically supported treatments beginning with mandatory SS groups (Najavits,

2002), followed by optional individual EMDR therapy (Shapiro, 2001). The ITTP is defined as an "integration" of SS and EMDR therapy and was intended to be an adjunctive treatment component in the TCDCP Program as Usual to enhance program outcomes such as improved graduation rates and lower postprogram recidivism.

Thurston County Drug Court Program

Adults at least 18 years of age with SUD who are charged with a felony drug or property crime(s) are referred by the Thurston County (Washington State) Prosecuting Attorney's Office to the TCDCP. If the prosecuting attorney determines that the defendant meets the program *eligibility* criteria, the individual is then interviewed by the TCDCP administrator to determine *suitability* for the program. TCDCP *suitability* criteria includes the defendant's ability to meet the requirements of the program. Participants must work and/or attend school full time (or half-time combination) in a W-2 tax-paying job, obtain high school diploma or general equivalency diploma (GED), participate in a group counseling environment, read at a sixth-grade level, pay restitution in full (if applicable) with the amount not exceeding \$2,500, and manage transportation to and from the program building and courthouse. Exclusion criteria include having been previously convicted of a violent felony crime "against a person" such as first- or second-degree robbery or assault, sex offense, or any crime that involved the use of a weapon during the commission of the crime. In addition, TCDCP clients may have nonpsychotic mental health diagnoses.

The TCDCP Program as Usual (PAU) is a three-phase, 12- to 18-month structured program that includes random urine drug screens; ongoing judicial review; substance abuse education; cognitive behavioral groups; specifically, moral reconnection therapy (Little & Robinson, 1988); recovery support groups; individual counseling; and relapse prevention groups (Gorski, 1990). Phase 1 of the PAU lasts 3–4 months and is focused on orientation and stabilization; Phase 2 lasts from 5 to 8 months and includes intensive counseling; and Phase 3 lasts 4–6 months and is focused on continued intensive counseling, application of what has been learned, and transition back into the community. Frequency and intensity of individual program elements are described in Table 1.

Graduation from the TCDCP is achieved by fulfilling all program requirements including, but not limited to, obtaining a GED or high school diploma while in the program (if not acquired before entry),

TABLE 1. Thurston County Drug Court Program Program as Usual

Phase 1 (3–4 months) Orientation/Stabilization	Phase 2 (5–8 months) Intensive Counseling	Phase 3 (4–6 months) Application/Transition
Develop individual treatment plan.	Review/update individual treatment plan.	Review/update individual treatment plan.
Substance abuse education (1×/week, 2 hours)	Substance abuse education (1×/week, 2 hours)	Enhancement group <i>Gorski relapse prevention</i>
Moral reconnection therapy (MRT group; 1×/week, 2 hours)	MRT group (1×/week, 2 hours)	MRT group (1×/week, 2 hours)
Seeking Safety (ITTP) (1×/week, 2 hours)	Seeking Safety (ITTP) (1×/week, 2 hours)	EMDR therapy (ITTP) 1× per week, 60–90 minute with specially trained trauma counselors
Individual counseling (1×/week, minimum 1 hour)	Individual counseling (1×/2 weeks, minimum 1 hour)	Individual counseling (1×/2 weeks, minimum 1 hour)
Cognitive self-change process group (1×/week, 2 hours)	Cognitive self-change process group (1×/week, 2 hours)	Cognitive self-change process group (1×/week, 2 hours)
Drug court progress review (1×/week minimum)	Drug court progress review (1×/2 weeks minimum)	Drug court progress review (1×/month minimum)
Recovery support groups (4×/week minimum)	Recovery support groups (3×/week minimum)	Recovery support groups (3×/week minimum)

Note. Throughout the program, all participants are also required to do the following in each of the phases (ITTP received PAU + ITTP): (a) urinalysis or breathalyzer testing, (b) weekly payment per contract, (c) random home visits, (d) case management. ITTP = Integrated Trauma Treatment Program; EMDR = eye movement desensitization and reprocessing; PAU = Program as Usual.

becoming employed full-time in a W-2 tax-paying job or enrolling full time in school, or a half-time combination of both, payment of all restitution and program fees, and 180 days of consecutive clean and sober days as measured by urinalysis and breathalyzer tests.

The Integrated Trauma Treatment Program: Seeking Safety and EMDR Therapy

The TCDCP was launched in 1998 providing most elements described earlier, but the program administrator was aware of the role that trauma played in the participants' history, believing that trauma assessment and treatment might be an important missing piece in the program. In 1998, integrated trauma and substance abuse treatment was not the "standard of care" it is today (NADCP, 2013; Steadman et al., 2013; SAMHSA, 2005). In 2004, the ITTP was created to address this identified need. Data analysis for this cohort ran from August 1, 2004, to December 31, 2009.

The ITTP was developed to be consistent with current clinical practice for complex trauma, especially co-occurring with substance abuse, which includes an adequate period of preparation and stabilization followed by individual trauma treatment

(Foa, Keane, Friedman, & Cohen, 2009; Ford, Courtois, Steele, van der Hart, & Nijenhuis, 2005; Minkoff, 2001; Zweben & Yeary, 2006). To provide a cost-effective, comprehensive, individualized, phased, trauma-specific intervention that might be well tolerated, SS was administered for safety and stabilization (Phase 2 of EMDR therapy). Required SS groups took place during PAU Phases 1 and 2, followed by optional individual trauma treatment with EMDR therapy, generally occurring within Phase 3 of the PAU (Table 1).

All program elements in the TCDCP are mandatory; therefore, all ITTP clients were required to attend the full PAU *plus* SS treatment. The SS groups provided education about the relationship between trauma and addiction as well as affect management and safe coping skills. Completion of SS groups was a prerequisite for receiving individual EMDR therapy. EMDR therapy was the only voluntary component of the program and was provided by licensed EMDR therapists using the standard eight-phase, three-pronged protocol. Licensed EMDR therapists made the final clinical judgment about appropriateness for EMDR therapy at the time a participant was interviewed for individual trauma treatment.

Seeking Safety

SS is a manualized, present-focused cognitive behavioral therapy program that integrates trauma and substance abuse treatment. Twenty-five topics designed to enhance a sense of safety and stabilize clients are based on five core concepts: (a) safety as the priority in the first stage of treatment; (b) integrated treatment of PTSD and substance abuse; (c) a focus on ideals; (d) attention to four key content areas: cognitive, behavioral, interpersonal, and case management; and (e) attention to therapist processes (Najavits, 2002). Groups may be conducted by paraprofessional staff and do not require licensed professional therapists. Topics can be conducted in any order and are designed to be independent of each other, making the program highly flexible and adaptable to multiple settings. The program provides education, skills building, and rehearsal in a supportive gender-specific group (or individual) format but was not designed to explore past individual trauma memories as part of its program. SS focuses primarily on safe, adaptive coping skills in the present and psychoeducation about the relationship between trauma and SUD.

Seeking Safety was designed to be integrated with other treatments—Although the treatment can be conducted as a stand-alone intervention, the complexity of patients' needs usually suggests that they be in several treatments at the same time, ie: pharmacotherapy, individual therapy, twelve-step groups. (Najavits, 2002, p. 24)

SS was chosen for the ITTP program because it has been rigorously studied for the efficacy of treatment for co-occurring PTSD/SUD with 13 pilots, 3 controlled studies, and 6 randomized controlled trials (e.g., Boden et al., 2012; Hien, Cohen, Miele, Litt, & Capstick, 2004). It is listed on SAMHSA's (2006) National Registry of Evidence-Based Programs and Practices (NREPP) and is the model with the highest number of independent studies, which renders it less subject to positive bias. SS studies have relatively few exclusionary criteria for clients who are primarily individuals with complex trauma/PTSD and other comorbidity, high severity and chronicity, and multiple life problems (Najavits & Hien, 2013).

SS has been tested with dually diagnosed women, men, and adolescent girls. Samples include clients in outpatient and residential settings, low-income urban women, incarcerated women, and both male and female veterans (Boden et al., 2012; SAMHSA, 2006). SS has been determined to be effective with a criminal justice population. An evaluation of 17 women

in a minimum security criminal justice setting over a 3-month period showed significant improvements in PTSD symptoms and reduced substance use at post-treatment and 3-month follow-up. The recidivism rate was 33% at the 3-month follow-up, a rate typical for this population (Zlotnick, Najavits, Rohsenow, & Johnson, 2003). Another study (Lynch, Heath, Mathews, & Cepeda, 2012) examined the effectiveness of SS with 59 incarcerated women who completed the intervention and 55 who were waitlisted. Participants in SS demonstrated greater symptom improvement in PTSD and depression as well as improved interpersonal functioning and coping as compared to waitlisted offenders. These findings provide preliminary support for the use of this intervention with incarcerated women. For a full review of current research on SS, go to <http://www.seekingsafety.org>.

EMDR Therapy

EMDR therapy is a comprehensive treatment approach with specific protocols and procedures that integrate elements of psychodynamic, cognitive behavioral, experiential, interpersonal, and body-oriented therapies (Shapiro, 2001). EMDR therapy uses an eight-phase, three-pronged protocol to treat (a) *past* experiential contributors that laid the groundwork for current symptoms; (b) *present* day triggers that activate negative emotions, beliefs, and body sensations manifesting as “symptoms”; and (c) *future* rehearsal of adaptive desired states and behaviors (Shapiro, 2001). The eight phases include 1: history, case conceptualization, and treatment planning; 2: preparation (safety and stabilization); 3–6: reprocessing disturbing memories to a more adaptive state; 7–8: closure and reevaluation. A procedure specific to EMDR therapy is discrete sets of bilateral (side-to-side) eye movements, tactile tapping, or auditory tones, which provide dual attention stimulation during the processing phases of the protocol.

EMDR's theoretical model, the adaptive information processing (AIP) model (Shapiro, 2001), proposes that current symptoms are a result of unprocessed, earlier disturbing or traumatic events that are not appropriately integrated within memory systems and therefore prevent adaptive functioning in present time or orientation. It posits that these unprocessed disturbing memories can leave a person vulnerable to becoming unexpectedly “triggered” by any slight reminder of the original event such as sights, sounds, smells, or internal states. These triggers are often “cues” for substance use relapse in a misguided attempt to ease the distress (Coffey et al., 2002).

EMDR therapy was chosen for the ITTP program for co-occurring trauma and SUD because the AIP model predicts that reprocessing memories of past adverse events, present environmental triggers, and future anticipated stressors to an adaptive, nondistressing state will diminish and/or eliminate the posttraumatic stress symptoms that can lead to drug use cravings (Coffey et al., 2002; Shapiro, 2001; Shapiro, Vogelmann-Sine, & Sine, 1994; Vogelmann-Sine, Sine, Smyth, & Popky, 1998; Zweben & Yearly, 2006). SS and EMDR therapy are both empirically supported trauma-specific treatments. The ITTP combined them to cover the eight phases of EMDR therapy as an ITTP. SS groups were used to provide a structured, cost-efficient, present-oriented “Phase 2” (preparation, safety, stabilization), and individual EMDR therapy was offered for the individualized “reprocessing phases” of traumatic memory.

Research has suggested that the use of standard trauma-focused EMDR therapy with co-occurring trauma and SUD and/or behavioral addictions, such as gambling and sex addiction, may enhance overall treatment outcomes (Cox & Howard, 2007; Henry, 1996; Marich, 2009, 2010). In one randomized controlled study, Hase, Schallmayer, and Sack (2008) targeted “addiction memories” (Boening, 2001) such as relapse and substance use cravings, with two sessions of a modified EMDR therapy protocol. They found that reprocessing memories specifically associated with the person’s addiction significantly reduced alcohol craving at posttreatment and at 1 month post-treatment compared to the treatment as usual group. Several other EMDR therapy modifications have been suggested for targeting memories related specifically to addictive processes, such as urges, cravings, relapse, euphoric recall, and other triggering affective and somatic states associated with addictive behaviors (Knipe, 2005, 2014; Miller, 2010, 2012; Popky, 2005).

EMDR therapy is listed on SAMHSA’s (2010) NREPP. The efficacy of EMDR therapy for the treatment of PTSD and trauma is supported by approximately 29 randomized controlled studies comparing EMDR therapy to other treatments for PTSD. For a full review of EMDR therapy research, go to <http://www.emdr.com/general-information/research-overview.html>.

Method

Participants

Data was collected from 220 participants enrolled in the TCDCP from August 1, 2004, to December 31, 2009. Participants who reported at least one “Criterion A” event according to the *Diagnostic and*

Statistical Manual of Mental Disorders (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association [APA], 2000) sometime in their life, as assessed by one of two valid and reliable PTSD measures (see “Measures” section), were assigned to the ITTP as an added component of the PAU. A Criterion A event is considered an extreme stressor with direct personal exposure to an event (actual or threatened death or serious injury), or other threat to one’s physical integrity; witnessing an event involving another person; or hearing about an event experienced by a family member or other close associate, accompanied by extreme fear, helplessness, or horror at the time of the event (APA, 2000).

Assessments for depression and self-esteem were also administered to all participants. Training for conducting assessments with participants was provided by the first two authors (SB and SG). The drug court administrator conducted all assessments as semistructured interviews to ensure that participants understood what was being asked of them. Questions were presented in a standardized format. Clients who did not report any Criterion A trauma participated in the PAU only. Exclusion criteria for the study included previous treatment with EMDR therapy, a clinically significant dissociative disorder, active suicidality, or psychosis. No participants in this study were excluded based on these criteria.

Procedures

Study Design. This preliminary study was designed to determine what, if any, program outcome improvements could be demonstrated by adding a trauma-specific treatment component to the PAU. Participants who did not endorse a trauma history were assigned to PAU only (Table 1). Participants who endorsed a Criterion A trauma history were assigned to the ITTP, where they received required SS group treatment during PAU Phases 1 and 2. After successful completion of SS, ITTP participants were offered optional individual EMDR therapy, generally during the third phase of PAU and are referred to in this article as the *EMDR selectors*. Those who ended their trauma treatment with SS are referred to as *EMDR decliners*. Those participants who declined EMDR therapy in PAU Phase 3 returned to standard PAU programming for the third and final phase of the TCDCP.

Cross Training. In a drug court treatment model, a critical foundation is team collaboration. It is crucial for comprehensive cross training to be conducted with all members of the drug court team including law enforcement, superior court judge, prosecuting and defense attorneys, chemical dependency counselors, administrative and support staff, and any other

stakeholders in the community. The first two authors (SB and SG) did 1 day of cross-training with all members of the treatment team as described earlier and a 1-day training of support staff to conduct SS. The EMDR therapists were then cross-trained by the drug court administrator in TCDCP requirements, policies, and procedures.

TCDCP Treatments

Program as Usual. See earlier description in the “Thurston County Drug Court Program” section. The PAU is composed of a structured three-phase program lasting a minimum of 12 months to a maximum of 18 months, with clearly defined requirements for program completion (Table 1).

Seeking Safety. The implementation of SS was based on collaborative decisions made by the drug court administrator and the principal investigators about which topics might best meet the trauma treatment needs of these drug court program participants. Fifteen of the full 25 topics were used (Table 2). The intention was to avoid duplicating other program services already being provided by the PAU, which the ITTP participants were also attending.

SS groups were started in the first phase of the PAU after screening for eligibility within the first month of acceptance into the TCDCP. Groups were conducted once a week for 2 hours each and were gender-specific. Groups were closed once started and consisted of 6–10 individuals. New groups were started with Topic 1 and ran through Topic 15. Groups were facilitated by state-certified chemical dependency professionals (CDPs) and drug court paraprofessional support staff in accordance with the SS manual (Najavits, 2002).

Training to conduct SS groups was conducted by the first two authors (SB and SG; principal investigators) who had attended an early training offered by the developer of SS. The drug court’s clinical program supervisor, who had been trained to conduct SS by the principal investigators, assessed treatment fidelity within the SS program. The supervisor randomly evaluated SS groups for basic fidelity to the recommended curriculum structure using the SS Adherence Scale suggested by the developer of the program (Najavits, 2002).

EMDR Therapy. During the course of the SS groups, the drug court administrator presented detailed information about the next optional treatment phase. Participants were offered up to 30 individual sessions of EMDR therapy, 60–90 minutes in length, on a voluntary basis if they completed the required SS groups. Participants were gathered as a group and shown a videotape of the coinvestigators’ presentation about

TABLE 2. Seeking Safety Group Topics Used in Integrated Trauma Treatment Program (ITTP)

Seeking Safety Topics in ITTP	Total Time per Topic (hours)
Intake / case management	1 (individual)
Safety (Parts 1 and 2)	2
PTSD: Taking back your power (Parts 1 and 2)	2
Detaching from emotional pain (Parts 1 and 2)	2
When substances control you	2
Red and green flags (Parts 1 and 2)	2
Honesty	2
Recovery thinking (Parts 1 and 2)	2
Integrating the split self	2
Commitment (Parts 1 and 2)	2
Creating meaning	2
Setting boundaries (Parts 1 and 2)	2
Discovery (Parts 1 and 2)	2
Coping with triggers	2
Healing from anger (Parts 1 and 2)	2
Healthy relationships (Parts 1 and 2)	2
Termination case management	1 (individual)

Note. Total 30 hours of group treatment. PTSD = posttraumatic stress disorder.

trauma-informed treatment with EMDR therapy. They also viewed a video interview of a substance abuse client who had been treated with EMDR, who described how the treatment alleviated her symptoms of PTSD, thereby helping her maintain long-term sobriety. Those who opted for EMDR therapy were excused from one 12-step meeting per week to equalize program hours.

The first and second phases of EMDR therapy (history taking and stabilization) were addressed in other portions of the ITTP Phases 1–2 (PAU + SS). The individual reprocessing phases of EMDR therapy typically started in the third phase of drug court, following standard procedures using Phases 3–8, based on the three-pronged protocol including past and present trauma targets followed by establishing a desirable adaptive future.

EMDR therapists were independent contractors to the TCDCP. Three therapists provided EMDR therapy beginning in 2004, two of which were EMDR certified by the EMDR International Association (EMDRIA). Therapists submitted two random audiotapes of their

private practice EMDR therapy clients to an EMDR Institute trainer for a basic fidelity check, prior to assigning drug court participants to them. Fidelity to the EMDR treatment protocol is considered important to maximize treatment outcomes (Maxfield & Hyer, 2002). As the ITTP grew, the number of EMDR therapists increased to eight over this data collection period through 2009. The additional five therapists were not fidelity checked prior to being hired because of limited resources. Four of the eight therapists were certified and were consistently attending EMDR therapy consultation group with a local EMDRIA-approved consultant and basic trainer who had assisted in the deployment of this ITTP. No ongoing structured fidelity checks were done; however, all EMDR therapists were required to submit monthly progress reports regarding their assigned drug court participants for review by the drug court treatment team including the judge. This process was used to track the individual EMDR therapy treatment goals of the participants.

Termination and Recidivism

The cohort reported in this article was tracked for 5 years from date of graduation, termination, or declining of the program. Drug court terminators are those participants who either voluntarily drop out of the program or are expelled because of program violations. Drug courts measure recidivism in one of two ways: postprogram arrest and postprogram reconviction. Recidivism for the TCDCP is measured by postprogram reconviction.

Since the inception of the TCDCP in 1998, drug court graduates have recidivated at a lower rate than the terminated group, and the terminated group recidivated at a lower rate than those who declined drug court altogether, indicating a beneficial impact of even a limited dose of engagement in the drug court process (E. Goodman, personal communication, June 2, 2015).

Measures

Participants were assessed for a Criterion A event (APA, 2000) with either the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995) or the Detailed Assessment of Posttraumatic Stress (DAPS; Briere, 2001). Both the CAPS and the DAPS provide information on an adult client's history of exposure to various types of traumatic events as well as scales that assess PTSD symptoms. The CAPS was used as the initial trauma assessment for the first 90 participants, but because the administration of the CAPS required trained clinical interviewers who did not work within the drug court program, the decision was made to switch the trauma assessment to the DAPS for the remaining

130 participants and thereafter in later cohorts. The DAPS was administered as a semistructured interview by the drug court administrator to ensure participants' understanding of the questions being asked. Posttreatment assessment of posttraumatic symptoms was conducted using whichever pretreatment assessment was initially used to indicate a trauma history.

Symptoms of depression were assessed with the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), which includes 21 self-report items that are based on a 4-point scale. These can be computed into a raw score, which indicates varying levels of depressive symptoms: 0–13 minimal, 14–19 mild, 20–28 moderate, and 29–63 severe.

Self-esteem was assessed with the Index of Self-Esteem (ISE; Hudson, 1982). The ISE is a 25-item self-report scale designed to measure the degree, severity, or magnitude of the participants' self-esteem problems. Scores higher than 30 suggest clinically significant symptoms of low self-esteem (higher scores indicate lower self-esteem).

Results

Two hundred twenty individuals, 60% male, were enrolled in the TCDCP from August 1, 2004 to December 31, 2009. Participants were primarily White (88%), older than the age of 18 years with a mean age of 32 years, and a mean education level of Grade 12. The most commonly endorsed drug of choice was methamphetamine (52%), and more than half of the sample reported being unemployed (65%) at the time of initial assessment. One hundred fifty participants (68%) were assigned to the ITTP based on assessment of a trauma history. This group participated in trauma-specific treatment in addition to participating in the standard PAU. The remaining 70 participants (32%) were enrolled in the drug court PAU only, reporting no Criterion A trauma history. Types of trauma reported in the TCDCP included, but were not limited to, physical, emotional, and sexual abuse/assault; physical and emotional neglect; witnessing parental abuse; loss of child custody through jail or child protective services; being homeless and active in addiction; using drugs during pregnancy; traumatic deaths; medical traumas; and motor vehicle accidents. Of the 150 participants who endorsed a history of trauma, 61 (41%) identified symptoms consistent with a diagnosis of PTSD, whereas 89 participants (59%) reported subthreshold symptom levels.

Of the 220 participants in TCDCP, 128 graduated (42 in PAU, 86 in ITTP). Ninety-two (28 in PAU, 64 in ITTP) were terminated from the drug court for various program violations, almost half because of continued substance use (per the drug court administrator; Figure 1).

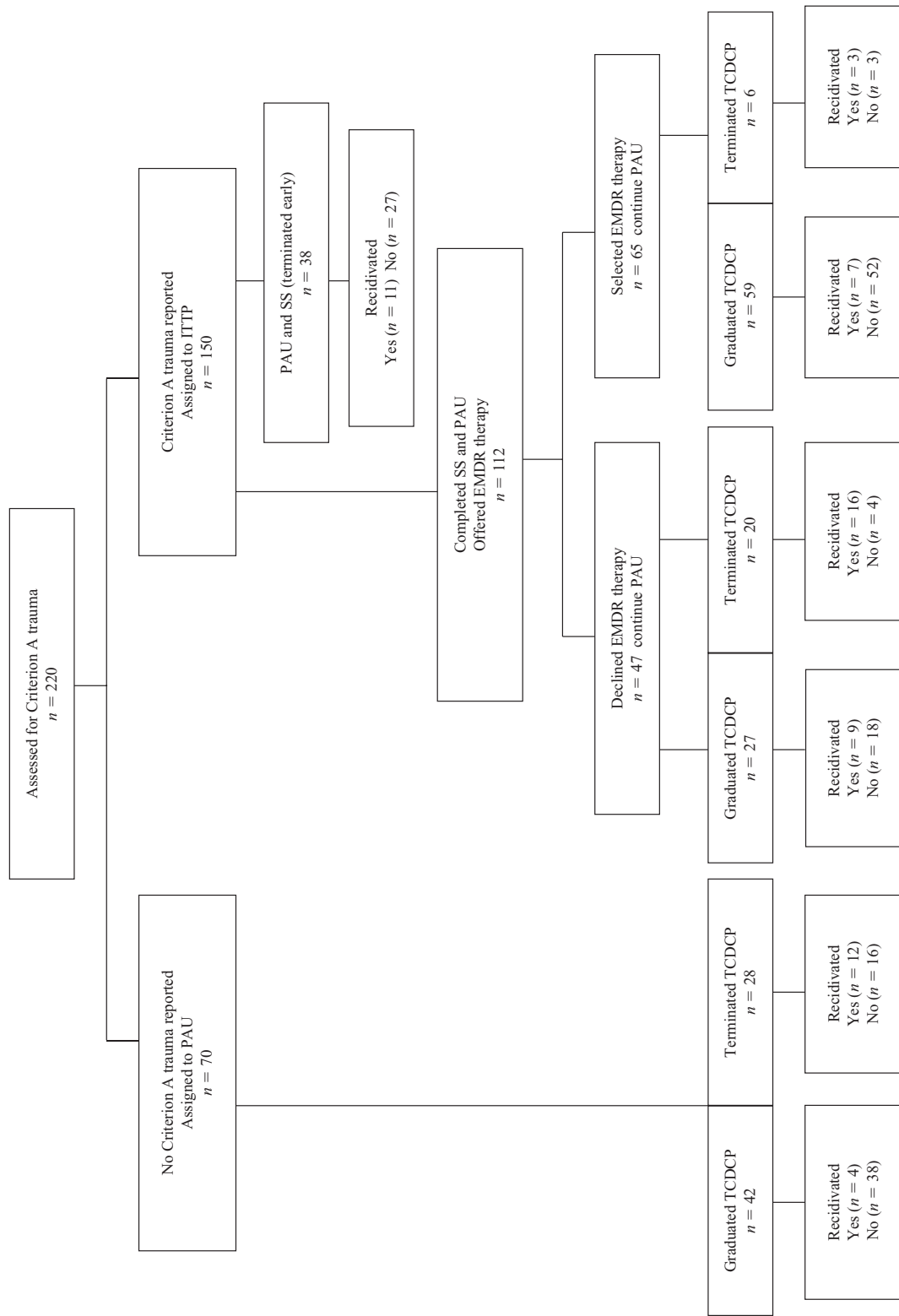


FIGURE 1. Program as Usual and Integrated Trauma Treatment Program flowchart.

TABLE 3. Integrated Trauma Treatment Program (ITTP) Pretreatment Mean Scores

Assessments	ITTP Phase 3 Cohort	
	Declined EMDR Pretreatment M (n = 47)	Selected EMDR Pretreatment M (n = 65)
BDI-II	10	15 ^a
ISE	31 ^b	33 ^b
CAPS total ^c	33 (n = 13)	55 ^d (n = 20)
DAPS total ^e	57 (n = 34)	68 ^f (n = 45)

Note. EMDR = eye movement desensitization and reprocessing; BDI-II = Beck Depression Inventory-II; ISE = Index of Self-Esteem; CAPS = Clinician-Administered PTSD Scale (Total = Reexperiencing + Avoidance + Arousal); DAPS = Detailed Assessment of Posttraumatic Stress (Total = Reexperiencing + Avoidance + Arousal).

^aMean score in mild depression range.

^bMean score indicates clinically significant low self-esteem.

^cCAPS used for pretreatment trauma screening assessment up to Participant 90.

^dMean score indicates moderate symptoms.

^eDAPS used to Participant 91–220.

^fMean score above clinically significant cutoff.

One hundred twelve participants endorsing a trauma history completed SS groups, moved into Phase 3 treatment, and were offered individual EMDR therapy. Sixty-five members of this cohort volunteered for EMDR and 47 declined it (Figure 1). Of the 65 participants, 58% had at least 10 sessions of EMDR, an average of 12, with a range of 4–29.

Visual examination of the pretreatment scores for the 112 ITTP Phase 3 cohort indicated that EMDR therapy selectors tended to report more severe symptoms of depression and posttraumatic stress than EMDR decliners. On each of these measures, only the scores for the EMDR selectors were clinically significant. There was no difference between decliners and selectors' scores on the ISE, which were both above the clinical cutoff (Table 3).

Demographic and Descriptive Variables

Demographic and descriptive variables including education, race, gender, employment status, marital status, and drug of choice were compared. There were no significant differences between the PAU and ITTP on any of the demographic variables except gender. At the beginning of treatment, the PAU group had significantly more men (80%, $n = 56$) than women (20%, $n = 14$) as compared to the ITTP group (51% men, $n = 77$; 49% women, $n = 73$). The ITTP Phase 3 cohort included 59 men and 53 women. EMDR therapy was

selected by 29 men and 36 women and declined by 30 men and 17 women.

Graduation Rates

Prior to implementation of the ITTP in 2004, the graduation rate in the TCDCP was 51% ($n = 412$). Data suggests an increase in overall program graduation rates after implementation of the trauma program. Within this study, the PAU graduated at a rate of 60% (42 of 70 initial participants) and ITTP (with and without EMDR therapy) graduated at a combined rate of 57% (86 of 150 initial participants). A separate analysis of the graduation rates for members of the Phase 3 ITTP cohort revealed that the graduation rate for those who selected EMDR therapy was 91% (59 of 65 members of Phase 3 cohort), whereas the rate for those who declined EMDR therapy was 57% (27 of 47 members of Phase 3 cohort; Figure 1).

Recidivism Rates

Between 1998 and 2003, the recidivism rate in the TCDCP ($n = 375$), as measured by postprogram reconviction, was 25% for program graduates and 31% for program terminators between 1998 and 2003. With the implementation of the ITTP, the overall TCDCP ($n = 220$) recidivism rate for felony reconvictions was 16% for graduates (20 of 128) and 45% for terminators (42 of 94). A comparison of recidivism rates among graduates revealed that PAU graduates had a 10% recidivism rate (4 of 42 graduates) and ITTP graduates had a 19% rate (16 of 86 graduates). A further examination of recidivism rates for ITTP graduates in the Phase 3 cohort found a recidivism rate of 33% for those who declined EMDR (9 of 27 graduates) and a 12% rate for those who selected EMDR (7 of 59 graduates).

Discussion

The prevalence of a trauma history in the criminal justice population is disproportionately high in comparison to the general population. This was reflected in this study, where 68% of TCDCP participants endorsed a history of significant (Criterion A) trauma on either the CAPS or the DAPS. The literature review indicated that although drug court program completion and graduation is the best predictor of lower postprogram recidivism rates, individuals with trauma histories often do not achieve good outcomes. The provision of trauma therapy in this study resulted in improved graduation rates in the TCDCP, with no notable differences between the PAU (60%) and combined ITTP (57%) graduates (with and without

EMDR), indicating that the trauma group looked similar to the PAU group at the end of the TCDCP.

Because program completion and graduation has been one of the biggest challenges in drug court programs treating trauma, substance abuse, and other comorbid mental health conditions, this finding indicates how important trauma treatment may be to overall program outcomes within a drug court setting.

Comparison of ITTP Phase 3 Cohort Who Selected or Declined EMDR Therapy

An interesting finding in this study was the difference in graduation rates for the Phase 3 ITTP cohort who were given the opportunity to select or decline individual treatment with EMDR therapy. The graduation rate for EMDR selectors was 91% compared to 57% for decliners. We also see higher recidivism rates in the group who declined EMDR therapy. Members of the Phase 3 cohort who declined EMDR therapy and graduated had a recidivism rate of 33% compared to only 12% of the EMDR therapy selectors. The EMDR therapy condition looked similar to the PAU recidivism rate of 10%. This large difference in recidivism rates among program graduates of this ITTP study suggests that the addition of individual EMDR therapy might have positively impacted both graduation and postprogram recidivism.

Gender and symptom differences were noted between those who elected to participate in individual EMDR therapy and the group that declined EMDR. Although the combined ITTP group endorsing a Criterion A event included 51% men ($n = 77$) and 49% women ($n = 73$), after completing SS, about half the men ($n = 30$) in the Phase 3 cohort declined EMDR therapy compared to only 32% of the women ($n = 17$). It may be useful to explore the impact of gender differences in accepting or declining individual trauma treatment in future studies.

The initial pretreatment scores of participants who selected EMDR therapy were somewhat higher than those who declined. It is possible that individuals experiencing higher levels of symptom distress might be more motivated to take the opportunity for individual trauma treatment when provided.

Motivation for treatment and willingness to participate in individual trauma treatment was not a measured variable in this study. However, participants' decision to engage in EMDR therapy appears to have had a positive impact on graduation and recidivism. The administrator of this drug court program reported that almost all the qualified ITTP participants who declined EMDR therapy did so because

they did not wish to take on anything "new" in their schedule. More rigorous, controlled research will be needed to evaluate what specific motivational factors influence program engagement and graduation.

Additional Potential Factors of Impact on Outcomes

Although PAU participants never received SS or EMDR therapy, all participants were exposed to extensive screening procedures and educational information about the linkages between trauma and substance abuse. It is possible that the additional attention paid to participants because of the addition of the ITTP, as well as the educational information, may have had a positive impact on program graduation outcomes. It is also possible that the more intensive individual therapy time itself, not specifically EMDR therapy, may be responsible for the improvement in program completion and graduation.

Strengths and Limitations

The strengths of the study include the provision of services for co-occurring trauma and substance abuse in a naturalistic setting with limited exclusionary criteria. Concern has been expressed that the exclusion of complex comorbidity in existing PTSD treatment studies decreases applicability and generalizability to real-world clinical settings where co-occurring disorders are the rule rather than the exception with SUDs. The length of the drug court program (12–18 months) provided a well-supervised, safe "container" for testing the ITTP program and procedures.

One important omission from this study was the assessment and impact of the more ubiquitous disturbing adverse life experiences (including the ACE study questionnaire) which do not rise to the level of Criterion A traumas but have been recognized as contributing to clinically significant trauma symptoms that interfere with life functioning. This type of assessment, as well as education of participants regarding the effects of these adverse events, might have yielded more ITTP participants and thus more volunteers for EMDR therapy, perhaps increasing program graduation rates even more.

The lack of randomization to treatment groups limits conclusions that can be drawn about outcomes between the treatment conditions. Additional limitations include no ongoing structured fidelity checks for EMDR therapy. Future studies should also consider the role of criminal thinking and behavior as elements in the success of both ITTP implementation and research and producing permanent changes in drug court participant behaviors.

Recommendations for Use of This ITTP in a Drug Court Program

Several follow-up issues were explored between the investigators and the drug court administrator after the analysis of this study:

1. It is suggested that assessments be delayed for from 45 to 90 days to (a) allow acute drug toxicity to ease for a longer period, (b) allow the participants to establish a trusting relationship with their counselor to maximize the possibility of honesty about their history, and (c) ensure that participants' basic needs (food, clothing, shelter) are met.
2. It is important that SS therapists follow adherence to the SS model while at the same time customizing the SS groups to the needs of their specific participants.
3. It is important that EMDR therapists maintain fidelity to EMDR therapy's standard procedures. The drug court program administrator and program supervisor should ensure that the EMDR therapists use basic fidelity check forms.
4. Ideally, at least one EMDR therapist should be a drug court employee to ensure "on-site presence" and to act as a liaison between drug court and any independent EMDR therapy contractors.
5. Earlier provision of EMDR therapy may be advisable during PAU Phase 2. This practice has since been implemented in the TCDCP, guided by the individual needs and readiness of each participant.
6. Graduation ceremonies were particularly motivating for conveying the value participants received from engaging in EMDR therapy.

Future Directions for Research

This ITTP model might be replicated in other settings serving dually diagnosed clients with additional specific challenges such as domestic violence or postcombat PTSD in the developing veterans courts and in treating adolescents in the criminal justice system in addition to adults. These various treatment settings could develop and implement an ITTP tailored to meet the specific needs of the clients they serve. This can be accomplished by (a) using screening tools that measure the specific types of behaviors or traits the program is seeking to improve (e.g., PTSD symptoms, depression, self-efficacy, coping responses, relapse, family patterns of behavior, and overall quality of life); (b) designing the treatment intervention phases, length, and treatment dose in accordance with the specific needs of the assessed population to determine minimum effective treatment dosing and intensity levels; and (c) screening for the more common "disturbing life experiences" that could be responsible for significant symptom manifestation.

It is suggested that future research with this complex population should include targeting addiction-specific memories such as urges, cravings, relapse, euphoric recall, and other positively charged affective and somatic states associated with addictive behaviors as described in the "EMDR Therapy" section.

Individualized trauma treatment approaches are expected to lead to more comprehensive recovery from addictive disorders including long-term abstinence, reduced recidivism in the criminal justice system, improved quality of relationships, and potential closure to the multigenerational cycle of trauma and substance abuse. The promising outcomes of the ITTP may add useful information to the existing literature on the treatment of trauma in the criminal justice system as well as suggesting directions for future, more rigorous research on this topic.

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