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18

Psychosocial Treatments for Posttraumatic Stress Disorder

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The study of psychosocial treatments for posttraumatic stress disorder (PTSD) has improved substantially in the past decade, with greater rigor, expansion of sampling, and diverse treatment models. It is clear that PTSD treatments work better than treatment as usual; average effect sizes are in the moderate to high range. A variety of treatments have been established as effective, with no one treatment having superiority, and both present-focused and past-focused models work (neither consistently outperforms the other). Areas of future direction include training, dissemination, client access to care, optimal delivery modes, and mechanisms of action. Methodological issues are also discussed, including improving research reporting, broadening study samples, and greater use of active comparison conditions.

CONTEXT

Awareness of PTSD has increased markedly. Its origins in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) began in the first edition as "gross stress reaction" (American Psychiatric Association [APA], 1952), and it was eventually termed PTSD in the third edition (APA, 1980). First understood as a disorder primarily suffered by military personnel in wartime, it has since been understood as a disorder arising from diverse types of traumas, including natural disaster, such as hurricane or tornado; child physical and sexual abuse; domestic violence; life-threatening illness; accidents; and terrorist attacks. Most people (81.7%) experience one or more traumas in their lifetime, per the National Comorbidity Survey Replication (Sledjeski, Speisman, & Dierker, 2008). Yet, remarkably, most people who experience trauma do not go on to develop PTSD. For those who do develop PTSD after exposure to trauma, their

symptoms cluster into four categories as defined by DSM-5 (APA, 2013): (a) *intrusion symptoms* (e.g., intrusive memories, nightmares, flashbacks); (b) *avoidance symptoms* (e.g., not wanting to talk about the trauma, avoidance of reminders of the trauma); (c) *negative alterations in cognitions and mood* (e.g., distorted self-blame, estrangement from others, diminished interest in activities), and (d) *alterations in arousal and reactivity* (e.g., sleep problems, anger, exaggerated startle response). Additionally, the *dissociative* subtype of PTSD identifies symptoms such as feeling detached from one's mind or body and experiences in which the world seems unreal, dreamlike, or distorted. Persistence of symptoms for over a month and marked decline in functioning are also required. DSM-5 PTSD differs from DSM-IV-R PTSD primarily in the following ways: (a) the definition of "trauma" now includes the phrase "or sexual violence," and there is no longer a requirement for "intense fear, helplessness, or horror" and (b) a new symptom cluster has

been added: “negative thoughts and mood.” The 12-month prevalence rate of PTSD in the U.S. population is estimated at 3.5% and lifetime prevalence at 6.8% (Kessler et al., 2005a, 2005b). Global data suggest that similar rates of PTSD are also observed in countries outside of the United States (Kessler et al., 2009).

Most people with PTSD have one or more co-occurring psychiatric diagnoses, including disorders of mood, substance use, anxiety, and personality (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Subjectively, the experience of PTSD is described as a devastating loss that "shatters assumptions" about oneself, others, the future, and the world (Janoff-Bulman, 1992) and that affects perceptions of safety, trust, power, esteem, and intimacy (McCann & Pearlman, 1990). A broad literature on PTSD exists within the professional field and also in literature (e.g., Frankl, 1963; Morrison, 1987; Wiesel, 1960) and film (e.g., *Once Were Warriors*, *Monster*, *This Boy's Life*, *Schindler's List*, *Saving Private Ryan*, *Precious*).

Historically, description of trauma arose in relation to combat, from ancient literature (the *Iliad*) through later history, with terms such as *soldier's heart* during the American Civil War, *shell shock* during World War I, and other terms such as *combat neurosis* and *war hysteria* (Weisaeth, 2002). In 1895, Freud and Breuer proposed that trauma could lead to mental disorder, an idea radical for its time (Wilson, 1994). After the Vietnam War, PTSD was formally named in the *DSM-III* (APA, 1980). The decades since then have seen enormous growth in the study of PTSD, including its epidemiology, assessment, and neurobiological substrates and the development and testing of new treatments for it.

This chapter is designed to be helpful to both clinicians and researchers. It is organized into four sections: key principles, description and empirical validation of PTSD treatments, summary of key findings, and future directions. Due to space limitations and the plentiful array of PTSD models that have arisen in recent years, we have limited this review to models with one or more type 1 studies (randomized controlled trials [RCTs]) published in the peer-reviewed literature from 2010 to February 2014, as well as retaining key type 1 studies from the earlier edition of this chapter (Najavits, 2007). This review is comprehensive in that we included all interventions

and studies that met these parameters, plus the following inclusion criteria:

- *Treatments designed for PTSD* (not treatments developed for other diagnoses and applied to PTSD without adaptation)
 - *Treatments intended for full PTSD* rather than a specific PTSD symptom (thus excluding Imagery Rehearsal Therapy for nightmares, for example; Casement & Swanson, 2012)
 - *Behavioral therapies* (thus excluding medication trials, medication-enhanced psychotherapy, or comparisons of medication vs. psychotherapy)
 - *Samples with current PTSD*. We excluded models that only had studies of clients with a history of trauma; subthreshold PTSD; or no PTSD, such as prevention studies.
 - *Individual or group treatment modality*. We excluded couple and family treatments as these are less frequently practiced.
 - *Adult PTSD treatments*. We cover adolescent studies if they were in addition to at least one adult RCT. For treatments specifically designed for children or children and their caregivers, the interested reader is directed to www.nctsn.org and www.nrepp.org. Examples of such treatments are Child-Parent Psychotherapy (Lieberman, Van Horn, & Ippen, 2005) and Trauma-Focused CBT (Cohen, Mannarino, & Iyengar, 2011).
 - *Studies that report pretreatment to end-of-treatment PTSD outcomes*. Studies that do not provide end-of-treatment outcomes have been excluded (e.g., McGovern, Lambert-Harris, Alterman, Xie, & Meier, 2011).

In terms of our reporting, we focus solely on PTSD outcomes unless the treatment was designed to address a comorbid condition (e.g., substance use disorder [SUD]), in which case we also report on that. We do not address secondary outcomes, nor treatment dismantling results. We focus on intent-to-treat analysis, not subgroup analyses, unless intent-to-treat was not available. We also focus on differences between treatment conditions, as all studies were RCTs. We do not address follow-up periods after the end of treatment, as our goal is to prioritize the internal validity of treatment effects. References to more detailed descriptions and research reviews are provided throughout for readers who desire additional information. All models are listed in alphabetical order within sections.

KEY PRINCIPLE

Across the available arching principles:

1. PTSD treatment as consistent evidence for PTSD diagnosis is drawn by evidence on psychosocial interventions (Bisson, et al., 2013; Bradbury, et al., 2005; Butler, et al., 2010; Watt, et al., 2010). Practice guidelines for Trauma and PTSD (Friedman, et al., 2004) and the American Psychiatric Society (2013) include recommendations for Agency functioning (Jonas, et al., 2013).

KEY PRINCIPLES

Across the available literature, we note several overarching principles:

1. *PTSD treatments work, and work better than treatment as usual (TAU).* Research shows consistent evidence that treatments designed for PTSD do indeed work. This is the conclusion drawn by every major review and meta-analysis on psychosocial treatments for PTSD (e.g., Bisson, Roberts, Andrew, Cooper, & Lewis, 2013; Bradley, Greene, Russ, Dutra, & Westen, 2005; Butler, Chapman, Forman, & Beck, 2006; Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010; Watts et al., 2013) and professional practice guidelines such as the International Society for Traumatic Stress Studies (Foa, Keane, Friedman, & Cohen, 2008), the Royal College of Psychiatrists and the British Psychological Society (2005), Veterans Health Administration (2004), Institute of Medicine (2008), and the Agency for Healthcare Research and Quality (Jonas et al., 2013).

The degree of improvement is in the moderate to high range. For example, according to a meta-analysis by Bradley and colleagues (2005), 67% of clients who complete PTSD treatment no longer meet criteria for the disorder ("complete analysis"), and 56% of clients who enroll in PTSD treatment no longer meet criteria for the disorder ("intent-to-treat analysis"). Effect sizes, which reflect degree of change, are reported to average 1.43 from pretreatment to end of treatment, 1.11 when comparing PTSD treatment versus waitlist control conditions, and 0.83 when comparing PTSD treatment versus supportive therapy control condition. Consistent with these findings, another recent meta-analysis reported an average effect size of 1.14 across PTSD psychotherapy studies (Watts et al., 2013).

Despite the overall positive outcomes for PTSD treatments, it is important to recognize several major caveats that generally receive less scrutiny. Dropout rates are a concern. PTSD treatments are usually conducted in individual modality by highly trained clinicians, which add up to relatively costly treatments; and a substantial proportion of study participants had prior PTSD treatment and/or

other relevant treatments during the course of studies, including medications (thus calling into question the impact of any particular episode of PTSD behavioral therapy; Najavits, 2013).

2. *The PTSD literature has achieved strong results in part by excluding more severe and complex clients.* The PTSD literature has historically and consistently excluded clients with complexities such as the following (Bradley et al., 2005; Najavits & Hien, 2013; Ronconi, Shiner, & Watts, 2014):

- Homelessness
- SUD (especially alcohol or drug dependence and drug use disorders generally)
- Domestic violence
- Suicidal or homicidal ideation
- Serious and persistent mental illness
- Significant medical illnesses such as HIV
- Mandated treatment
- Pregnancy
- Cognitive impairment
- Current incarceration

Thus, the PTSD literature needs to be understood in light of such major limitations. Less positive treatment outcomes are likely when a broader range of clients are included. For example, a treatment often labeled as "gold standard" for PTSD, Prolonged Exposure, has more positive results when studied in PTSD-alone than PTSD/SUD samples (Najavits, 2012, 2013). Notably, treatment models designed for comorbid PTSD/SUD tend to have fewer exclusions in their study samples.

3. *Various treatments are effective, thus allowing clinicians and clients to choose based on their preferences.* A major advance has been the growing evidence base of many PTSD models. Thus, there is no one right way but many. It is possible to select effective treatments based on the clinician's training, the treatment context, and clients' presentation and preferences.
4. *PTSD treatments fall into two broad categories: past-focused and present-focused (or their combination).* Past-focused PTSD models ask the client to explore the trauma narrative in detail to promote "working through" or processing of painful memories and emotions of the trauma. In contrast, present-focused PTSD models focus on psychoeducation and

- coping skills to improve current functioning in domains such as interpersonal, cognitive, and behavioral skills. Examples of past-focused models include Cognitive Processing Therapy (CPT), Eye Movement Desensitization and Reprocessing (EMDR), Narrative Exposure Therapy, and Prolonged Exposure. Examples of present-focused models include Cognitive Therapy for PTSD (CT-PTSD), Seeking Safety, and Stress Inoculation Training.¹
5. *Overall, effective treatments do not differ significantly from each other.* For example, present- and past-focused models both work, and neither consistently outperforms the other (Bisson et al., 2013; Jonas et al., 2013). This is often a surprise to clinicians and clients, who typically assume that telling the trauma narrative is “more powerful” or “necessary” for healing. Similarly, within any category, treatments do not differ significantly from one another. For example, among past-focused treatments, EMDR and Prolonged Exposure both work, and neither outperforms the other (Benish, Imel, & Wampold, 2008; Bisson et al., 2013; Bradley et al., 2005; Powers et al., 2010; Watts et al., 2013).
 6. *Combining effective treatments is intuitively appealing, but research so far suggests it is not needed.* Various studies have compared combinations of effective treatments (e.g., Prolonged Exposure plus Stress Inoculation Training or Cognitive Therapy), but the combined treatment consistently shows no greater efficacy than the single treatments being studied (Bryant et al., 2008; Bryant, Moulds, Guthrie, Dang, & Nixon, 2003; Foa et al., 1999, 2005; Foa, Rothbaum, Riggs, & Murdock, 1991; Glynn et al., 1999; Moser, Cahill, & Foa, 2010).
 7. *The empirical base has improved greatly over the past decade.* The field now has more studies, more models, and a wider range of populations (e.g., comorbid clients, adolescents); the use of technology such as virtual reality and telehealth; and improved study methodologies.
 8. *In addition to evidence-based treatments, the PTSD field has various untested treatments.* Some treatments have never been tested; others have been evaluated only in case studies or uncontrolled pilots. Such treatments may hold promise, and thus it is important to remember that “absence of evidence is not evidence of absence.”

9. *Additional research is needed.* Important topics include how to improve training and dissemination of evidence-based treatments; larger sample sizes; broader populations to include more complex and severe clients; exploration of interactions between client and clinician variables in relation to treatment models; longer follow-ups; effectiveness studies; optimal timing of treatments; greater attention to external uncontrolled treatments; improvement in access to care; and further study of promising models.

DESCRIPTION AND EMPIRICAL VALIDATION OF TREATMENTS

In this section, we describe specific PTSD therapies and their RCT evidence. Models are identified as *past*- and/or *present-focused* per point 4 above. Past-focused models are reviewed first due to the larger quantity of literature on these models.

Past-Focused Treatments

The past-focused treatments listed in this section (Table 18.1) share a common strategy of asking the client to explore the past in detail. The models differ in some aspects of their approaches, including how explicitly the trauma narrative is expressed, whether nonverbal modalities are used (e.g., physical sensations), and whether other techniques are incorporated. But overall, these models have as their central goal a deep therapeutic exploration of past trauma. As such, they typically evoke intense emotions, such as rage, sadness, panic, and fear. The client is encouraged to face trauma memories and emotions fully, after which she or he is guided to return to the present by the end of the session.

In some models, the clinician guides the client to focus on “hot spots” that may be especially painful (such as the look on the face of a dying child or the smell of smoke from a fire). To increase the vividness of memories, the client may be asked to notice all senses (smell, sight, sound, touch, hearing) and speak in the present tense. The client may be asked to repeat the trauma narrative many times until it no longer holds strong emotional power. The client essentially *works through* or *processes* the trauma. If the client experienced multiple traumas, she or he

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its listed in this section on strategy of asking the detail. The models differ in approaches, including how trauma is expressed, whether it is sed (e.g., physical sensations) or techniques are incorporated. Models have as their central orientation of past trauma. As intense emotions, such as anger. The client is encouraged to express feelings and emotions fully, and to return to the present

inician guides the client may be especially painful (e.g., face of a dying child or rape). To increase the vividness, the client may be asked to notice (sight, sound, touch, hearing) and smell. The client may be asked to repeat many times until it reaches a threshold of power. The client processes the trauma. If there are multiple traumas, she or he

TABLE 18.1 Selection^a of Past-Focused Posttraumatic Stress Disorder (PTSD) Treatment Models with Type 1 Randomized Controlled Trials

Treatment Model	Modality	Population(s)	Comparison Condition(s)
Abreactive Ego State Therapy	Individual	Mixed PTSD sample	Ochberg Counting Method
Accelerated Resolution Therapy	Individual	Mixed PTSD sample	Attention control
Cognitive Processing Therapy	Individual	Incarcerated adolescents, veterans, survivors of child sexual abuse, interpersonal trauma, military sexual trauma, sexual assault	Minimal attention, Prolonged Exposure, Present-Centered Therapy, treatment as usual, waitlist
Emotional Freedom Techniques	Individual	Mixed PTSD sample, veterans	EMDR, standard of care/waitlist
Eye Movement Desensitization and Reprocessing (EMDR)	Individual	Female sexual assault survivors, mixed PTSD sample, health maintenance organization patients, primary care patients, veterans	Biofeedback-assisted relaxation, Brief Eclectic Psychotherapy, Emotional Freedom Techniques, Prolonged Exposure, Prolonged Exposure + cognitive restructuring, relaxation, routine clinical care, waitlist
Narrative Exposure Therapy	Individual	Earthquake survivors, refugees	Psychoeducation, supportive counseling, treatment as usual, waitlist
Prolonged Exposure	Group, individual	Adolescents, female sexual assault survivors, mixed PTSD sample, Japanese civilians, female veterans and active duty military, motor vehicle accident survivors, people living with HIV, primary care patients, survivors of combat and terrorism, veterans	Cognitive Processing Therapy, Cognitive Therapy, EMDR, monitoring group, Present-Centered Group Treatment, Present-Centered Therapy, Prolonged Exposure + cognitive restructuring, relaxation, Stress Inoculation Training, supportive counseling, Time-Limited Dynamic Therapy, treatment as usual, waitlist
Structured Writing Therapy for PTSD	Individual	Comorbid PTSD/substance use disorder	Treatment as usual
Virtual Reality Exposure Therapy	Individual	Veterans	Minimal attention
Written Exposure Therapy	Individual	Motor vehicle accident survivors	Waitlist

^a Per inclusion criteria as defined at the start of the chapter.

may be encouraged to fully process one trauma, usually the most upsetting one, and then move to others.

Among the many versions of such treatments, several have accumulated an evidence base. Such treatments represent a helpful method that may achieve results in relatively short time frames, particularly for single-incident trauma. However, such methods may be contraindicated due to the fact that intense trauma memories and emotions can be too disturbing for clients who are currently unstable, such as those who

are in domestic violence relationships, who are homeless, who have SUD, or who have suicidal or homicidal ideation (Najavits, 2002; Solomon & Johnson, 2002). Also, clients may be poor candidates for these models if they lack memory for their trauma, have severe dissociation, or have major cognitive impairment (Coffey, Schumacher, Brimo, & Brady, 2005). Thus, such complex clients have been excluded from the vast majority of PTSD outcome trials, as noted earlier in this chapter.

Abreactive Ego State Therapy

Abreactive Ego State Therapy emphasizes the repeated, hypnotically activated “reliving” of the trauma event, combined with ego-strengthening techniques conducted by a co-clinician (Barabasz, Barabasz, Christensen, French, & Watkins, 2013). In recent studies of a 5- to 6-hour single session of manualized Abreactive Ego State Therapy, it outperformed a placebo comparison (the Ochberg Counting Method) in mixed PTSD samples (Barabasz et al., 2013; Christensen, Barabasz, & Barabasz, 2013).

Accelerated Resolution Therapy

Accelerated Resolution Therapy is a brief treatment developed for adults with comorbid PTSD and depression (Kip et al., 2013). It uses imaginal exposure (the client “imagines” the trauma in detail) in conjunction with the clinician oscillating the hand at the client’s eye level, with the client engaging in left-to-right eye movements as a way to reduce physiological sensations related to the recall of a trauma. After this exposure to trauma material, the clinician then facilitates “voluntary image replacement” by asking the client to replace distressing images or senses with positive images. Although Accelerated Resolution Therapy is similar to EMDR (see below), it is distinct in its use of image replacement, its primary focus on processing of physiological sensations, and use of a fixed number of eye movements (Kip et al., 2013). In an RCT with survivors of military trauma, those receiving Accelerated Resolution Therapy evidenced greater reduction in PTSD symptoms than those in an attention control condition (Kip et al., 2013).

Cognitive Processing Therapy

CPT was originally developed for female rape victims (Resick & Schnicke, 1992) but has since been tested in other populations per Table 18.1. The model draws heavily on McCann and Pearlman’s 1990 trauma themes of safety, trust, power, esteem, and intimacy (Solomon & Johnson, 2002). There is a strong focus on cognitive restructuring to address overly generalized beliefs (“the world is unsafe”) and overly constricted beliefs (“it’s all my fault”). The client typically

writes a trauma narrative as homework outside of the therapy session.

In RCTs of CPT, it has outperformed minimal attention (Resick, Nishith, Weaver, Astin, & Feuer, 2002), TAU (Forbes et al., 2012), and waitlist control conditions (Ahrens & Rexford, 2002; Chard, 2005; Galovski, Blain, Mott, Elwood, & Houle, 2012; Macdonald, Monson, Doron-Lamarca, Resick, & Palfai, 2011; Monson et al., 2006). CPT has also been directly compared with Prolonged Exposure; both evidenced positive outcomes and there were no differences between them on PTSD outcomes (Resick et al., 2002). When CPT was studied in relation to Person-Centered Therapy, a present-focused model, it outperformed the latter on self-reported but not clinician-assessed PTSD symptoms (Suris, Link-Malcolm, Chard, Ahn, & North, 2013). For a review, see Koucky, Dickstein, and Chard (2013).

Emotional Freedom Techniques

The Emotional Freedom Techniques approach (Craig, 1999) assumes that PTSD is the byproduct of trauma-related disturbances in the body’s energy field. The treatment uses light manual stimulation of the endpoints of traditional acupuncture meridians on the face, upper body, and hands, while the client focuses on the trauma. In an RCT with veterans, Emotional Freedom Techniques outperformed a waitlist control (Church et al., 2013). In a study comparing Emotional Freedom Techniques versus EMDR in a mixed PTSD sample, PTSD reductions were found in both conditions; however, more EMDR clients achieved clinically significant PTSD change (Karatzias et al., 2011).

Eye Movement Desensitization and Reprocessing

In EMDR therapy (Shapiro, 1995) the client focuses on trauma while engaging in bilateral (back-and-forth) eye movements by tracking the clinician’s raised fingers horizontally across the visual field. The client reports thoughts, emotions, and physical sensations that emerged. Processing involves reducing negative emotions and physical sensations (e.g., chest tension); and strengthening positive beliefs (e.g., “I’m now in control”). Some clinicians use tapping or tones instead of eye movements as the essential element is believed to be dual awareness (Jeffries & Davis,

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the client focuses l (back-and-forth) ician's raised fin field. The client physical sensations educing negative g., chest tension); (e.g., "I'm now tapping or tones essential element Jeffries & Davis,

2013). Detailed descriptions of the trauma, extended exposures, and homework are not used.

Various RCTs of EMDR have been conducted (for reviews and meta-analyses, see, e.g., Bisson et al., 2013; Bradley et al., 2005; Butler et al., 2006; Verstraet, van der Wurff, & Vermetten, 2013; Watts et al., 2013). EMDR has outperformed control conditions such as waitlist (Power et al., 2002; Rothbaum, 1997; Rothbaum, Astin, & Marsteller, 2005) and routine clinical care (Carlson, Chemtob, Rusnak, Hedlund, & Muraoka, 1998; Marcus, Marquis, & Sakai, 1997), although in one study it did not outperform a relaxation control other than on one variable (Taylor et al., 2003). Compared to active treatments, it has outperformed Biofeedback-Assisted Relaxation (Carlson et al., 1998) and has resulted in faster recovery than Brief Eclectic Psychotherapy (Nijdam, Gersons, Reitsma, de Jongh, & Olff, 2012) and more clinically significant change than Emotional Freedom Techniques (Karatzias et al., 2011). It has been most studied in relation to Prolonged Exposure (Power et al., 2002; Rothbaum et al., 2005; Taylor et al., 2003). The overall finding, based on meta-analyses, is that both models work yet do not evidence differences in their outcomes or in duration of treatment (Bisson et al., 2013; Bradley et al., 2005; Powers et al., 2010; Watts et al., 2013).

Narrative Exposure Therapy

Narrative Exposure Therapy was originally developed for survivors of war and torture (Schauer, Neuner, & Elbert, 2005). It does not identify a single trauma event as the focus of therapy; rather, it guides the client to construct a detailed chronological account of his or her history, integrating the trauma narrative into a cohesive life story. In RCTs, Narrative Exposure Therapy has outperformed a waitlist control (Zang, Hunt, & Cox, 2013), TAU (Stenmark, Catani, Neuner, Elbert, & Holen, 2013), and psychoeducation and supportive counseling (Neuner, Schauer, Klaschik, Karunakara, & Elbert, 2004). For a review, see Robjant and Fazel (2010).

Prolonged Exposure

Prolonged Exposure starts with several sessions of preparation of the client, after which the client can

engage in both imaginal exposure (the client "imagines" the trauma) and in vivo exposure (the client faces reminders of the trauma, such as touching clothing that was worn at the time of the trauma) (Foa, Hembree, & Rothbaum, 2007). Breathing retraining is also recommended. There is a strong focus on exposure homework, including writing or audiotaping a trauma narrative to review between sessions.

Prolonged Exposure has had various RCTs (for reviews and meta-analyses, see, e.g., Foa, 2011; McLean & Foa, 2011; Powers et al., 2010; Rauch, Eftekhari, & Ruzeck, 2012). RCTs comparing Prolonged Exposure to active treatments have reported positive outcomes but no differences between Prolonged Exposure and CPT (Resick et al., 2002); Cognitive Therapy (Marks, Lovell, Noshirvani, Livanou, & Thrasher, 1998; Tarrier et al., 1999); EMDR (Rothbaum et al., 2005); Present-Centered Group Treatment (Schnurr et al., 2003); or Stress Inoculation Training (Foa et al., 1999). In a few RCTs, there have been differences between treatment conditions. For example, Prolonged Exposure has outperformed Relaxation Training (Marks et al., 1998; Taylor et al., 2003) and Time Limited Dynamic Therapy (using a developmentally adapted Prolonged Exposure therapy for adolescents; Gilboa-Schechtman et al., 2010).

Prolonged Exposure has outperformed some minimal control conditions, including a monitoring control condition (Pacella et al., 2012), TAU (Asukai, Saito, Tsuruta, Kishimoto, & Nishikawa, 2010; Nacasch et al., 2011), waitlist control (Foa et al., 2005; Glynn et al., 1999; Power et al., 2002), and supportive counseling (Bryant et al., 2003; Foa, McLean, Capaldi, & Rosenfield, 2013a; Foa et al., 1991). However, a recent RCT for clients with comorbid PTSD and SUD compared Prolonged Exposure to BRENDA (a supportive counseling model) and found that both models improved PTSD and SUD, with no difference between them at the end of treatment in either domain (Foa et al., 2013b).

Virtual Reality Exposure Therapy

Virtual Reality Exposure Therapy is a version of exposure therapy that makes use of advanced graphics, sound effects, and computer technology to immerse the client in a realistic, visually rich virtual environment. For example, one model for military veterans

has the client don headgear to view “a virtual Huey helicopter flying over a virtual Vietnam, and a clearing surrounded by jungle” (Rothbaum, Hodges, Ready, Graap, & Alarcon, 2001). As the client moves, the scene appears to move, too, via body-tracking devices.

Such technology-intensive models have become more common in recent years and are beginning to accumulate evidence that both Virtual Reality Exposure Therapy and traditional exposure therapies have positive outcomes, with no differences between them (for reviews, see Goncalves, Pedrozo, Coutinho, Figueira, & Ventura, 2012; Motraghi, Seim, Meyer, & Morissette, 2014; Rizzo et al., 2011; Rothbaum, Rizzo, & Difede, 2010). A recent study of military personnel found that Virtual Reality Exposure Therapy outperformed a minimal attention control on criterion C symptoms of PTSD (avoidance/numbing) and post-traumatic guilt (Miyahira et al., 2012).

Written Exposure Therapies

Written exposure therapies focus on processing trauma memories through writing. These approaches are derived from the early work of Pennebaker and Beall (1986), who had clients repeatedly write about

their most traumatic experience with as much emotion and detail as possible. Such approaches go by a number of names (e.g., Structured Writing Therapy, Written Disclosure, Written Exposure Therapy) and have generally evidenced similar treatment effects as therapies using oral disclosure of the traumas (see Frattaroli, 2006, for a review).

For example, in an RCT of a brief, five-session Written Exposure Therapy with motor vehicle accident survivors, Written Exposure Therapy outperformed waitlist control (Sloan, Marx, Bovin, Feinstein, & Gallagher, 2012). However, a recent study in clients with comorbid PTSD and SUD found that Structured Writing Therapy did not outperform TAU on PTSD or SUD outcomes, with both conditions reducing the symptom severity of both disorders (van Dam, Ehring, Vedel, & Emmelkamp, 2013).

Present-Focused Treatments

Present-focused PTSD treatments (Table 18.2) provide psychoeducation and coping skills training. Various cognitive, behavioral, and interpersonal methods are used, such as grounding (sensory focus to recenter in the present so as to reduce upsetting

TABLE 18.2 Selection^a of Present-Focused Posttraumatic Stress Disorder (PTSD) Treatment Models with Type 1 Randomized Controlled Trials

Treatment Model	Modality	Population(s)	Comparison Condition(s)
Cognitive Therapy for PTSD (CT-PTSD)	Individual	Children, mixed PTSD sample, motor vehicle accident survivors	Assessment only, emotion-focused supportive therapy, Prolonged Exposure, Prolonged Exposure + cognitive restructuring, relaxation, self-help booklet, Trauma-Focused Cognitive-Behavioral Therapy, waitlist
Seeking Safety	Group, individual	Groups with comorbid PTSD/substance use disorder: adolescent girls, homeless women veterans, incarcerated women, low-income urban women, male veterans, women	Enhanced residential services, Relapse Prevention, standard community care, treatment as usual, waitlist, Women's Health Education
Stress Inoculation Training	Individual	Female sexual assault survivors	Prolonged Exposure, supportive counseling, waitlist
Trauma Affect Regulation: Guide for Education and Therapy (TARGET)	Group, individual	Delinquent adolescent girls, incarcerated women, mothers	Present-Centered Therapy, relational supportive therapy, supportive group therapy, waitlist

^a Per inclusion criteria as defined at the start of the chapter.

much emotions go by a long Therapy, therapy) and potent effects on traumas (see

five-session motor vehicle therapy outcome (Bovin, 2013), a recent SUD found to outperform both conditions (Bovin et al., 2013).

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emotions), learning to ask for help, identifying and coping with PTSD triggers, rehearsing compassionate self-statements, getting out of unsafe relationships, developing a schedule of productive activities, and cognitive restructuring.

Cognitive Therapy for Posttraumatic Stress Disorder

In CT-PTSD, the goal is to help clients become aware of their maladaptive beliefs and modify them to become more adaptive. This may include, for example, correcting excessively negative assumptions about the trauma (e.g., self-blame); exploring the connection between beliefs, feelings, and behavior; and identifying inaccurate appraisal of threats in the current environment. Examples of models include those by Ehlers, Clark, Hackmann, McManus, and Fennell (2005), Foy (1992), and Tarrier and colleagues (1999). A cognitive component is also part of many of the past-focused models reviewed above, as well as many of the combination models reviewed below; however, as described here, CT-PTSD does not include a past-focused component.

Several RCTs of CT-PTSD have been conducted; see the review by Butler and colleagues (2006) and a recent meta-analysis by Ougrin (2011). In comparisons with active treatment conditions, CT-PTSD and active treatments generally reduce PTSD symptoms, with no difference between them. Examples include Prolonged Exposure (Marks et al., 1998; Tarrier et al., 1999) and Trauma-Focused Cognitive Behavioral Therapy (Nixon, Sterk, & Pearce, 2012). CT-PTSD has outperformed Relaxation Training (Marks et al., 1998), a self-help booklet (Ehlers et al., 2003), and Emotion-Focused Supportive Therapy (Ehlers et al., 2014). It has also outperformed a number of minimal control conditions, including assessment only (Ehlers et al., 2003) and waitlist (Ehlers et al., 2005, 2014).

Seeking Safety

Seeking Safety was designed to treat comorbid PTSD and SUD (Najavits, 2002). It focuses on the core theme of safety, with 25 topics that address cognitive, behavioral, and interpersonal coping skills to address both disorders at the same time (integrated therapy) from the start of treatment (first-stage therapy). Examples of topics are, for example, *asking for help*,

compassion, healing from anger, healthy relationships, honesty, and creating meaning. It emphasizes flexibility, with skills addressed in any order the clinician chooses, and variable treatment length and pacing.

Various RCTs of Seeking Safety have been conducted. Seeking Safety is the only model thus far for comorbid PTSD and SUD that has outperformed a control condition on SUD (see Najavits & Hien, 2013, for a review). In a study of men veterans, Seeking Safety outperformed TAU on SUD (drug use disorder); PTSD and alcohol use disorder improved in both conditions, with no difference between them (Boden et al., 2012). In a study of community-based women, both Seeking Safety and Relapse Prevention (an active comparison) reduced PTSD and SUD symptoms, with no difference between them, and both treatments outperformed a nonrandomized TAU arm on PTSD and SUD (Hien, Cohen, Miele, Litt, & Capstick, 2004). In a study of adolescent girls, Seeking Safety outperformed TAU on SUD and trauma symptoms but not PTSD (Najavits, Gallop, & Weiss, 2006). In a study of partial-dose Seeking Safety using less than half the model, both Seeking Safety and Women's Health Education (an active comparison) reduced PTSD symptoms, with no difference between them (Hien et al., 2009). SUD did not decrease in either study arm, but close to half the sample was abstinent from substances at baseline. An RCT on PTSD and alcohol use disorder (AUD) compared partial-dose (12 sessions) Seeking Safety with the antidepressant sertraline versus Seeking Safety with placebo (Hien et al., in press). Both conditions improved in both PTSD and alcohol use severity; moreover, the Seeking Safety plus sertraline condition had greater PTSD improvements than Seeking Safety plus placebo. This study indicates that Seeking Safety, with or without antidepressant medication, evidenced significant improvements in both disorders, even with just a partial dose.

Stress Inoculation Training

Stress Inoculation Training for PTSD is designed to help clients manage anxiety and cope better. It can include breathing exercises, relaxation, psychoeducation, thought stopping, cognitive restructuring, role playing, and guided self-dialogue (Foa et al., 1991). Compared to Prolonged Exposure, Stress Inoculation Training was superior in one study (Foa et al., 1991) but showed no difference in another (Foa et al.,

1999). Stress Inoculation Training has outperformed supportive counseling and waitlist control (Foa et al., 1991, 1999). We were unable to locate any recent RCTs on Stress Inoculation Training.

Trauma Affect Regulation: Guide for Education and Therapy

Trauma Affect Regulation: Guide for Education and Therapy (TARGET) teaches affect-regulation skills relevant to trauma (Ford & Russo, 2006). Its seven skills are summarized by “FREEDOM”: “Focusing the mind on one thought at a time; Recognizing current triggers for emotional reactions; distinguishing dysregulated versus adaptive Emotions; Evaluations (thoughts), goal Definitions, and behavioral Options; and self-statements affirming that taking responsibility for recovering from intense emotions is crucial not only to one’s personal well-being but also to Making a positive contribution to primary relationships and the community” (Ford, Steinberg, & Zhang, 2011).

In an RCT comparing TARGET to Present-Centered Therapy there were no differences between them in PTSD diagnosis or clinically significant change in PTSD symptoms, but both treatments outperformed waitlist on these variables (Ford et al., 2011). In an RCT of TARGET versus relational supportive therapy, there was no difference between them except for one variable favoring TARGET (PTSD criterion B [i.e., intrusive reexperiencing symptoms]; Ford, Steinberg, Hawke, Levine, & Zhang, 2012). Similarly, in an RCT comparing TARGET to supportive group therapy, both reduced PTSD symptoms, with no difference between them (Ford, Chang, Levine, & Zhang, 2013).

Combination Treatments (Past-Plus Present-Focused)

In this section, we review models that combine past- and present-focused treatments, an intuitively appealing attempt to create a stronger model of therapy (Table 18.3).

TABLE 18.3 Selection^a of Combination Past- Plus Present-Focused Posttraumatic Stress Disorder (PTSD) Treatment Models with Type 1 Randomized Controlled Trials

<i>Treatment Model</i>	<i>Modality</i>	<i>Population(s)</i>	<i>Comparison Condition(s)</i>
Abreactive Ego State Therapy	Individual	Mixed PTSD sample	Ochberg Counting Method
Brief Eclectic Psychotherapy	Individual	Mixed PTSD sample, police officers	EMDR, minimal attention, waitlist
Concurrent Treatment of PTSD and SUD Using Prolonged Exposure (COPE)	Individual	Comorbid PTSD/ substance use disorder (SUD)	Treatment as usual
Dialectical Behavior Therapy for PTSD (DBT-PTSD)	Individual and group	Survivors of child sexual abuse	Waitlist
Integrated Cognitive-Behavioral Therapy (CBT) for PTSD and Alcohol Use Disorder	Individual	Comorbid PTSD/ alcohol use disorder	CBT for alcohol use disorder + supportive counseling
Resilience-Oriented Treatment for PTSD	Group	Veterans	Waitlist
Skills Training in Affective and Interpersonal Regulation (STAIR)/Exposure	Individual	Adult female survivors of childhood abuse	Supportive counseling + Prolonged Exposure, STAIR + supportive counseling, minimal attention waitlist
Trauma Management Therapy	Individual and group	Male veterans	Exposure therapy

^a Per inclusion criteria as defined at the start of the chapter.

Brief Eclectic Psychotherapy

Brief Eclectic Psychotherapy is composed of two primary phases: imaginal exposure and cognitive restructuring (Gersons, Carlier, & Olff, 2004). Its core treatment components are also used in other cognitive-behavioral therapies, including psychoeducation, imaginal exposure, writing assignments, and cognitive restructuring. However, Brief Eclectic Psychotherapy is unique in its use of exposure for catharsis, inclusion of mementos and farewell rituals, and incorporation of psychodynamic elements (Schnyder, Muller, Maercker, & Wittmann, 2011).

Brief Eclectic Psychotherapy has outperformed a minimal attention control (Schnyder et al., 2011) and waitlist (Gersons, Carlier, Lamberts, & van der Kolk, 2000). It has also been directly compared with EMDR, with both evidencing positive outcomes on PTSD reduction and no differences between them (Nijdam et al., 2012).

Concurrent Treatment of Posttraumatic Stress Disorder and Substance Use Disorder Using Prolonged Exposure

Concurrent Treatment of PTSD and SUD using Prolonged Exposure (COPE) integrates existing treatment components for PTSD and SUD, including motivational enhancement and CBT for SUD; psychoeducation about PTSD/SUD; *in vivo* and imaginal exposure; and cognitive restructuring (Mills et al., 2012). COPE is a modified version of Concurrent Treatment of PTSD and Cocaine Dependence (Back, Dansky, Carroll, Foa, & Brady, 2001). In a recent RCT, both COPE and TAU reduced PTSD and SUD symptoms among clients with comorbid PTSD/SUD at end of treatment, with no difference between them (Mills et al., 2012).

Dialectical Behavior Therapy for Posttraumatic Stress Disorder

Dialectical Behavior Therapy for PTSD (DBT-PTSD) is an adaptation of DBT, an evidence-based treatment for borderline personality disorder that does not target trauma and has shown limited effects on PTSD (Harned et al., 2008). DBT-PTSD was developed to (1) reduce fear of trauma-related primary emotions,

such as fear, disgust, and powerlessness, using exposure techniques; (2) question nonjustified secondary emotions, such as guilt, shame, and self-contempt; and (3) radically accept trauma-related facts (Bohus et al., 2013). In a recent RCT of DBT-PTSD for clients with comorbid PTSD and borderline personality in a residential treatment setting, it outperformed a TAU waitlist control on reduction of PTSD symptoms but not on symptoms of borderline personality disorder (Bohus et al., 2013).

Integrated Cognitive Behavioral Therapy for Posttraumatic Stress Disorder and Alcohol Use Disorder

Integrated Cognitive Behavioral Therapy for PTSD and Alcohol Use Disorder (ICBT-PTSD/AUD) combines CBT and motivational enhancement approaches for alcohol use disorder with exposure therapy and cognitive restructuring for PTSD (Sannibale et al., 2013). An RCT compared ICBT-PTSD/AUD to ICBT-AUD plus supportive counseling (but no PTSD component). Both conditions evidenced reductions in PTSD symptom severity and alcohol consumption, with no difference between them at the end of treatment (Sannibale et al., 2013).

Resilience-Oriented Treatment for Posttraumatic Stress Disorder

Kent, Davis, Stark, and Stewart (2011) developed "a resilience-oriented treatment for PTSD" that seeks to foster clients' resources, such as awareness of positive emotions and social connectedness. These resources are drawn on in later sessions, when group members experience PTSD symptoms or engage in trauma exposure. In a study of veterans with PTSD, the resilience-oriented treatment outperformed waitlist control (Kent et al., 2011).

Skills Training in Affect and Interpersonal Regulation/Exposure

Skills Training in Affect and Interpersonal Regulation followed by exposure therapy (STAIR/Exposure) is a phase-based model developed for adult survivors of child abuse (Cloitre, Koenen, Cohen, & Han, 2002). STAIR/Exposure divides sessions evenly between

skills training (adapted from DBT) and exposure (adapted from Prolonged Exposure). The phase-based concept derives from the work of Herman (1992) and others who identified phases of PTSD recovery, in which coping skills are established before engaging in exposure techniques.

In an RCT, STAIR/Exposure has outperformed minimal attention waitlist (Cloitre et al., 2002). Compared to active, phase-based treatments, it has outperformed supportive counseling followed by exposure therapy and performed equivalent to STAIR followed by supportive counseling (rather than exposure) (Cloitre et al., 2010). For additional discussion of STAIR/Exposure, see Landes and colleagues (2013).

Trauma Management Therapy

Trauma Management Therapy was developed for veterans with PTSD (Turner, Beidel, & Frueh, 2005). It is composed of imaginal and *in vivo* exposure, followed by social and emotional rehabilitation (veteran-specific training in social skills, anger management, and communication). In a recent RCT, both Trauma Management Therapy and an exposure therapy-only condition reduced PTSD symptoms, with no difference between them; however, Trauma Management Therapy outperformed exposure therapy on measures of social engagement and interpersonal functioning (Beidel, Frueh, Uhde, Wong, & Mentrikoski, 2011).

SUMMARY OF KEY FINDINGS

Effective Treatments

Various treatment approaches show positive outcomes in RCTs with TAU, minimal attention, and waitlist controls. Among the treatment approaches reviewed above, all generally outperform control conditions, with the exception of Structured Writing Therapy, which did not outperform TAU (van Dam et al., 2013). However, with regard to active treatment comparisons, effective treatments do not appear to differ significantly from each other. Within any category (i.e., past- or present-focused), results across RCTs do not indicate consistent, significant differences between active treatments. For example, among

past-focused treatments, CPT, EMDR, Narrative Exposure Therapy, and Prolonged Exposure all work, with none consistently outperforming any other (Benish et al., 2008; Jonas et al., 2013; Powers et al., 2010).

Comparison of Present- versus Past-Focused Treatments

Available data indicate no demonstrable difference in outcome between present- and past-focused treatments (e.g., Bisson et al., 2013; Bradley et al., 2005; Butler et al., 2006; Marks et al., 1998; Ougrin, 2011; Schnurr et al., 2003; Watts et al., 2013). This may come as a surprise given a longstanding clinical literature suggesting that both may be needed for PTSD recovery (Herman, 1992). Indeed, some clients and clinicians believe that the "real work" in PTSD treatment is past-focused, with present-focused work merely a precursor or adjunct. In fact, both present- and past-focused PTSD models produce positive outcomes, neither outperforms the other, and both are superior, overall, to control conditions such as waitlist and TAU. Thus, client preferences and clinician training should become the ultimate determinant of which model to choose from among the various models. Indeed, a recent meta-analysis of PTSD treatments used a novel approach by addressing *complexity* of the client population as a moderator (Gerger, Munder, & Barth, 2014). Their conclusion was that specific PTSD treatments (which largely have been past-focused) are the preferential treatment only for clients with less complex clinical problems. For clients with greater complexity, both specific and non-specific treatments (e.g., present-focused models such as relaxation and supportive counseling) are equally recommended.

Combination of Treatment Approaches

Combining effective treatments is intuitively appealing, but research indicates that it is not needed. Various studies have compared combinations of effective treatments (e.g., Prolonged Exposure plus Stress Inoculation Training or Cognitive Therapy), but the combined treatment typically shows no greater efficacy than either treatment alone (Bryant et al., 2003; Foa et al., 1991, 1999, 2005; Glynn et al., 1999;

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Moser et al., 2010). For example, several studies have addressed whether Prolonged Exposure is sufficient by itself or whether adding elements of Cognitive Therapy (i.e., cognitive restructuring and/or coping skills training) improves PTSD outcomes. Several RCTs indicate that the addition of Cognitive Therapy did not improve outcomes over and above pure exposure in various samples (Bryant et al., 2003; Foa et al., 2005; Marks et al., 1998; Moser et al., 2010). Similarly, cognitive or skills models without an exposure component show no difference from those with an exposure component (Cloitre et al., 2010; see also the dismantling study by Resick et al., 2008). In sum, both exposure and cognitive therapy components produce positive outcomes but do not appear to enhance treatment effects when combined. One exception is a study that reported better PTSD outcomes for a combination of imaginal exposure, in vivo exposure, and cognitive restructuring compared to exposure alone (Bryant et al., 2008).

Treatments for Comorbid Posttraumatic Stress Disorder and Substance Use Disorder

Recent years have seen an increase in the number of treatment models developed for and tested with clients with comorbid PTSD and SUD. Indeed, SUD is the only disorder comorbid with PTSD that has received notable research attention. Similar to treatment models developed for PTSD, models developed for comorbid PTSD/SUD fall into present-focused, past-focused, or combination categories. Seeking Safety, a present-focused treatment, is the most studied evidence-based model. It is the only model thus far studied for PTSD/SUD that has outperformed a control in RCTs (see Najavits & Hien, 2013, for a review). In contrast, past-focused models, which have been studied in four recent RCTs, indicated no difference from the control on either PTSD or SUD at end of treatment. Neither Structured Writing Therapy (van Dam et al., 2013) nor COPE (Mills et al., 2012) outperformed TAU, and neither Prolonged Exposure nor ICBT-PTSD/AUD outperformed supportive counseling (Foa et al., 2013b; Sannibale et al., 2013). Additional reviews of treatments for comorbid PTSD/SUD are available (e.g., Brady, Back & Coffey, 2004; Najavits & Hien, 2013; Ouimette & Read, 2013; van Dam et al., 2013).

FUTURE DIRECTIONS

Like the proverbial glass that is both half full and half empty, PTSD treatment outcome research can be viewed in terms of its major advances over the past several years, or from the framework of all that still needs to be studied.

Improvement in Methodology

The methodology of studies investigating psychosocial treatments is much improved compared with 30 years ago. Indeed, the meta-analysis by Bradley and colleagues (2005) found that treatment effect size was positively associated with year of publication, indicating that more recent studies showed more robust effects. However, close inspection of research reports shows a level of methodological variability that is sometimes at odds with the simple "bottom-line message" conveyed in the abstracts. For example, many studies employ small sample sizes, are statistically underpowered, and collect limited follow-up data (Bisson et al., 2013). Many studies do not include or report on key issues that would be helpful for understanding their results (e.g., power analyses, end-of-treatment assessments, comorbid disorders). In the current climate, results of PTSD treatment outcome research may determine what treatments and programs are funded or discontinued; thus, adequate methodology has real-world implications for clients, clinicians, and programs.

Two excellent methods for evaluating the quality of clinical trials are provided in the 2010 Consolidated Standards of Reporting Trials statement (Schulz, Altman, & Moher, 2010) and by Moncrief (see Bisson & Andrew, 2005). Insistence on one or both of these consistently by journal editors and funding agencies could have a dramatic and rapid impact.

The Moncrief scale, for example, considers 23 different methodological criteria and assigns scores to them on a 0-to-2 scale, giving a maximum possible total of 46. The criteria included in the scale are objective and include items such as specification of main outcomes a priori, sample size, follow-up duration, power calculation, method of allocation, allocation concealment, clear description of treatment and adjunctive treatment, blinding of subjects, representative sample recruitment, use of diagnostic criteria, exclusion criteria and number of exclusions and refusals, description

of sample demographics, blinding of assessor, assessment of compliance with treatments, details of side effects, record of number and reasons for withdrawal by group, outcome measures described clearly or use of validated instruments, information on comparability and adjustment for differences in analysis, inclusion of withdrawals in analysis, presentation of results with inclusion of data for reanalysis of main outcomes, appropriate statistical analysis, conclusions justified, and declaration of interests (Bisson & Andrew, 2005, p. 4).

In addition to these could be added the need to report the rate of comorbid Axis I and Axis II diagnoses (given that most PTSD clients have one or more co-occurring disorders), clinician effects, adherence rating, clinician selection and training, method for assigning clients to clinicians, use of a treatment manual, analysis of both completer and intent-to-treat samples, and whether clients were paid to attend treatment sessions. It has also been suggested that using waitlist and TAU comparisons may be responsible for the inflation of effect sizes in RCTs of psychotherapy approaches and that, therefore, direct comparisons between effective psychotherapies are needed to avoid such inflation (Watts et al., 2013).

Broadening of Samples

Recent studies use rigorous selection of PTSD clients (rather than simply a history of trauma) and validated diagnostic tools. Also, a broader array of client populations has been studied in terms of sociodemographic characteristics and trauma type. However, continued expansion in sampling is needed. There are still relatively few studies that include complex individuals, with the most common exclusions being comorbid psychosis, SUD, bipolar disorder, and suicidal ideation (Ronconi et al., 2014). It will be essential to include these individuals in future therapy outcome research to improve the generalizability of results to real-world client populations.

Studies of Dissemination

There is a need for more effectiveness studies that evaluate how treatments fare in real-world implementation and a need to better understand issues such as client and clinician preferences for treatment, use of technology for enhancing treatment, and public

health challenges such as how clients can access PTSD treatment in their communities. One such public health challenge is the cost of PTSD treatment, and additional research is needed to determine which treatments are simultaneously cost-effective and effective in reducing PTSD symptoms. For example, although studies of Virtual Reality Exposure Therapy are becoming more prevalent in the literature, these therapies are often more expensive and harder to implement than verbal or written exposure therapies. Given findings that Virtual Reality Exposure Therapy does not outperform traditional exposure therapies (Goncalves et al., 2012; Motraghi et al., 2014; Rizzo et al., 2011; Rothbaum et al., 2010), the use of such technologies may not be necessary to produce clinically significant change.

Additionally, the use of telehealth and Internet technologies to improve treatment access is the subject of a number of recent open pilots and pilot RCTs. Initial results suggest that telehealth and Internet delivery of PTSD treatment is safe and effective (Morland, Hynes, Mackintosh, Resick, & Chard, 2011; Possemato, Ouimette, & Knowlton, 2011; Strachan, Gros, Ruggiero, Lejuez, & Acierno, 2012); however, it may not be as effective as in-person treatment (Gros, Yoder, Tuerk, Lozano, & Acierno, 2011). Larger RCTs of telehealth and Internet-delivered treatments are needed before making any further conclusions about the effectiveness of these approaches.

Delivery of Treatments

Another key area is more refined study of how to deliver treatments. This might include how and when they should be combined (e.g., with other psychosocial treatments), how long to deliver them, when to determine that a treatment is not working for particular clients, outcome differences based on modality and/or pacing of treatment, whether particular clinician characteristics are necessary for effective delivery, and greater understanding of what aspects of treatments are essential.

NOTE

1. The term *trauma-focused* is often used to identify past-focused models and *non-trauma-focused* to identify present-focused models. We eschew these terms, however,

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REFERENCES

- Ahrens, J. (1998). The effects of cognitive behavioral therapy on posttraumatic stress symptoms. *Journal of Traumatic Stress, 11*, 621-632.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders (5th ed.)*. Washington, DC.
- American Psychological Association. (2010). *Effectiveness of psychotherapy: A review of recent evidence*. Washington, DC.
- Asukai, J. (1998). Trauma and recovery: A cognitive-behavioral perspective. In J. Asukai (Ed.), *Advances in Trauma and Traumatic Stress Studies* (Vol. 17, pp. 744-768). Greenwich, CT: JAI.
- Back, S. (1998). *Recovering from trauma: A cognitive-behavioral approach*. New York: Basic Books.
- Barabasz, A. (1998). *Posttraumatic stress: A cognitive-behavioral perspective*. New York: Plenum.
- Beidel, D. C., & Turner, S. M. (1998). Trauma and the child: A cognitive-behavioral perspective. In J. Asukai (Ed.), *Advances in Trauma and Traumatic Stress Studies* (Vol. 17, pp. 801-824). Greenwich, CT: JAI.

as all present-focused PTSD models directly and strongly "focus on trauma." The difference is how they approach it. Past-focused models primarily focus on the past by exploring intense trauma memories and associated feelings, thoughts, and body sensations. Present-focused models omit detailed exploration of the past, typically in the service of helping stabilize the client, and instead focus primarily on coping skills and psychoeducation. We note too that the term "non-trauma-focused treatment" to refer to such present-focused PTSD models is also problematic as it labels them solely by what they are not. It is equivalent to referring to women as "non-men" or children as "non-adults." Present-focused approaches have a rich content of coping skills and psychoeducation that is better captured by a meaningful label (Najavits & Hien, 2013).

REFERENCES

- Ahrens, J., & Rexford, L. (2002). Cognitive processing therapy for incarcerated adolescents with PTSD. *Journal of Aggression, Maltreatment and Trauma*, 6, 201–216.
- American Psychiatric Association. (1952). *Diagnostic and statistical manual of mental disorders*. Washington, DC: Author.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Asukai, N., Saito, A., Tsuruta, N., Kishimoto, J., & Nishikawa, T. (2010). Efficacy of exposure therapy for Japanese patients with posttraumatic stress disorder due to mixed traumatic events: A randomized controlled study. *Journal of Trauma & Stress*, 23(6), 744–750. doi: 10.1002/jts.20589
- Back, S. E., Dansky, B. S., Carroll, K. M., Foa, E. B., & Brady, K. T. (2001). Exposure therapy in the treatment of PTSD among cocaine-dependent individuals: description of procedures. *Journal of Substance Abuse Treatment*, 21(1), 35–45.
- Barabasz, A., Barabasz, M., Christensen, C., French, B., & Watkins, J. G. (2013). Efficacy of single-session abreactive ego state therapy for combat stress injury, PTSD, and ASD. *International Journal of Clinical and Experimental Hypnosis*, 61(1), 1–19. doi: 10.1080/00207144.2013.729377
- Beidel, D. C., Frueh, B. C., Uhde, T. W., Wong, N., & Mentrikoski, J. M. (2011). Multicomponent behavioral treatment for chronic combat-related posttraumatic stress disorder: a randomized controlled trial. *Journal of Anxiety Disorders*, 25(2), 224–231. doi: 10.1016/j.janxdis.2010.09.006
- Benish, S. G., Imel, Z. E., & Wampold, B. E. (2008). The relative efficacy of bona fide psychotherapies for treating post-traumatic stress disorder: a meta-analysis of direct comparisons. *Clinical Psychology Review*, 28(5), 746–758. doi: 10.1016/j.cpr.2007.10.005
- Bisson, J. I., & Andrew, M. (2005). Psychological treatment of post-traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*, (2), CD003388. doi: 10.1002/14651858.CD003388.pub2
- Bisson, J. I., Roberts, N. P., Andrew, M., Cooper, R., & Lewis, C. (2013). Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. *Cochrane Database of Systematic Reviews*, 12, CD003388. doi: 10.1002/14651858.CD003388.pub4
- Boden, M. T., Kimerling, R., Jacobs-Lentz, J., Bowman, D., Weaver, C., Carney, D., ... & Trafton, J. A. (2012). Seeking Safety treatment for male veterans with a substance use disorder and post-traumatic stress disorder symptomatology. *Addiction*, 107(3), 578–586. doi: 10.1111/j.1360-0443.2011.03658.x
- Bohus, M., Dyer, A. S., Priebe, K., Kruger, A., Kleindienst, N., Schmahl, C., ... & Steil, R. (2013). Dialectical behaviour therapy for post-traumatic stress disorder after childhood sexual abuse in patients with and without borderline personality disorder: a randomised controlled trial. *Psychotherapy and Psychosomatics*, 82(4), 221–233. doi: 10.1159/000348451
- Brady, K. T., Back, S. E., & Coffey, S. F. (2004). Substance abuse and posttraumatic stress disorder. *Current Directions in Psychological Science*, 13(5), 206–209. doi: 10.1111/j.0963-7214.2004.0309.x
- Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. *American Journal of Psychiatry*, 162(2), 214–227. doi: 10.1176/appi.ajp.162.2.214
- Bryant, R. A., Moulds, M. L., Guthrie, R. M., Dang, S. T., Mastrodomenico, J., Nixon, R. D., ... & Creamer, M. (2008). A randomized controlled trial of exposure therapy and cognitive restructuring for posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 76(4), 695–703. doi: 10.1037/a0012616
- Bryant, R. A., Moulds, M. L., Guthrie, R. M., Dang, S. T., & Nixon, R. D. (2003). Imaginal exposure alone and imaginal exposure with cognitive restructuring in treatment of posttraumatic stress disorder.

- Journal of Consulting and Clinical Psychology*, 71(4), 706–712.
- Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: a review of meta-analyses. *Clinical Psychology Review*, 26(1), 17–31. doi: 10.1016/j.cpr.2005.07.003
- Carlson, J. G., Chemtob, C. M., Rusnak, K., Hedlund, N. L., & Muraoka, M. Y. (1998). Eye movement desensitization and reprocessing (EDMR) treatment for combat-related posttraumatic stress disorder. *Journal of Traumatic Stress*, 11(1), 3–24. doi: 10.1023/A:1024448814268
- Casement, M. D., & Swanson, L. M. (2012). A meta-analysis of imagery rehearsal for post-trauma nightmares: effects on nightmare frequency, sleep quality, and posttraumatic stress. *Clinical Psychology Review*, 32(6), 566–574. doi: 10.1016/j.cpr.2012.06.002
- Chard, K. M. (2005). An evaluation of cognitive processing therapy for the treatment of posttraumatic stress disorder related to childhood sexual abuse. *Journal of Consulting and Clinical Psychology*, 73(5), 965–971. doi: 10.1037/0022-06X.73.5.965
- Christensen, C., Barabasz, A., & Barabasz, M. (2013). Efficacy of abreactive ego state therapy for PTSD: trauma resolution, depression, and anxiety. *International Journal of Clinical and Experimental Hypnosis*, 61(1), 20–37. doi: 10.1080/00207144.2013.729386
- Church, D., Hawk, C., Brooks, A. J., Toukolehto, O., Wren, M., Dinter, I., & Stein, P. (2013). Psychological trauma symptom improvement in veterans using emotional freedom techniques: a randomized controlled trial. *Journal of Nervous & Mental Disease*, 201(2), 153–160. doi: 10.1097/NMD.0b013e31827f6351
- Cloitre, M., Koenen, K. C., Cohen, L. R., & Han, H. (2002). Skills training in affective and interpersonal regulation followed by exposure: a phase-based treatment for PTSD related to childhood abuse. *Journal of Consulting and Clinical Psychology*, 70(5), 1067–1074.
- Cloitre, M., Stovall-McClough, K. C., Nooner, K., Zorbas, P., Cherry, S., Jackson, C. L.,...& Petkova, E. (2010). Treatment for PTSD related to childhood abuse: a randomized controlled trial. *American Journal of Psychiatry*, 167(8), 915–924. doi: 10.1176/appi.ajp.2010.09081247
- Coffey, S. F., Schumacher, J. A., Brimo, M. L., & Brady, K. T. (2005). Exposure therapy for substance abusers with PTSD: translating research to practice. *Behavior Modification*, 29(1), 10–38. doi: 10.1177/0145445504270855
- Cohen, J. A., Mannarino, A. P., & Iyengar, S. (2011). Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: a randomized controlled trial. *Archives of Pediatric & Adolescent Medicine*, 165(1), 16–21. doi: 10.1001/archpediatrics.2010.247
- Craig, G. (1999). *Emotional freedom techniques: The manual*. The Sea Ranch, CA: Author.
- Ehlers, A., Clark, D. M., Hackmann, A., McManus, F., & Fennell, M. (2005). Cognitive therapy for post-traumatic stress disorder: development and evaluation. *Behaviour Research and Therapy*, 43(4), 413–431. doi: 10.1016/j.brat.2004.03.006
- Ehlers, A., Clark, D. M., Hackmann, A., McManus, F., Fennell, M., Herbert, C., & Mayou, R. (2003). A randomized controlled trial of cognitive therapy, a self-help booklet, and repeated assessments as early interventions for posttraumatic stress disorder. *Archives of General Psychiatry*, 60(10), 1024–1032. doi: 10.1001/archpsyc.60.10.1024
- Ehlers, A., Hackmann, A., Grey, N., Wild, J., Liness, S., Albert, I.,...& Clark, D. M. (2014). A randomized controlled trial of 7-day intensive and standard weekly cognitive therapy for PTSD and emotion-focused supportive therapy. *American Journal of Psychiatry*, 171, 294–304. doi: 10.1176/appi.ajp.2013.13040552
- Foa, E. B. (2011). Prolonged exposure therapy: past, present, and future. *Depression & Anxiety*, 28(12), 1043–1047. doi: 10.1002/da.20907
- Foa, E. B., Dancu, C. V., Hembree, E. A., Jaycox, L. H., Meadows, E. A., & Street, G. P. (1999). A comparison of exposure therapy, stress inoculation training, and their combination for reducing posttraumatic stress disorder in female assault victims. *Journal of Consulting and Clinical Psychology*, 67(2), 194–200.
- Foa, E. B., Hembree, E. A., Cahill, S. P., Rauch, S. A., Riggs, D. S., Feeny, N. C., & Yadin, E. (2005). Randomized trial of prolonged exposure for posttraumatic stress disorder with and without cognitive restructuring: outcome at academic and community clinics. *Journal of Consulting and Clinical Psychology*, 73(5), 953–964. doi: 10.1037/0022-006X.73.5.953
- Foa, E. B., Hembree, E. A., & Rothbaum, B. O. (2007). *Prolonged Exposure Therapy for PTSD: Emotional processing of traumatic experiences, therapist guide*. New York: Oxford University Press.
- Foa, E. B., Keane, T. M., Friedman, M. J., & Cohen, J. A. (Eds.). (2008). *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (2nd ed.). New York: Guilford Press.

- '., & Iyengar, S. (2011). posttraumatic stress disorder to intimate partner violence: A controlled trial. *Archives of Medicine*, 165(1), 16–21. doi:10.1001/jama.2010.247
- freedom techniques: The CA*: Author.
- Schmidt, A., McManus, F. (1991). Cognitive therapy for PTSD: development and research: A meta-analysis. *Archives of Traumatic Stress and Therapy*, 43(4), 2004.03.006
- Schmidt, A., McManus, F., & Mayou, R. (2003). A meta-analysis of cognitive therapy, repeated assessments as predictors of posttraumatic stress disorder. *Psychiatry*, 60(10), 1024–1032. doi:10.1024/0033-204X.60.10.1024
- Schmidt, N., Wild, J., Liness, D. M. (2014). A randomized controlled trial of 7-day intensive and brief cognitive therapy for PTSD and co-occurring substance abuse. *American Journal of Psychiatry*, 171(3), 294–304. doi:10.1176/appi.ajp.2013.12121907
- Seale, E. A., Jaycox, L. H., & G. P. (1999). A comparison of resilience training, reducing posttraumatic stress symptoms in assault victims. *Journal of Clinical Psychology*, 67(2), 195–204.
- Cahill, S. P., Rauch, F. B., N. C., & Yadin, E. E. (2007). Effects of prolonged exposure versus cognitive processing for PTSD: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 73(5), 953–964. doi:10.1037/0022-006X.73.5.953
- Rothbaum, B. O. (2007). *Treatment for PTSD: Emotional processing of information therapist guide*. New York: Guilford Press.
- Spitzer, M. J., & Cohen, J. (2007). *Effective treatments for PTSD: A meta-analysis from the International Society for Traumatic Stress Studies* (2nd ed.).
- Foa, E. B., McLean, C. P., Capaldi, S., & Rosenfield, D. (2013a). Prolonged exposure vs supportive counseling for sexual abuse-related PTSD in adolescent girls: a randomized clinical trial. *Journal of the American Medical Association*, 310(24), 2650–2657. doi:10.1001/jama.2013.282829
- Foa, E. B., Rothbaum, B. O., Riggs, D. S., & Murdock, T. B. (1991). Treatment of posttraumatic stress disorder in rape victims: a comparison between cognitive-behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology*, 59(5), 715–723.
- Foa, E. B., Yusko, D. A., McLean, C. P., Suvak, M. K., Bux, D. A., Jr., Oslin, D., & Volpicelli, J. (2013b). Concurrent naltrexone and prolonged exposure therapy for patients with comorbid alcohol dependence and PTSD: a randomized clinical trial. *Journal of the American Medical Association*, 310(5), 488–495. doi:10.1001/jama.2013.8268
- Forbes, D., Lloyd, D., Nixon, R. D., Elliott, P., Varker, T., Perry, D., & Creamer, M. (2012). A multisite randomized controlled effectiveness trial of cognitive processing therapy for military-related posttraumatic stress disorder. *Journal of Anxiety Disorders*, 26(3), 442–452. doi:10.1016/j.janxdis.2012.01.006
- Ford, J. D., Chang, R., Levine, J., & Zhang, W. (2013). Randomized clinical trial comparing affect regulation and supportive group therapies for victimization-related PTSD with incarcerated women. *Behavior Therapy*, 44(2), 262–276. doi:10.1016/j.beth.2012.10.003
- Ford, J. D., & Russo, E. (2006). A trauma-focused, present-centered, emotion self-regulation approach to integrated treatment for PTSD and addiction. *American Journal of Psychotherapy*, 60, 335–355.
- Ford, J. D., Steinberg, K. L., Hawke, J., Levine, J., & Zhang, W. (2012). Randomized trial comparison of emotion regulation and relational psychotherapies for PTSD with girls involved in delinquency. *Journal of Clinical Child and Adolescent Psychology*, 41(1), 27–37. doi:10.1080/15374416.2012.632343
- Ford, J. D., Steinberg, K. L., & Zhang, W. (2011). A randomized clinical trial comparing affect regulation and social problem-solving psychotherapies for mothers with victimization-related PTSD. *Behavior Therapy*, 42(4), 560–578. doi:10.1016/j.beth.2010.12.005
- Foy, D. W. (1992). *Treating PTSD: Cognitive-behavioral strategies*. New York: Guilford Press.
- Frankl, V. E. (1963). *Man's search for meaning*. New York: Pocket Books.
- Frattaroli, J. (2006). Experimental disclosure and its moderators: A meta-analysis. *Psychological Bulletin*, 132(6), 823–865. doi:10.1037/0033-295X.132.6.823
- Galovski, T. E., Blain, L. M., Mott, J. M., Elwood, L., & Houle, T. (2012). Manualized therapy for PTSD: flexing the structure of cognitive processing therapy. *Journal of Consulting and Clinical Psychology*, 80(6), 968–981. doi:10.1037/a0030600
- Gersens, B. P., Carlier, I. V., Lamberts, R. D., & van der Kolk, B. A. (2000). Randomized clinical trial of brief eclectic psychotherapy for police officers with posttraumatic stress disorder. *Journal of Traumatic Stress*, 13(2), 333–347. doi:10.1023/A:1007793803627
- Gerger, H., Munder, T., & Barth, J. (2014). Specific and nonspecific psychological interventions for PTSD symptoms: A meta-analysis with problem complexity as a moderator. *Journal of Clinical Psychology*, 70(7), 601–615. doi:10.1002/jclp.22059
- Gersens, B. P., Carlier, I. V. E., & Olff, M. (2004). *Protocol for Brief Eclectic Psychotherapy for posttraumatic stress disorder*. University of Amsterdam: Academic Medical Center.
- Gilboa-Schechtman, E., Foa, E. B., Shafran, N., Aderka, I. M., Powers, M. B., Rachamim, L., & Aptekar, A. (2010). Prolonged exposure versus dynamic therapy for adolescent PTSD: A pilot randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(10), 1034–1042. doi:10.1016/j.jaac.2010.07.014
- Glynn, S. M., Eth, S., Randolph, E. T., Foy, D. W., Urbaitis, M., Boxer, L., & Crothers, J. (1999). A test of behavioral family therapy to augment exposure for combat-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 67(2), 243–251.
- Goncalves, R., Pedrozo, A. L., Coutinho, E. S., Figueira, I., & Ventura, P. (2012). Efficacy of virtual reality exposure therapy in the treatment of PTSD: a systematic review. *PLoS One*, 7(12), e48469. doi:10.1371/journal.pone.0048469
- Gros, D. F., Yoder, M., Tuerk, P. W., Lozano, B. E., & Acierno, R. (2011). Exposure therapy for PTSD delivered to veterans via telehealth: predictors of treatment completion and outcome and comparison to treatment delivered in person. *Behavior Therapy*, 42(2), 276–283. doi:10.1016/j.beth.2010.07.005
- Harned, M. S., Chapman, A. L., Dexter-Mazza, E. T., Murray, A., Comtois, K. A., & Linehan, M. M. (2008). Treating co-occurring Axis I disorders in recurrently suicidal women with borderline personality disorder: A 2-year randomized trial of dialectical behavior therapy versus community treatment by experts. *Journal of Consulting and Clinical Psychology*, 76(6), 1068–1075. doi:10.1037/a0014044

- Herman, J. L. (1992). *Trauma and recovery*. New York: Basic Books.
- Hien, D. A., Cohen, L. R., Miele, G. M., Litt, L. C., & Capstick, C. (2004). Promising treatments for women with comorbid PTSD and substance use disorders. *American Journal of Psychiatry*, 161(8), 1426–1432. doi: 10.1176/appi.ajp.161.8.1426
- Hien, D. A., Wells, E. A., Jiang, H., Suarez-Morales, L., Campbell, A. N., Cohen, L. R.,...& Nunes, E. V. (2009). Multisite randomized trial of behavioral interventions for women with co-occurring PTSD and substance use disorders. *Journal of Consulting and Clinical Psychology*, 77(4), 607–619. doi: 10.1037/a0016227
- Hien, D. A., Levin, F. R., Ruglass, L. M., Lopez-Castro, T., Hu, M. C., Papini, S., Cohen, & L., H., A. (in press). Combining seeking safety with sertraline for PTSD and alcohol use disorders: A randomized controlled trial. *Journal of Clinical and Consulting Psychology*.
- Institute of Medicine. (2008). *Treatment of posttraumatic stress disorder: An assessment of the evidence*. Washington, DC: The National Academies Press.
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.
- Jeffries, F. W., & Davis, P. (2013). What is the role of eye movements in eye movement desensitization and reprocessing (EMDR) for post-traumatic stress disorder (PTSD)? a review. *Behavioural and Cognitive Psychotherapy*, 41(3), 290–300. doi: 10.1017/S1352465812000793
- Jonas, D. E., Cusack, K., Formeris, C. A., Wilkins, T. M., Sonis, J., Middleton, J. C.,...& Gaynes, B. N. (2013). *Psychological and pharmacological treatments for adults with posttraumatic stress disorder (PTSD)*. Rockville, MD: Agency for Healthcare Research and Quality.
- Karatzias, T., Power, K., Brown, K., McGoldrick, T., Begum, M., Young, J.,...& Adams, S. (2011). A controlled comparison of the effectiveness and efficiency of two psychological therapies for posttraumatic stress disorder: eye movement desensitization and reprocessing vs. emotional freedom techniques. *Journal of Nervous & Mental Disease*, 199(6), 372–378. doi: 10.1097/NMD.0b013e31821cd262
- Kent, M., Davis, M. C., Stark, S. L., & Stewart, L. A. (2011). A resilience-oriented treatment for posttraumatic stress disorder: results of a preliminary randomized clinical trial. *Journal of Traumatic Stress*, 24(5), 591–595. doi: 10.1002/jts.20685
- Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Chatterji, S., Lee, S., Ormel, J.,...& Wang, P. S. (2009). The global burden of mental disorders: an update from the WHO World Mental Health (WMH) surveys. *Epidemiologia e Psichiatria Sociale*, 18(1), 23–33.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 593–602. doi: 10.1001/archpsyc.62.6.593
- Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 617–627. doi: 10.1001/archpsyc.62.6.617
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 52(12), 1048–1060.
- Kip, K. E., Rosenzweig, L., Hernandez, D. F., Shuman, A., Sullivan, K. L., Long, C. J.,...& Diamond, D. M. (2013). Randomized controlled trial of accelerated resolution therapy (ART) for symptoms of combat-related post-traumatic stress disorder (PTSD). *Military Medicine*, 178(12), 1298–1309. doi: 10.7205/MILMED-D-13-00298
- Koucky, E. M., Dickstein, B. D., & Chard, K. M. (2013). Cognitive behavioral treatments for posttraumatic stress disorder: Empirical foundation and new directions. *CNS Spectrums*, 18(2), 73–81. doi: 10.1017/S1092852912000995
- Landes, S. J., Garovoy, N. D., & Burkman, K. M. (2013). Treating complex trauma among veterans: Three stage-based treatment models. *Journal of Clinical Psychology: In Session*, 69(5), 523–533. doi: 10.1002/jclp.21988
- Lieberman, A. F., Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child & Adolescent Psychiatry*, 44(12), 1241–1248. doi: http://dx.doi.org/10.1097/01.chi.0000181047.59702.58
- Macdonald, A., Monson, C. M., Doron-Lamarca, S., Resick, P. A., & Palfai, T. P. (2011). Identifying patterns of symptom change during a randomized controlled trial of cognitive processing therapy for military-related posttraumatic stress disorder. *Journal of Traumatic Stress*, 24(3), 268–276. doi: 10.1002/jts.20642
- Marcus, S. V., Marquis, M., & Sakai, C. (1997). Controlled study of PTSD using EMDR in an HMO setting. *Psychotherapy*, 34, 307–315.
- Marks, I., Lovell, K., Noshirvani, H., Livanou, M., & Thrasher, S. (1998). Treatment of posttraumatic stress disorder by exposure and/or cognitive

- Health (WMH) surveys. *Social Psychiatry and Psychiatric Epidemiology*, 18(1), 23–33.
- Demler, O., Jin, R., Walters, E. E. (2005). Age-of-onset distributions. *National Comorbidity Survey Replication. General Psychopathology*, 31/archpsyc.62.6.593
- Demler, O., Merikangas, K. R. (2005). Prevalence, severity, and comorbidity of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 617–627.
- met, E., Hughes, M., & et al. (2005). Traumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 62(6), 617–627.
- met, E., Hughes, M., & et al. (2005). Traumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 62(6), 617–627.
- ández, D. F., Shuman, C. J., & Diamond, S. (2005). A randomized controlled trial of art for symptoms of posttraumatic stress disorder. *Journal of the American Medical Association*, 293(12), 1298–1309.
- & Chard, K. M. (2013). Advances in treatments for posttraumatic stress disorder: an update and new directions. *Journal of Trauma and Acute Stress*, 73(2), 73–81. doi: 10.1017/jts.2012.00298
- , & Burkman, K. M. (2013). Trauma among veterans: treatment models. *Journal of Trauma and Acute Stress*, 69(5), 523–533.
- & Ippen, C. G. (2005). Treatment: child-parent bonders exposed to marijuanna. *American Academy of Child and Adolescent Psychiatry*, 44(12), 1097–1107. doi: 10.1017/jts.2012.00298
- I., Doron-Lamarca, S., & P. (2011). Identifying risk during a randomised cognitive processing for posttraumatic stress disorder. *Journal of Trauma and Acute Stress*, 72(3), 268–276.
- & Sakai, C. (1997). Using EMDR in an adult, 34, 307–315.
- ani, H., Livanou, M., & et al. (2005). Treatment of posttraumatic exposure and/or cognitive restructuring: a controlled study. *Archives of General Psychiatry*, 55(4), 317–325.
- McCann, I. L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy, and transformation*. New York: Brunner/Mazel.
- McGovern, M. P., Lambert-Harris, C., Alterman, A. I., Xie, H., & Meier, A. (2011). A randomized controlled trial comparing integrated cognitive behavioral therapy versus individual addiction counseling for co-occurring substance use and posttraumatic stress disorders. *Journal of Dual Diagnosis*, 7(4), 207–227. doi: 10.1080/15504263.2011.620425
- McLean, C. P., & Foa, E. B. (2011). Prolonged exposure therapy for post-traumatic stress disorder: a review of evidence and dissemination. *Expert Review of Neurotherapeutics*, 11(8), 1151–1163. doi: 10.1586/ern.11.94
- Mills, K. L., Teesson, M., Back, S. E., Brady, K. T., Baker, A. L., Hopwood, S., & Ewer, P. L. (2012). Integrated exposure-based therapy for co-occurring posttraumatic stress disorder and substance dependence: a randomized controlled trial. *Journal of the American Medical Association*, 308(7), 690–699. doi: 10.1001/jama.2012.9071
- Miyahira, S. D., Folen, R. A., Hoffman, H. G., Garcia-Palacios, A., Spira, J. L., & Kawasaki, M. (2012). The effectiveness of VR exposure therapy for PTSD in returning warfighters. *Studies in Health Technology and Informatics*, 181, 128–132.
- Monson, C. M., Schnurr, P. P., Resick, P. A., Friedman, M. J., Young-Xu, Y., & Stevens, S. P. (2006). Cognitive processing therapy for veterans with military-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 74(5), 898–907. doi: 10.1037/0022-006X.74.5.898
- Morland, L. A., Hynes, A. K., Mackintosh, M. A., Resick, P. A., & Chard, K. M. (2011). Group cognitive processing therapy delivered to veterans via telehealth: a pilot cohort. *Journal of Traumatic Stress*, 24(4), 465–469. doi: 10.1002/jts.20661
- Morrison, T. (1987). *Beloved*. New York: Knopf.
- Moser, J. S., Cahill, S. P., & Foa, E. B. (2010). Evidence for poorer outcome in patients with severe negative trauma-related cognitions receiving prolonged exposure plus cognitive restructuring: implications for treatment matching in posttraumatic stress disorder. *Journal of Nervous & Mental Disease*, 198(1), 72–75. doi: 10.1097/NMD.0b013e3181c81fac
- Motraghi, T. E., Seim, R. W., Meyer, E. C., & Morissette, S. B. (2014). Virtual reality exposure therapy for the treatment of posttraumatic stress disorder: a methodological review using CONSORT guidelines. *Journal of Clinical Psychology*, 70(3), 197–208. doi: 10.1002/jclp.22051
- Nacasch, N., Foa, E. B., Huppert, J. D., Tzur, D., Fostick, L., Dinstein, Y., & Zohar, J. (2011). Prolonged exposure therapy for combat- and terror-related posttraumatic stress disorder: a randomized control comparison with treatment as usual. *Journal of Clinical Psychiatry*, 72(9), 1174–1180. doi: 10.4088/JCP.09m05682blu
- Najavits, L. M. (2002). *Seeking Safety: A treatment manual for PTSD and substance abuse*. New York: Guilford Press.
- Najavits, L. M. (2007). Psychosocial treatments for posttraumatic stress disorder. In P. E. Nathan & J. M. Gorman (Eds.), *A guide to treatments that work* (3rd ed., pp. 513–529). New York: Oxford Press.
- Najavits, L. M. (2012). Expanding the boundaries of PTSD treatment. *Journal of the American Medical Association*, 308(7), 714–716. doi: 10.1001/2012.jama.10368
- Najavits, L. M. (2013). Therapy for posttraumatic stress and alcohol dependence. *Journal of the American Medical Association*, 310(22), 2457–2458. doi: 10.1001/jama.2013.282141
- Najavits, L. M., Gallop, R. J., & Weiss, R. D. (2006). Seeking safety therapy for adolescent girls with PTSD and substance use disorder: a randomized controlled trial. *Journal of Behavioral Health Services and Research*, 33(4), 453–463. doi: 10.1007/s11414-006-9034-2
- Najavits, L. M., & Hien, D. (2013). Helping vulnerable populations: a comprehensive review of the treatment outcome literature on substance use disorder and PTSD. *Journal of Clinical Psychology*, 69(5), 433–479. doi: 10.1002/jclp.21980
- Neuner, F., Schauer, M., Klaschik, C., Karunakara, U., & Elbert, T. (2004). A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an African refugee settlement. *Journal of Consulting and Clinical Psychology*, 72(4), 579–587. doi: 10.1037/0022-006X.72.4.579
- Nijdam, M. J., Gersons, B. P., Reitsma, J. B., de Jongh, A., & Olff, M. (2012). Brief eclectic psychotherapy v. eye movement desensitisation and reprocessing therapy for post-traumatic stress disorder: randomised controlled trial. *British Journal of Psychiatry*, 200(3), 224–231. doi: 10.1192/bj.p.2011.099234
- Nixon, R. D. V., Sterk, J., & Pearce, A. (2012). A randomized trial of cognitive behaviour therapy and cognitive therapy for children with posttraumatic stress disorder following single-incident trauma. *Journal of Trauma and Acute Stress*, 73(2), 73–81. doi: 10.1017/jts.2012.00298

- of Abnormal Child Psychology*, 40(3), 327–337. doi: 10.1007/s10802-011-9566-7
- Ougrin, D. (2011). Efficacy of exposure versus cognitive therapy in anxiety disorders: systematic review and meta-analysis. *BMC Psychiatry*, 11, 200. doi: 10.1186/1471-244X-11-200
- Ouimette, P., & Read, J. P. (Eds.). (2013). *Handbook of trauma, PTSD and substance use disorder comorbidity*. Washington, DC: American Psychological Association Press.
- Pacella, M. L., Armelie, A., Boarts, J., Wagner, G., Jones, T., Feeny, N., & Delahanty, D. L. (2012). The impact of prolonged exposure on PTSD symptoms and associated psychopathology in people living with HIV: a randomized test of concept. *AIDS and Behavior*, 16(5), 1327–1340. doi: 10.1007/s10461-011-0076-y
- Pennebaker, J. W., & Beall, S. K. (1986). Confronting a traumatic event: toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, 95(3), 274–281.
- Possemato, K., Ouimette, P., & Knowlton, P. (2011). A brief self-guided telehealth intervention for post-traumatic stress disorder in combat veterans: a pilot study. *Journal of Telemedicine and Telecare*, 17(5), 245–250. doi: 10.1258/jtt.2011.100909
- Power, K., McGoldrick, T., Brown, K., Buchanan, R., Sharp, D., & Swanson, V. (2002). A controlled comparison of eye movement desensitization and reprocessing versus exposure plus cognitive restructuring versus wait list in the treatment of post-traumatic stress disorder. *Clinical Psychology and Psychotherapy*, 9, 299–318.
- Powers, M. B., Halpern, J. M., Ferenschak, M. P., Gillihan, S. J., & Foa, E. B. (2010). A meta-analytic review of prolonged exposure for posttraumatic stress disorder. *Clinical Psychology Review*, 30(6), 635–641. doi: 10.1016/j.cpr.2010.04.007
- Rauch, S. A., Eftekhari, A., & Ruzek, J. I. (2012). Review of exposure therapy: a gold standard for PTSD treatment. *Journal of Rehabilitation Research and Development*, 49(5), 679–687.
- Resick, P. A., Nishith, P., Weaver, T. L., Astin, M. C., & Feuer, C. A. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology*, 70(4), 867–879.
- Resick, P. A., & Schnicke, M. K. (1992). Cognitive processing therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology*, 60(5), 748–756.
- Resick, P. A., Galovski, T. E., Uhlmann, M. O., Scher, C. D., Clum, G. A., & Young-Xu, Y. (2008). A randomized clinical trial to dismantle components of cognitive processing therapy for posttraumatic stress disorder in female victims of interpersonal violence. *Journal of Consulting and Clinical Psychology*, 76, 243–258.
- Rizzo, A., Parsons, T. D., Lange, B., Kenny, P., Buckwalter, J. G., Rothbaum, B., ... & Reger, G. (2011). Virtual reality goes to war: a brief review of the future of military behavioral healthcare. *Journal of Clinical Psychology in Medical Settings*, 18(2), 176–187. doi: 10.1007/s10880-011-9247-2
- Robjant, K., & Fazel, M. (2010). The emerging evidence for Narrative Exposure Therapy: a review. *Clinical Psychology Review*, 30(8), 1030–1039. doi: 10.1016/j.cpr.2010.07.004
- Ronconi, J. M., Shiner, B., & Watts, B. V. (2014). Inclusion and exclusion criteria in randomized controlled trials of psychotherapy for PTSD. *Journal of Psychiatric Practice*, 20(1), 25–37. doi: 10.1097/01.pra.0000442936.23457.5b
- Rothbaum, B. O. (1997). A controlled study of eye movement desensitization and reprocessing in the treatment of posttraumatic stress disordered sexual assault victims. *Bulletin of the Menninger Clinic*, 61(3), 317–334.
- Rothbaum, B. O., Astin, M. C., & Marsteller, F. (2005). Prolonged Exposure versus Eye Movement Desensitization and Reprocessing (EMDR) for PTSD rape victims. *Journal of Traumatic Stress*, 18(6), 607–616. doi: 10.1002/jts.20069
- Rothbaum, B. O., Hodges, L. F., Ready, D., Graap, K., & Alarcon, R. D. (2001). Virtual reality exposure therapy for Vietnam veterans with posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 62(8), 617–622.
- Rothbaum, B. O., Rizzo, A. S., & Difede, J. (2010). Virtual reality exposure therapy for combat-related posttraumatic stress disorder. *Annals of the New York Academy of Science*, 1208, 126–132. doi: 10.1111/j.1749-6632.2010.05691.x
- Sannibale, C., Teesson, M., Creamer, M., Sitharthan, T., Bryant, R. A., Sutherland, K., ... & Peek-O'Leary, M. (2013). Randomized controlled trial of cognitive behaviour therapy for comorbid post-traumatic stress disorder and alcohol use disorders. *Addiction*, 108(8), 1397–1410. doi: 10.1111/add.12167
- Royal College of Psychiatrists & the British Psychological Society. (2005). National Clinical Practice Guideline on PTSD. Cited in Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral

- mansiek, M. O., Scher, Y.-Xu, Y. (2008). A random mantle components of for posttraumatic stress interpersonal violence. *Clinical Psychology*, 76,
- ange, B., Kenny, P., Kim, B.,...& Reger, G. To war: a brief review of oral healthcare. *Journal of Medical Settings*, 18(2), 30-011-9247-2
-). The emerging evidence Therapy: a review. *Journal of Trauma Stress*, 30(8), 1030-1039. doi: 10.1007/s00196-014-0404-0
- Watts, B. V. (2014). Efficacy in randomized controlled study for PTSD. *Journal of Trauma Stress*, 27, 5-37. doi: 10.1007/01.
- controlled study of eye and reprocessing in the stress disordered sexual assault. *Journal of the Menninger Clinic*,
- Marsteller, F. (2005). Eye Movement Processing (EMDR) for PTSD. *Journal of Traumatic Stress*, 18(2), 206-209. doi: 10.1007/s00196-005-0069-9
- Ready, D., Graap, K., & van der Kolk, B. Virtual reality exposure therapy with posttraumatic stress disorder. *Clinical Psychiatry*, 62(8), 55-62. doi: 10.1007/s00196-010-0628-8
- & Difede, J. (2010). Efficacy for combat-related PTSD. *Annals of the New York Academy of Sciences*, 1206, 26-132. doi: 10.1111/j.1747-0242.2010.01206.x
- ner, M., Sitharthan, T., K.,...& Peek-O'Leary, E. A. (2010). A controlled trial of cognitive-behavioral and comorbid post-traumatic stress disorders. *Addiction*, 105(1), 111-121. doi: 10.1111/j.1360-0540.2009.02567.x
- e British Psychological Society Clinical Practice Guidelines. Butler, A. C., Edwards, M., & Beck, A. T. (2011). Cognitive-behavioral therapy for cognitive-behavioral therapy: A review of meta-analyses. *Clinical Psychology Review*, 26, 17-31.
- Schauer, M., Neuner, F., & Elbert, T. (2005). *Narrative Exposure Therapy: A short-term intervention for traumatic stress disorders after war, terror, or torture*. Ashland, OH: Hogrefe & Huber.
- Schnurr, P. P., Friedman, M. J., Foy, D. W., Shea, M. T., Hsieh, F. Y., Lavori, P. W.,...& Bernardy, N. C. (2003). Randomized trial of trauma-focused group therapy for posttraumatic stress disorder: results from a Department of Veterans Affairs cooperative study. *Archives of General Psychiatry*, 60(5), 481-489. doi: 10.1001/archpsyc.60.5.481
- Schnyder, U., Muller, J., Maercker, A., & Wittmann, L. (2011). Brief eclectic psychotherapy for PTSD: a randomized controlled trial. *Journal of Clinical Psychiatry*, 72(4), 564-566. doi: 10.4088/JCP.10l06247blu
- Schulz, K. F., Altman, D. G., & Moher, D. (2010). CONSORT 2010 statement: Updated guidelines for reporting parallel group randomised trials. *Journal of Pharmacology and Pharmacotherapeutics*, 1(2), 100-107. doi: 10.4103/0976-500X.72352
- Shapiro, F. (1995). *Eye movement desensitization and reprocessing: Basic principles, protocols, and procedures*. New York: Guilford Press.
- Sledjeski, E. M., Speisman, B., & Dierker, L. C. (2008). Does number of lifetime traumas explain the relationship between PTSD and chronic medical conditions? Answers from the National Comorbidity Survey-Replication (NCS-R). *Journal of Behavioral Medicine*, 31(4), 341-349. doi: 10.1007/s10865-008-9158-3
- Sloan, D. M., Marx, B. P., Bovin, M. J., Feinstein, B. A., & Gallagher, M. W. (2012). Written exposure as an intervention for PTSD: a randomized clinical trial with motor vehicle accident survivors. *Behaviour Research and Therapy*, 50(10), 627-635. doi: 10.1016/j.brat.2012.07.001
- Solomon, S. D., & Johnson, D. M. (2002). Psychosocial treatment of posttraumatic stress disorder: a practice-friendly review of outcome research. *Journal of Clinical Psychology*, 58(8), 947-959. doi: 10.1002/jclp.10069
- Stenmark, H., Catani, C., Neuner, F., Elbert, T., & Holen, A. (2013). Treating PTSD in refugees and asylum seekers within the general health care system. A randomized controlled multicenter study. *Behaviour Research and Therapy*, 51(10), 641-647. doi: 10.1016/j.brat.2013.07.002
- Strachan, M., Gros, D. F., Ruggiero, K. J., Lejeune, C. W., & Acienro, R. (2012). An integrated approach to delivering exposure-based treatment for symptoms of PTSD and depression in OIF/OEF veterans: preliminary findings. *Behavior Therapy*, 43(3), 560-569. doi: 10.1016/j.beth.2011.03.003
- Suris, A., Link-Malcolm, J., Chard, K., Ahn, C., & North, C. (2013). A randomized clinical trial of cognitive processing therapy for veterans with PTSD related to military sexual trauma. *Journal of Traumatic Stress*, 26(1), 28-37. doi: 10.1002/jts.21765
- Tarrier, N., Pilgrim, H., Sommerfield, C., Faragher, B., Reynolds, M., Graham, E., & Barrowclough, C. (1999). A randomized trial of cognitive therapy and imaginal exposure in the treatment of chronic posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 67(1), 13-18.
- Taylor, S., Thordarson, D. S., Maxfield, L., Fedoroff, I. C., Lovell, K., & Ogrodniczuk, J. (2003). Comparative efficacy, speed, and adverse effects of three PTSD treatments: exposure therapy, EMDR, and relaxation training. *Journal of Consulting and Clinical Psychology*, 71(2), 330-338.
- Turner, S. M., Beidel, D. C., & Frueh, B. C. (2005). Multicomponent behavioral treatment for chronic combat-related posttraumatic stress disorder: trauma management therapy. *Behavior Modification*, 29(1), 39-69. doi: 10.1177/0145445504270872
- van Dam, D., Ehring, T., Vedel, E., & Emmelkamp, P. M. (2013). Trauma-focused treatment for posttraumatic stress disorder combined with CBT for severe substance use disorder: a randomized controlled trial. *BMC Psychiatry*, 13, 172. doi: 10.1186/1471-244X-13-172
- van Dam, D. V. E., Ehring, T., & Emmelkamp, P. M. G. (2012). Psychological treatments for concurrent posttraumatic stress disorder and substance use disorder: A systematic review. *Clinical Psychology Review*, 32, 202-214.
- Verstraet, S., van der Wurff, P., & Vermetten, E. (2013). Eye Movement Desensitization and Reprocessing (EMDR) as treatment for combat-related PTSD: A meta-analysis. *Military Behavioral Health*, 1(2), 68-73.
- Veterans Health Administration. (2004). *Management of Post-Traumatic Stress*. Office of Quality and Performance Publication 10Q-CPG/PTSD-04. Washington, DC: Veterans Health Administration, Department of Veterans Affairs and Health Affairs, Department of Defense.
- Watts, B. V., Schnurr, P. P., Mayo, L., Young-Xu, Y., Weeks, W. B., & Friedman, M. J. (2013). Meta-analysis of the efficacy of treatments for posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 74(6), e541-550. doi: 10.4088/JCP.12r08225

- Weisaeth, L. (2002). The European history of psychotraumatology. *Journal of Traumatic Stress*, 15(6), 443–452. doi: 10.1023/A:1020909620364
- Wiesel, E. (1960). *Night*. New York: Hill and Wang.
- Wilson, J. P. (1994). The historical evolution of PTSD diagnostic criteria: from Freud to DSM-IV. *Journal of Traumatic Stress*, 7(4), 681–698.
- Zang, Y., Hunt, N., & Cox, T. (2013). A randomised controlled pilot study: the effectiveness of narrative exposure therapy with adult survivors of the Sichuan earthquake. *BMC Psychiatry*, 13, 41. doi: 10.1186/1471-244X-13-41

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