ADULT SURVIVORS OF CHILDHOOD ABUSE:

A NOVEL ADAPTED TREATMENT MODEL

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ADULT SURVIVORS OF CHILDHOOD ABUSE:

A NOVEL INTEGRATIVE TREATMENT MODEL

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The PGSP-Stanford Psy.D. Consortium, Palo Alto University, 2017

A history of childhood physical and/or sexual abuse is reported at a rate of 40-60% in mental health treatment seeking adults. Therefore, it is important for mental health professionals to understand the impacts and develop efficacious treatments for individuals experiencing the sequelae of childhood abuse. This study identifies and presents efficacious psychotherapeutic treatments for adult survivors of childhood abuse based on the current body of literature. Twenty studies that specifically address symptoms of PTSD in adult survivors of childhood abuse are identified and presented. A new, adapted model of psychological treatment that considers psychodynamic and cognitive behavioral theories is proposed and discussed.

Adult Survivors of Childhood Abuse: A Novel Integrative Treatment Model

This dissertation by Sharon A. Humphrey, directed and approved by the candidate's committee, has been accepted and approved by the Faculty of The PGSP-Stanford Psy.D. Consortium, Palo Alto University in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

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DEDICATION

To my husband, Rich Humphrey: This was only possible with your unending love, support, patience, and understanding.

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INTRODUCTION

Overview

During the last 25 years, research on childhood abuse and its impact on psychological and physiological symptoms for adult survivors has burgeoned. Clinicians today can consult a variety of books, studies, and meta-analyses to guide their treatment. Despite the growing body of research that focuses on the unique needs of adult survivors, there continues to be limited dialogue among lay people about the effect of child abuse which facilitates the stigma and shame experienced by many survivors, resulting in reluctance to seek treatment for mental health symptoms associated with the abuse.

One of the most common mental health diagnoses associated with child abuse is Posttraumatic Stress Disorder (PTSD). PTSD occurs at an estimated rate of 10.4% in women and 5% in men (Breslau, Davis, Andreski, Peterson, & Schultz, 1997), even though rates of exposure to trauma are similar between the two sexes (Perrin et al., 2014). For women who have experienced childhood sexual abuse, the reported prevalence rates of PTSD are particularly high, ranging from 26% to 52% (Kessler, 2000; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Ullman & Brecklin, 2002). In the United States and abroad, nonclinical samples of adults self-reported childhood physical abuse at a rate of 10% to 31% in men and 6% to 40% in women (MacMillan, Tanaka, Duku, Vaillancourt, & Boyle, 2013; Thompson, Arias, Basile, & Desai, 2002). The same population self-reported childhood sexual abuse at a rate of 3% to 29% in men (Fergusson, McLeod, & Horwood, 2013; Finkelhor, 1994; MacMillan et al., 2013) and 7% to 36% in women (Fergusson et al., 2013; Finkelhor, 1994; MacMillan et al., 2013; Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992). Variation of statistics is accounted for

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by differences in cutoff ages as well as differences in definitions used for childhood physical and sexual abuse between the studies.

Between 50-60% of psychiatric inpatients and 40-60% of outpatients report a history of childhood physical abuse, sexual abuse, or both (Briere & Runtz, 1987; Bryer, Nelson, Miller, & Krol, 1987; Jacobson, 1989; Jacobson & Richardson, 1987). Moreover, 70% of psychiatric emergency room patients reported a history of childhood abuse (Briere & Zaidi, 1989). Given the prevalence rates among clinical populations, it stands to reason that most psychologists in clinical practice will work with individuals who have a history of childhood trauma. Therefore, it is important to understand the impact of childhood abuse in order to assist in the development of efficacious treatment approaches.

Impact of Childhood Abuse

The Centers for Disease Control and Prevention (CDC) define child abuse as "any act, or series of acts, of commission and omission by a parent or other caregiver (e.g., clergy, coach, teacher) that results in harm, potential for harm, or threat of harm to a child" (CDC, 2016). The CDC also categorizes abuse into two categories: acts of commission, and acts of omission. Acts of commission are intentional and deliberate. They include physical abuse, sexual abuse, and psychological abuse. An act of abuse is considered one of commission regardless of the intended outcome. For example, a caregiver may intend to spank a child as punishment, but not intend to break the skin or leave a bruise. Regardless, the act itself was not accidental and is therefore an act of commission. Acts of omission occur when there is a failure to provide for a child's basic physical, emotional, or educational needs or a failure to protect a child from harm. Examples of acts of omission are physical and emotional neglect, failure to attend to medical and dental needs

of the child, educational neglect, not providing adequate supervision, and exposing a child to violent environments.

Whether abuse is an act of commission or an act of omission, there are many consequences for the survivor. Repeated trauma in childhood impacts the survivor physically and mentally. A history of childhood abuse predicts more chronic medical conditions in adulthood than in those without a history of abuse (Shaw & Krause, 2002). In particular, childhood abuse predicts greater incidence of heart disease (Shaw & Krause, 2002; Springer, Sheridan, Kuo, & Carnes, 2007), recurrent gastrointestinal issues such as ulcers (Goodwin, Hoven, Murison, & Hotopf, 2003), and hypertension (Springer et al., 2007). Another study that examined data from the National Violence Against Women Survey found that childhood physical abuse was associated with lower perceived general health, chronic mental health conditions, the occurrence of injury, and substance abuse (Thompson et al., 2002). Psychiatric diagnoses associated with childhood abuse include depression (Wise, Zierler, Krieger, & Harlow, 2001), anxiety disorders (MacMillan et al., 2001), eating disorders (Kendler et al., 2000), and posttraumatic stress disorder (Widom, 1999).

In addition to the diagnoses associated with surviving childhood abuse, psychological constructs are also affected. Repeated abuse in childhood affects the formation of attachments to parental figures (Styron & Janoff-Bulman, 1997). Considerable evidence exists that children who are abused are more likely to be insecurely attached than their counterparts who are not abused (Brassard, Germain, & Hart, 1987; Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006; Sroufe, Egeland, Carlson, & Collins, 2005). Bowlby hypothesized that the quality of early attachment relationships depended on the degree to which the child could rely on his or her caretaker as a source of security and that these early relationships served as a blueprint for future

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relationships (Bowlby, 1988). It follows, that survivors of childhood abuse tend to form insecure

attachments as adults, which can result in dissatisfying relationships with others. Studies have

shown that disorganized and resistant or insecure attachment in childhood are risk factors for

developing personality and dissociative disorders (Barone, 2003; Lyons-Ruth et al., 2006; Sroufe

et al., 2005).

While disorganized attachment in childhood predicts dissociative experiences in

childhood and adolescence (Main & Morgan, 1996), dissociation at any developmental age

predicts a range of multiple, comorbid psychiatric issues in adulthood such as suicidality,

antisocial behavior, anxiety, PTSD, and substance use (Brown, 2001). Dissociation is a creative

defense mechanism used by many abused children to both escape physical pain and preserve

attachment to abusive caretakers as a matter of survival (Herman, 1997). Survivors of repeated

abuse subconsciously learn that dissociating during the traumatic experience allows them to

maintain a semblance of normality in everyday life. Dissociation can persist into adulthood,

interfering with the survivor's ability to perform activities of daily living, maintain relationships,

and perform responsibilities. This is a cardinal symptom of Complex PTSD, a potentially severe

outcome for some survivors of childhood abuse.

Childhood Abuse and Complex PTSD

Adult survivors of childhood abuse often present for treatment with a complex

constellation of problems and psychiatric symptoms, particularly those individuals who have

experienced sexual and physical abuse. Complex symptoms often include difficulty with

emotion regulation, impulsive behavior, severe dissociation, substance abuse and related issues,

problems with self-perception, disturbances in memory and attention, and/or somatic symptoms

(Briere, Kaltman, & Green, 2008; Cloitre, Garvert, Brewin, Bryant, & Maercker, 2013; Cloitre et

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al., 2009; Dorrepaal et al., 2012; Ehring et al., 2014; Herman, 1992). Survivors of childhood trauma may also have issues with sexual functioning, interpersonal difficulties (including parenting), emotional lability, high rates of re-victimization, sleep disorders, self-mutilation, and suicidality (Briere, 1992; Courtois, 2004). Furthermore, personality disorders have been highly correlated with a history of childhood abuse, particularly borderline personality disorder (BPD) and dissociative identity disorder (DID) (Bohus et al., 2013; Dorrepaal et al., 2013), diagnoses that typically present with a complicated clinical picture.

In order to understand whether these complex presentations are more likely to be reported in clinical populations, a study was conducted among a non-clinical sample of 2,453 university women (Briere et al., 2008). This study showed a linear relationship between the number of different childhood traumas experienced and symptom complexity as measured for the Trauma Symptom Inventory. The findings indicated that childhood trauma leads to complexity of symptoms (Briere et al., 2008).

A subsequent study using a clinical sample of 582 adult women presenting for treatment of trauma-related symptoms replicated these findings, indicating a significant relationship exists between cumulative trauma and symptom complexity (Cloitre et al., 2009). Additionally, analysis of lifetime trauma (combined adult and childhood trauma) indicated an overall additive effect of cumulative trauma to complexity of symptoms. When cumulative childhood trauma was controlled for in the analyses, the relationship between lifetime trauma and symptom complexity became non-significant. However, when adult cumulative trauma was included, the outcome did not change. This is important because it indicates that the presence of childhood trauma is related to symptom complexity in adults (Cloitre et al., 2009). This adds to the empirical evidence that adults abused in childhood have a particularly complex clinical

presentation, which may require interventions that are qualitatively different from those that propose to treat single-incidence PTSD.

PTSD

The diagnosis of PTSD was first codified in the late 1970's to help describe and understand the psychopathological sequelae experienced by a number of returning Vietnam War veterans (Resick et al., 2012). It was later adapted to apply to victims of rape, domestic violence, and child abuse (Friedman, Resick, & Keane, 2007). First appearing in the third edition of the Diagnostic and Statistical Manual of Psychiatric Disorders (DSM-III) in 1980, PTSD was originally categorized as an anxiety disorder. In the fourth edition of the DSM (DSM-IV) and the subsequent text revision of the same edition, DSM-IV-TR, PTSD remained part of anxiety disorders (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association [APA], 2000), despite strong interest by the PTSD subcommittee to move it out from under the anxiety disorders umbrella (Friedman, Keane, Resnick, & Phelps, 2008). The PTSD subcommittee wished to move PTSD from Anxiety Disorders to its own category because it became apparent that PTSD is not simply a fear-based anxiety reaction, but also includes anhedonic and dysphoric presentations. The diagnosis is also unique in the importance placed on the etiology of the diagnosis, namely, the traumatic event or events that lead to the posttraumatic reaction (Friedman, 2013).

The subcommittee included six criterion clusters in the DSM-IV-TR diagnosis of PTSD. Criterion A is (1) exposure through experiencing, witnessing, or being confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others; and (2) the person's response involved intense fear, helplessness, or horror (DSM-IV-TR, APA, 2000). Criteria B-D form the core of PTSD and broadly involve (B)

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re-experiencing the trauma, (C) avoidance and numbing, and (D) symptoms of hyperarousal or exaggerated startle response (DSM-IV-TR, APA, 2000). Criterion E involves duration of the disturbance, which must be longer than one month to qualify for diagnosis. Finally, Criterion F revolves around functional significance and whether or the not the disturbance causes clinically significant impairment (DSM-IV-TR, APA, 2000). These criterion clusters were carried over into the most recent edition of the DSM.

The fifth edition of the DSM (DSM-5) saw changes to categorization, definitions, and diagnostic criteria for PTSD. In DSM-5, PTSD is no longer categorized as an anxiety disorder, but appears in a new category labeled "trauma and stressor related disorders" (5th ed.; DSM-5; American Psychiatric Association [APA], 2013). While experiencing "intense fear, helplessness, or horror" related to the traumatic event was eliminated from Criterion A, indirect exposure by learning about the violent death of a loved one and experiencing repeated or extreme exposure to aversive details of a traumatic event were added (criteria A3 and A4). Intrusive and avoidance symptoms remained relatively unchanged in DSM-5 while numbing was reconceptualized as "negative alterations in cognition and mood" (Friedman, 2013). Dissociative and preschool subtypes were also added to DSM-5. As DSM-5 is relatively new, most published literature on PTSD uses DSM-IV-TR definitions and criteria. Therefore, this review focused on the DSM-IV-TR constructs for PTSD.

Complex PTSD

Despite the rigorous study that resulted in the diagnostic criteria for PTSD, clinicians reported a different symptom presentation for patients with a history of abuse in childhood. These symptoms, which were not captured in the original, classic diagnosis of PTSD, included difficulty with affect regulation, alterations in consciousness, somatic distress, identity

disturbance, alterations in perception of the perpetrator, extreme difficulty in relationships with others, and disruption in systems of personal meaning (Courtois, 2004). Research also indicated that individuals with a history of interpersonal childhood trauma also had higher rates of revictimization as adults (Herman, 1992). These complex presentations regularly included features of other mental health disorders, personality disorders, physical health problems, and psychosocial impairments (Courtois, 2009). This resulted in early trauma researchers developing new terms to capture the complexity of these symptom clusters.

Herman first proposed the diagnosis of complex posttraumatic stress disorder (C-PTSD) in 1992. It has also been referred to as disorders of extreme stress, not otherwise specified (DESNOS) (Herman, 1992; Pelcovitz et al., 1997), PTSD and its associated features in the DSM-IV (4th ed.; DSM-IV; American Psychiatric Association, 1994) , and Enduring Personality Change after Catastrophic Events (World Health Organization, 1993). It was conceptualized as the sequelae of prolonged, repeated trauma, of early life onset, that could only occur when the victim was under the coercive control of the perpetrator (Herman, 1992).

Herman (1992) defined C-PTSD as "a spectrum of conditions rather than a single entity," that includes "personality changes, alterations in affect regulation and meaning systems, consciousness, self-perception, and relations with others" (p. 125). She speculated that C-PTSD had its origins in a history of childhood trauma. The most common example was prolonged interpersonal trauma, particularly child sexual abuse (Choi, Klein, Shin, & Lee, 2009; Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997). Herman later expanded her definition to include prisoners of war, concentration camp survivors, victims of slavery, domestic violence victims, and those who are involved in human trafficking, regardless of developmental age of the

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victim at the time of the trauma (Herman, 1997). Herman was not alone in evolving the definitions and criteria for C-PTSD.

Other experts in the field of trauma narrowed and expanded the definition of C-PTSD. Courtois first expanded the definition to include prolonged, repeated traumas that could occur in adulthood such as prostitution, slavery, domestic abuse, prisoners of war, and human trafficking victims (Courtois, 2004), but later narrowed the definition by adding the criteria that the trauma occur at a time in the victim's life when they are developmentally vulnerable, such as childhood or adolescence (Courtois, 2009). Courtois added that these traumas typically compromise the victim's personality development and basic trust in relationships (Courtois, 2009). The original field trials, which used age 13 as the cut off for when abuse occurred, showed an association between C-PTSD and early interpersonal childhood trauma (Roth et al., 1997). The subsequent DSM-IV Field Trial showed that individuals with a history of sexual abuse before the age of 14 were more likely to develop C-PTSD than those who experienced sexual abuse after the age of 14 (van der Kolk, 2005). A third study of college women found that C-PTSD was strongly associated with a history of childhood abuse while exposure to other types of interpersonal trauma, such as rape and domestic violence in adulthood, was more strongly associated with the classic presentation of PTSD as defined in DSM-IV-TR (Ford, Stockton, Kaltman, & Green, 2006). Many studies were conducted, however without commonly agreed upon symptom domains, diagnosing C-PTSD remained in dispute.

To work towards settling this dispute, The Complex Trauma Task Force of the International Society for Traumatic Stress Studies (ISTSS) identified eight symptom domains for C-PTSD by conducting a survey of 100 experts, half identified as experts in the field of PTSD and half in the field C-PTSD. Three of the eight domains identified by the survey were derived

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from the DSM-IV-TR criteria for PTSD: re-experiencing, avoidance/emotional constriction, and hyperarousal. Emotion regulation difficulties, alterations in attention and consciousness (dissociation), adversely affected systems of belief, and somatic distress or disorganization comprise the remaining five (Cloitre et al., 2011).

Though the ISTSS put forth their findings, the diagnosis of C-PTSD remains controversial in the field of psychology because clinicians disagree about whether C-PTSD differs significantly enough from PTSD and Borderline Personality Disorder (BPD) to constitute a separate diagnosis. Some experts believe that personality changes related to C-PTSD are subsumed under the diagnosis of BPD (Resick et al., 2012), while others assert that a diagnosis of BPD is stigmatizing and prevents individuals from obtaining needed treatment (Herman, 1992). Despite the controversy, clinicians note that clients with a history of childhood abuse present with most, if not all, of the eight symptom domains and conceptualize cases based on existing theories.

Theoretical Conceptualizations of Complex Trauma

Conceptualizing a diagnosis gives clinicians a frame from which to work. Understanding why an individual develops particular symptoms guides clinical work and allows clinicians to anticipate how an individual will respond to psychotherapeutic treatment (Ivey, 2006). A comprehensive formulation takes personality, life circumstances, biological risk, and personal and family history into consideration. Psychodynamic and cognitive behavioral theories are two of the major theoretical orientations used in clinical work today. Each theory conceptualizes complex trauma in unique ways, yet there are also similarities between the approaches.

Cognitive-Behavioral Theory and Trauma

Cognitive behavioral theories of PTSD blend learning and cognitive theory. Learning theory conceptualizes PTSD as conditioned fear (Cloitre et al., 2009) and posits that during trauma, stress hormones activate, prolonging stress and facilitating memory consolidation (Heim & Nemeroff, 2009). This over-consolidation of trauma memories creates a wide-ranging network of fear that is too easily triggered by internal and external stimuli leading to classic PTSD symptoms of hypervigilance and hyperarousal (Heim & Nemeroff, 2009). In this model, PTSD is caused by a breakdown in the extinction mechanism. In order to account for the full range of PTSD symptoms, cognitive theories indicate that individuals respond to trauma by forming maladaptive thoughts and interpretations regarding the cause and consequence of the traumatic event (Lonergan, 2014). Cognitive distortions bring about negative automatic thoughts such as overgeneralization of danger, negative views of the self and others, and pessimism about the future (Ehlers, Clark, Hackmann, McManus, & Fennell, 2005). In this model, PTSD is maintained by a powerful fear response conditioned during the traumatic event followed by secondary emotional reactions, such as fear and guilt, which develop from the meaning derived from the trauma (Foa & International Society for Traumatic Stress, 2009).

Psychodynamic Theory and Trauma

Like cognitive behavioral theorists, psychodynamic theorists agree that fear plays a major role in developing and maintaining PTSD and C-PTSD. Hormonal changes in the body while experiencing trauma are thought to lead to over activation of the autonomic nervous system and this chronic arousal leads to the classic symptoms of hyperarousal and hypervigilance (Kardiner & Spiegel, 1947; Kolb, 1987). It is also postulated that these hormonal changes lead to traumatic memories encoding differently in the psyche from other types of memories (Janet, 1925).

Traumatic memories differ from other memories in that they lack verbal narrative, but are instead encoded as vivid images, sensations, and emotions (Herman, 1997). These fragmented, yet vivid, memories can surface for the survivor without warning in the form of nightmares and flashbacks in which images, sensations, and associated emotions of the trauma are repeated.

Repetition of traumatic events is common for survivors. Besides nightmares and flashbacks, survivors are prone to repeating traumatic events in other ways. Revictimization and replaying the dynamics of the abusive relationship in other intimate relationships occurs frequently (Herman, 1997). It is thought that repetition of traumatic events is an attempt to heal and that healing requires restoration of a sense of mastery or efficacy over a remembered event in which the individual felt helpless (Janet, 1925). Re-experiencing is often conceptualized as a survivor's attempt to integrate shattered mental schemas and make sense of what happened to them (Horowitz, 1974). Survivors often oscillate between re-experiencing and symptoms of avoidance or numbing, a cardinal symptom of both classic and complex trauma reactions. Avoidance and numbing are considered classic defenses in psychodynamic theory.

Numbing can also be conceptualized as a state of dissociation, a hallmark symptom of C-PTSD. Dissociation is often developed in abused children as a technique to avoid the pain and terror of abuse. It allows the individual to maintain internal schemas of their abusers, often adults responsible for protecting them, as good (Herman, 1992). Use and abuse of substances is common among those who cannot enter dissociative states on their own in order to numb themselves to the physical and emotional pain that follows trauma (Herman, 1997). Dissociation serves as a vital coping technique for the abused child, however in adulthood it can contribute to deficits in memory integration, consciousness, and identity. Dynamic theory describes the dissociated elements by emphasizing internal defenses, interpersonal interactions, and

developmental considerations (Spermon, Darlington, & Gibney, 2010). Dissociation allows the survivor to avoid strong affect, a reminder of the trauma. The inability to tolerate strong affect is hypothesized to have its roots in attachment (Herman, 1992).

Attachment and Childhood Trauma

A history of secure attachment with caregivers has long been understood to play a key role in developing emotional awareness, which is considered important in emotion regulation (Lane & Schwartz, 1987; Winnicott, 1965). Emotional dysregulation in C-PTSD is described as both alternating between extreme anger or sadness and affective emptiness (Lanius, Bluhm, & Frewen, 2011); and as an impaired ability to tolerate and/or regulate negative emotional states (Dvir, Ford, Hill, & Frazier, 2014). Social cognitive theory and affective neuroscience provide an explanation for emotional dysregulation in abused children, while psychodynamic theory illustrates how affective disturbances are maintained in adulthood.

Social cognitive theory and affective neuroscience indicate that children in an abusive environment learn that their impulses to end or escape the abuse are futile, resulting in learned helplessness. These individuals increasingly disconnect from intense emotions, which are out of their control (Lanius et al., 2011). Thus, it is not surprising that abused children grow into adults who have both difficulties identifying and labeling their emotions (alexithymia), and disturbances in awareness of their affective states. Psychodynamic theory poses some hypotheses for why these disturbances occur.

In dynamic theory, emotional dysregulation is described in terms of the abused child's inability to form positive inner representations of caregivers (Herman, 1997). The child's attempt to preserve faith in his or her caregivers often leads to a highly idealized image of one parent. Paradoxically, this is often the abusive parent who shows an extreme interest in the

child, while the child experiences the other parent as indifferent and uncaring (Herman, 1997). The child's reality of the parent as abusive cannot be reconciled with the idealized image, leaving the child without a solid inner representation of a trustworthy and caring parent whom they can evoke in times of emotional distress (Herman, 1997).

Just as an individual's capacity to regulate emotions stems from early caregiving relationships, so does their basic trust in themselves and others. Individuals who are abused in childhood tend to develop the belief that others are not trustworthy (Courtois, 2009). Bowlby, the pioneer of attachment theory, noted that children need a reliable caregiver who protects them from threat and teaches them appropriate social interaction (Bowlby, 1988). In the absence of a reliable caregiver, chronically abused children tend to develop insecure and disorganized/dissociative attachment styles arising from the child's need to protect him or herself from unpredictable and unsafe caregivers (Courtois, 2009). According to attachment theory, these internal working models provide the template for organizing adult personality and all interpersonal relationships (Shorey & Snyder, 2006).

The cognitive behavioral formulation of C-PTSD also recognizes the importance of disordered attachment to the inability to form stable relationships later in life (Courtois, 2009). The construct of interpersonal schemas is used to describe the expectations an individual has regarding relationships. Psychodynamic theory posits that the disordered attachment resulting from chronic abuse leads to interpersonal interactions that are plagued by the need for protection and the constant fear of abandonment (Herman, 1997). The adult survivor of abuse may seek to be "rescued" by an authority figure. He or she may idealize this person. Much as their primary caretaker was unable to live up to the idealized version the survivor held of them, reality proves that the person to whom they become attached is not perfect. This activates the survivor's

maladaptive relational pattern and leads to dissatisfying and failed interpersonal relationships (Herman, 1997). Abusive relationships in childhood lead to difficult interpersonal interactions in adulthood. This pattern facilitates maintenance of the individual's beliefs about themselves as bad, others and untrustworthy, and the world as unsafe.

Though the abused child sees themselves as bad, their immature defenses cannot allow them to conceive of a parent who is not good and caring. Therefore, they imagine that they must be deserving of the abuse (Herman, 1997). This innate sense of inner "badness" is not easily given up as it allows the individual to maintain attachment with primary caregivers. In adulthood, these individuals continue to imagine themselves as shameful and guilty. Some victims may interpret their abuse within the framework of faith, seeing themselves as a martyr (Herman, 1997). This disrupts the survivor's systems of faith, normally a protective factor. The abused individual grows up in an environment where those charged with his or her safety are unpredictable, untrustworthy, and unreliable, leading the individual to develop a schema of the world in general as unsafe.

While the outside world is considered unsafe, the individual's own physical body may also present difficulties. Somatic distress related to trauma is not a new concept. Freud's outdated conceptualization of hysteria included physical symptoms for which no organic cause could be found. This was termed conversion. Though conversion disorders are rarely seen in psychiatric practice today, physical symptoms and psychological dissociation are common (Nijenhuis, 2008). This co-occurrence was termed "somatoform dissociation," which includes bodily symptoms that have no organic basis (Nijenhuis, 2008). These might include inability to speak, see, or hear, pain, localized anesthesia, and/or motor dysfunction. Biological cycles of sleep, feeding, and elimination may be disrupted in an abusive environment, leading to problems

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such as eating disorders, insomnia, or gastrointestinal issues. These issues were theorized to develop because the abused child is unable to regulate bodily functions in a safe and consistent manner when they develop in an environment where their body is under the control of an abusive adult (Herman, 1997).

Conceptual theories concerning how symptoms develop and are maintained guide clinical understanding of C-PTSD related to childhood abuse. However, ideals of optimum psychological health should guide treatment.

Models of Psychological Health

Theoretical models of what constitutes psychological health guide psychotherapy treatments. Research on treatments for psychological disorders generally follows the clinical model, which identifies the lack of symptoms of disease as health (Craven & Hirnie, 2003). This somewhat narrow view has been adopted by the field of psychology, particularly in research, leading to the absence of symptoms as the marker of successful treatment. This model is often used in research because symptoms are measurable and therefore quantifiable.

Adaptive models incorporate both the absence of symptoms and psychosocial functioning in the definition of health (Craven & Hirnie, 2003). In the adaptive model, health is a condition in which the individual can engage in effective physical and social interaction with their environment. While lack of symptoms is important, other markers such as the ability to perform expected social roles, valued tasks, connect with others, experience a full range of emotions, seek and experience pleasure, engage in purposeful activities, and live a personally meaningful life are equally relevant when considering an individual's psychological well-being. These items are difficult to measure because the range of what is possible varies across these domains, however it is important to consider individuals holistically and not as a cluster of symptoms.

The reasons for working from an adaptive mental health model are manifold. Considering mental health from an adaptive standpoint, the clinician considers functioning in all areas of a client's life. Using this multidimensional perspective, clinicians are less likely to miss important factors when forming case conceptualizations. Understanding individuals as whole persons also impacts clients' sense of self. When clinicians treat individuals who seek help as if all areas of functioning are important, clients can incorporate all parts of themselves into a coherent and healthy narrative (Craven & Hirnie, 2003). By integrating a fuller range of functioning into every day living, clients live more personally meaningful lives. This may be especially important for survivors of childhood abuse who tend to have disruptions in multiple areas of functioning, mental health, and physical health.

Study Aims

First, this study aims to identify efficacious psychotherapeutic treatments for adult survivors of childhood abuse. Second, a new adapted model of psychological treatment for adult survivors of childhood abuse that considers psychodynamic and cognitive behavioral theories is proposed and discussed.

CHAPTER II

METHOD

To address the aims of this dissertation, a critical literature review was conducted. The primary purpose of the review was to describe the published treatments, identify key components of effective treatments, and propose an adapted model of treatment that addresses functioning for adult survivors of childhood abuse.

Literature Identification

This literature search covered the period from 1986 to 2016 and was conducted using PsycInfo and Google Scholar (and all databases searched within them). The following terms were used: child* AND abuse AND trauma* AND treatment OR therapy. PsycInfo returned 24,918 results and Google Scholar returned 21,100 results. Titles and abstracts of all returned articles were examined for inclusion and methods sections read, when necessary, to clarify. Studies identified in meta-analyses or referenced in identified articles were also reviewed for inclusion. As cognitive behavioral therapies (CBT) are the most widely used empirically-based treatment for trauma and were the majority of studies reviewed, with few studies using other treatment modalties, this study only included studies with CBT interventions. A total of 20 studies were identified for inclusion.

Inclusion and Exclusion Criteria

The articles included in the review were published between January 1986 and December 2016. Randomized clinical trials, pilot studies, and case studies published in peer-reviewed journals were included. Adult and children clinical presentations are qualitatively different and require different treatment approaches; therefore, the current study focused only on adult populations between the ages 18 and 64 years. To be included in the present review, participants

in studies must have been assessed for PTSD symptoms pre- and post-treatment. The index

trauma must have been identified as childhood physical and/or sexual abuse. All studies had to

be available in English.

Analysis Method

The first part of this study was identification of articles to include in the final analyses.

Titles and abstracts were read for inclusion. A thorough evaluation of the methods was

conducted to determine whether the study qualified as a randomized clinical trial (RCT), pilot

study, or case study. Each study included identification of PTSD symptoms and participants

were individuals between the ages of 18-64 years. Studies were included that reported

pretreatment and posttreatment evaluation of PTSD or C-PTSD symptoms.

Studies were analyzed for major strengths and limitations. This analysis was used to

identify efficacious treatments for childhood abuse and inform a novel treatment model that was

adapted from an existing trauma mode. The adapted model has clinical implications such that it

can be used to guide trauma-focused treatment.

CHAPTER III

RESULTS

A total of 20 studies were identified and included in this review. Seventeen studies used an exposure paradigm and three used a non-exposure based paradigm.

Exposure-Based Paradigms

Exposure-based therapies use various strategies for working with traumatic memories. This can be done through extinction of trauma-related fear networks, as in prolonged exposure, or by reframing trauma-related maladaptive cognitions, as in cognitive processing therapy (Friedman et al., 2008). These therapies are based on cognitive and behavioral science, are well researched, and are recognized as very efficacious, empirically-based treatments. Much of the early interventions to treat PTSD were exposure therapies that had been developed and proven effective for fear-based anxiety disorders. While these methods were effective in reducing avoidance to fear-based stimuli, they were not very effective in reducing cognitive scripts associated with traumatic experiences. Therefore, therapies that could target cognitions were needed.

Cognitive Restructuring

Cognitive restructuring is a component of cognitive behavioral therapy. This technique involves identifying maladaptive thoughts, evaluating them for merit, and replacing them with more adaptive, realistic thoughts (Foa & International Society for Traumatic Stress, 2009). Maladaptive thoughts often involve cognitive distortions such as all-or-nothing thinking, over-generalization, jumping to conclusions, catastrophizing, and magical thinking. Socratic questioning, thought recording, cognitive rehearsal, and guided imagery are a few of the techniques used by therapists to restructure cognitive distortions.

Pilot studies. The earliest study identified that examined a cognitive-behavioral therapy for adult survivors of childhood abuse was published in 1986 and examined whether cognitive restructuring was successful at ameliorating mood disturbances that accompany the distorted beliefs often experienced by adults who suffered sexual abuse in childhood (Klassen & Gazan, 1986). There were 11 participants in this pilot outcome study. All were female and had a history of childhood sexual abuse (Klassen & Gazan, 1986). No other demographic information was reported, nor were recruitment procedures described. The number of therapeutic sessions was not reported.

A measurement tool, the Belief Inventory, was created specifically for the study (Klassen & Gazan, 1986). The Belief Inventory measured common distorted beliefs amongst child sexual abuse survivors. A cut off for clinical significance was determined to be one standard deviation (15.88) below the mean (30.82) of the initial scores of the 11 participants. These measures were collected pretreatment, weekly during treatment, and at termination of treatment. Nine of the 11 participants were above this cut-off point before the intervention while only one remained in the clinically significant range at the termination of treatment. To determine statistical significance of change in scores, a one-way repeated measures analysis of variance (ANOVA) was conducted on the mean scores at intake and termination. The study findings showed significant improvement on cognitive distortion scores between time one and time two. Beck Depression Inventory (BDI) scores were also collected. A BDI score of 21 was the recommended cut-off point for clinically significant depression. According to this criterion, six of the 11 participants had clinically significant levels of depressive symptoms prior to engaging in cognitive restructuring therapy while three remained in the clinically significant range at the close of the intervention. A one-way repeated measures ANOVA was conducted on the pretreatment and

termination scores and a clinically significant improvement in scores was found (Klassen & Gazan, 1986).

Study findings indicated that cognitive restructuring led to clinically and statistically significant improvements for participants. The three women who remained in the clinically significant range on the BDI at termination had other complicated causal factors, such as interpersonal and sexual problems. Cognitive restructuring was only one part of a comprehensive and extended treatment program aimed at addressing a range of problems presented by adult women who were sexually abused as children (Klassen & Gazan, 1986).

A later pilot study examined the cognition of being contaminated in relation to childhood sexual abuse (Steil, Jung, & Stangier, 2011). Women ages 28 – 57 years old were recruited through magazines, journals, or were referred to the study by a psychiatrist or psychotherapist. All of the participants had a formal diagnosis of PTSD related to childhood sexual abuse and experienced feelings of being contaminated related to that abuse. All of the participants completed the equivalent of a high school diploma and five had university degrees. The study was conducted in Frankfurt, Germany (Steil et al., 2011).

This study examined the efficacy of a brief, two-session intervention comprised of cognitive restructuring and imagery modification. The intervention was specifically designed to address feelings of being contaminated. Self-ratings were collected pre-treatment, post-treatment, and six weeks after treatment. Participants were asked to complete a daily scale rating intensity, vividness, and uncontrollability of feelings of being contaminated and related distress on a scale from 0 – 100 (0 = "not at all", 100 = "extremely"). The posttraumatic diagnostic scale, which generates a mean score describing overall PTSD severity on a scale from 0 – 3, was also administered (Steil et al., 2011).

The study found significant reduction in intensity ($\chi^2 = 14.22$; df = 2; p = .001), vividness ($\chi^2 = 14.889$; df = 2; p = .001), uncontrollability of feelings of being contaminated ($\chi^2 = 16.22$; df = 2; p = .000), and related distress threat ($\chi^2 = 14.889$; df = 2; p = .001), at the follow-up assessments (i.e., posttreatment and six weeks follow up; Steil et al., 2011). Reductions in scores on the Posttraumatic Diagnostic Scale were also statistically significant ($\chi^2 = 8.667$; df = 2; p = .013). Although the study focused specifically on feelings of being contaminated, the brief intervention also resulted in reduction in overall PTSD symptoms as measured by the Posttraumatic Diagnostic Scale. By comparing data from a different study that used a no treatment waitlist control group (McDonagh et al., 2005), study findings indicated that cognitive restructuring and imagery modification was better than no treatment at reducing symptoms in CSA-related PTSD (Steil et al., 2011).

The results of the brief intervention are limited due to the lack of a control group and randomization (Steil et al., 2011). Also, it remains unclear what the long-term effect of the intervention would be over time. Another limitation of the study is that there was no assessment of PTSD post-treatment. Moreover, seven of the nine participants either continued therapy or started new therapy following the initial session of cognitive restructuring and imagery modification. This could be a confounding factor as these participants likely engaged in therapy which targeted their symptoms of PTSD between the initial and follow up assessments (Steil et al., 2011).

Prolonged Exposure, In-Vivo Exposure, and Cognitive Restructuring

Prolonged exposure is a cognitive and behavioral therapy developed for treating PTSD. In this therapy, the survivor calls to mind the traumatic memory in as much detail as possible and recounts it to the therapist in the present tense (McDonagh et al., 2005). They go over this

memory as many times as needed until distress diminishes. Oftentimes, sessions are recorded and survivors listen to the recounting of the traumatic memory as homework. Typically, a hierarchy of distressing memories is established and the most distressing memory is targeted first (Foa & International Society for Traumatic Stress, 2009). In-vivo exposure involves creating a hierarchy of avoided situations, thoughts, people, and feelings. Survivors are then asked to engage in activities, either in session or as homework, that bring them into contact with these avoided circumstances.

Randomized clinical trial. A 2005 study examined the efficacy of a CBT protocol in ameliorating the symptoms of PTSD in adult female survivors (n = 74) of CSA (McDonagh et al., 2005). This randomized clinical trial compared a CBT protocol to Present Centered Therapy (PCT) and waitlist control. This was the first randomized clinical trial for women with PTSD secondary to CSA in which CBT was compared to PCT and a waitlist control group. PCT was chosen as the active compare group to examine the efficacy of a therapy that did not include exposure, was not a non-specific supportive counseling, and was similar in dosage to CBT (McDonagh et al., 2005).

The participants were on average 39.8 years old and the majority (79.3% of the CBT group, 90.9% of the PCT group, and 69.6% of the waitlist control group) had at least a high school diploma. Half to 70% of the sample had an income of $20,000 or higher and the majority were married (59% of the CBT group, 41% of the PCT group, and 52% of the waitlist control group). Approximately 95% of participants were white. The remaining 5% of the participants identified as African American, Native American, or other. Ninety-four percent of the participants were sexually abused by either a male relative or a male known to them. There was

no description of the recruitment methods (McDonagh et al., 2005), making it difficult to generalize the findings of the study.

The Clinician Administered PTSD Scale (CAPS) was used as a screening assessment and as the main outcome measure for the study. Other outcome measures included the State-Trait Anxiety Inventory, the Trauma Symptom Inventory, the BDI, the Dissociative Experiences Scale, the State-Trait Anger Expression Inventory and the Quality of Life Inventory. Assessments were conducted at pre-treatment, post-treatment, 3- and 6-month follow up. Data from these assessments were analyzed using univariate analyses with t-tests or chi-square tests. The generalized linear models repeated measures procedure was used to analyze the variance on repeated measures. Post-hoc analyses were conducted to examine pairwise differences between groups. Intention-to-treat and completer analyses were conducted (McDonagh et al., 2005).

Once screened for eligibility, participants were randomized to one of three conditions. The CBT condition consisted of prolonged imaginal exposure (PE), in vivo exposure, and cognitive restructuring. The PCT therapy focused on psychoeducation about the diagnosis of PTSD, the common aftereffects of childhood trauma, training in problem solving, and journal writing. Both treatments consisted of seven 2-hour sessions and seven 90-minute sessions. Wait-list participants were given their choice of CBT or PCT after they completed all of the follow up assessments (McDonagh et al., 2005).

The intent-to-treat analyses showed mild improvement in PTSD symptoms for the CBT and PCT conditions. Completer analysis showed moderate improvement with nearly half of those in the CBT condition and around a third of those in the PCT condition no longer meeting criteria for diagnosis as measured by the CAPS. Long-term effects of CBT appeared to be greater than those of PCT with more CBT completers no longer meeting criteria for PTSD at 3-

and 6-month follow up. The study findings indicated that CBT and PCT were superior to wait-list control and CBT was superior to PCT for maintaining treatment gains long-term (McDonagh et al., 2005).

The dropout rate for the CBT condition was 41% overall and 100% for participants diagnosed with an Axis-II disorder, suggesting that CBT may not be well tolerated by survivors with Axis-II diagnoses (McDonagh et al., 2005).

Cognitive Processing Therapy for Sexual Assault (CPT-SA)

Cognitive processing therapy for sexual assault (CPT-SA) was developed in 1997 (Chard, Weaver, & Resick, 1997). An adaptation of CPT for rape victims, CPT-SA focuses on the typical symptom responses to childhood sexual abuse, the abuse experience itself, and the survivor's environment. CPT-SA incorporates the theories of information processing, developmental psychology, and self-trauma, and as such, targets the ways in which cognitions, development, and attachment influence the maintenance of symptoms (Chard et al., 1997).

Completed over the course of 17 weeks, CPT-SA combines individual and group therapy sessions. Individual and group sessions occur concurrently during the first nine weeks of therapy, after which clients participate solely in group therapy. The first three weeks of therapy focus on building therapeutic rapport, cohesion between group members, and psychoeducation about PTSD. The fourth through sixth weeks are devoted to exposure. This involves the survivor writing about his or her most distressing episode of abuse and reading it aloud to the therapist. They are then encouraged to write about the same episode in more detail before moving on to the next most distressing episode of abuse, if there is one. Weeks seven through nine are spent examining dysfunctional thought patterns and identifying more adaptive and realistic thoughts to replace the distorted cognitions. Together, the group spends weeks 10

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through 16 examining core beliefs in five areas: safety, trust, power, self-esteem, and intimacy. The final week of therapy sees the participants integrating what they have learned by rewriting the trauma narrative to incorporate their new understanding of how they were impacted by the abuse (Chard et al., 1997).

Case study. The first published research of CPT-SA reports case studies of two adult, female survivors of childhood sexual abuse (Chard et al., 1997). Both participants participated in the 17-week, 26 session protocol. The Symptom Checklist-90-Revised (SCL-90-R), Global Severity Index, CAPS, BDI, and Modified PTSD Symptom Scale were used to measure symptoms at pretreatment and immediately posttreatment. Both participants improved at the posttreatment on most measures. One participant scored higher on somatization at posttreatment, however this was attributed to a physical illness that the participant learned about during the course of the study. No statistical analyses were performed. The study findings indicated that the use of CPT-SA for adult survivors of childhood abuse was supported (Chard et al., 1997).

Pilot study. A 2001 study furthered the research by Chard and colleagues. The aim of this subsequent study was to examine the relationship between cognitive distortions and PTSD severity during the course of CPT-SA in a sample of women (n = 53) with a history of CSA (Owens, Pike, & Chard, 2001). The hypothesis was that CPT-SA would reduce cognitive distortions as well as PTSD severity. These constructs were measured using the Personal Beliefs and Reactions Scale, the World Assumptions Scale, and the CAPS-II. Assessment occurred pre-treatment, post-treatment, and at 3- and 12-month follow up. The participants were recruited using fliers and mailings to mental health clinics in a medium-sized Midwestern town. The average age of the participants was 33 years and 87% of the participants were Caucasian, 11% African American, and 2% were Hispanic/Latino/Mexican American. The mean years of

education was 14.2 years. Participants who met criteria for inclusion were randomly assigned to treatment or a minimal attention waitlist condition. Those assigned to the waitlist condition were offered treatment after 17 weeks. Seven waitlisted participants later completed the treatment bringing the number of participants completing the treatment to 35. Treatment consisted of the full 17 week, 26 session protocol (Owens et al., 2001).

Independent sample *t*-tests were performed to determine whether the treatment sample differed significantly from the waitlist sample on higher-order World Assumptions Scale scales, Personal Beliefs and Reactions Scale subscales, and PTSD severity at pretreatment and immediately posttreatment. A Bonferroni correction was used to obtain the most conservative measure for significance. While no significant difference was detected at pretreatment, it was found that significant differences between the treatment and minimal attention groups on measures of feelings of safety and trust, power, esteem, intimacy, beliefs about the benevolence of the world, and self-worth at post-treatment, with the treatment group seeing more improved scores in all cases. Analysis also confirmed the a priori hypothesis that cognitive distortions and PTSD severity are positively correlated. The study findings showed that CPT-SA was effective at reducing cognitive distortions and PTSD severity. As gains were maintained at both 3- and 12-month follow up, it was hypothesized that participants continued to use the skills learned to manage and challenge cognitive distortions whenever new challenges related to trauma were encountered (Owens et al., 2001).

Randomized clinical trial. This line of research was continued with a randomized controlled study examining the utility of CPT-SA for a group of women with a history of childhood sexual abuse (Chard, 2005). Seventy-one women were recruited through advertisements in the community, physical and mental health clinics, and presentations at local

mental health facilities. The participants were randomized to either active treatment or minimal

attention waitlist control. The treatment condition was 17 weeks with 26 sessions, as previously

described. Participants were between the ages of 18 and 56 years of age, with an average age of

32. The average years of education were 13 and ranged from eight to 20 years. Forty-one

percent reported an income below $10,000, 52% below $30,000, and 3.5% above $50,000. The

ethnic breakdown of the group was 14% African American, 81.4% White, 3.5%

Latino/Hispanic/Mexican, and 1% identified as "other." Fifty-seven percent of participants

reported more than 100 incidents of abuse as well as having more than one abuser. Moreover,

40% of the participants met criteria for current major depression (Chard, 2005).

Participants were assessed at pretreatment, immediately posttreatment, 3-month, and 1-

year follow up. The Clinical Administered PTSD Scale: One Week Symptom Status Version

(CAPS-SX), which is a 30-item interview used to measure the presence and severity of PTSD

symptoms, was the main outcome measure. Other outcome measures included the Structured

Clinical Interview for DSM-IV (SCID-I), the Sexual Abuse Exposure Questionnaire, the

Modified PTSD Symptom Scale, the BDI, and Dissociative Experiences Scale – II (Chard,

2005).

Cohen's d and Eta-square analyses were conducted to assess for effect size, before and

after controlling for pretreatment scores, respectively. Cohen's d for the CAPS-SX ($d = 1.52$),

MPSS ($d = 1.55$), BDI-II ($d = 1.42$), and the DES ($d = .91$) were all considered large effect sizes.

Subsequent to controlling for pretreatment scores, Eta-squared for CAPS-SX ($\eta^2 = .65$), MPSS

($\eta^2 = .70$), BDI-II ($\eta^2 = .58$), and DES ($\eta^2 = .32$) also showed strong effect sizes. Pairwise t-tests

conducted at follow up showed significant differences on the CAPS-SX at post-treatment and 3-

month follow up indicating that PTSD symptoms continued to improve over time. There were

no significant changes on any other measures, indicating that gains assessed at posttreatment were maintained at three months. No significant changes were found on any measures between 3-months and 1-year follow up, indicating that gains were maintained for one year following treatment. A MANOVA was used to conduct the intent-to-treat analysis across the four assessment points. This analysis indicated that treatment scores were significant over time on the CAPS-SX, BDI, Modified PTSD Symptom Scale, and the Dissociative Experiences Scale-II. Clinical improvement, as measured by examining the diagnostic status of both the treatment group and control group at posttreatment, was also reported. A chi-squared analysis of CAPS-SX scores showed that the treatment group was improved at a clinically significant level over the minimal attention group for PTSD symptoms (Chard, 2005).

Based on these analyses, the findings showed that CPT-SA is a promising treatment for adult survivors of childhood sexual abuse. It was hypothesized that the combined individual and group therapy format of CPT-SA may have been better tolerated as participants had opportunities to integrate what they learned in each therapy while in the other therapy (Chard, 2005).

Strengths of this CPT-SA trial include the randomized controlled design, blind assessments, and the comprehensive assessment protocol. The broad inclusion criteria is also a strength as this improves the generalizability of the study. By allowing those who were on medication, met criteria for personality disorders, had multiple lifetime traumas, suicidal ideation, and non-fatal self-injurious behaviors to participate, the sample is more reflective of patients who are seen in clinical practice. The small sample size and small number of minorities participating in the study are limitations. Comparing the treatment group to a waitlist limits the ability to judge the efficacy of CPT-SA compared to other active treatments. Further, it was

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unclear whether treatment success was due to the exposure component, the cognitive processing component, or both working together (Chard, 2005).

Dismantling study. To address the question of whether the individual components were responsible for participant improvements or if it was an action of both components working together, a dismantling study of CPT was conducted (Resick et al., 2008). This was accomplished by randomizing participants into one of three arms. One arm consisted of the 17-week CPT protocol. Another arm was cognitive therapy only (CPT-C), which was identical to the full protocol without the written accounts (WA) component. In the remaining arm, WA only, participants wrote about their traumas, read them aloud to therapists, and gave subjective units of distress (SUDS) scores. Therapists did not engage in cognitive therapy with WA participants (Resick et al., 2008).

The intent-to-treat sample of 150 women was recruited in the St. Louis, Missouri area through referrals from victim assistance agencies, therapists, flyers, newspaper advertisements, and word of mouth. The average age of participants was 35.4 and they had an average of 13.8 years of education. Of the sample, 62% were White, 34% African American, 3% Hispanic, and 1% identified their race as "other." The majority of the participants had a total household income of less than $20,000 per year. Twenty percent of the women were married or cohabitating. The average amount of time elapsed since the index trauma was 14.6 years (Resick et al., 2008).

All measures were completed at pretreatment, immediately posttreatment, and 6-month follow up with some collected weekly during treatment. The CAPS, SCID-I, Sexual Abuse Exposure Questionnaire, and the Physical Punishment Scale of Assessing Environments – III were used to assess trauma severity and symptoms. Self-report measures included the BDI,

Personal Beliefs and Reactions Scale, Posttraumatic Diagnostic Scale, State-Trait Anger Expression Inventory, State-Trait Anxiety Inventory, and the Therapeutic Outcome Questionnaire. The other assessments were collected at pretreatment, immediately posttreatment, and 6-month follow up (Resick et al., 2008).

The BDI and Posttraumatic Diagnostic Scales were collected weekly as well as at pretreatment, two weeks posttreatment, and 6-month follow up. Data was analyzed for the nine time points with a linear mixed-effects regression model using maximum likelihood estimation and exact dates of assessment. Time was a categorical variable. A significant group effect for the Posttraumatic Diagnostic Scale was found, indicating that the three treatment groups differed. Comparisons for each session using a least square means showed that CPT did not differ from CPT-C on the Posttraumatic Diagnostic Scale or BDI, but CPT did differ from WA at posttreatment on the Posttraumatic Diagnostic Scale. CPT-C differed from WA at assessments during treatment on the Posttraumatic Diagnostic Scale. Groups did not differ at the pretreatment and 6-month follow up assessments. Multiple paired t-tests showed that there was significant improvement on the Posttraumatic Diagnostic Scale by week two for the CPT-C group, by week three in the CPT group, and at week five for the WA group. For the BDI, significant improvement was found at week three for the CPT-C group, at week four for the CPT group, and at week six for the WA group (Resick et al., 2008).

Data from the CAPS and SCID were analyzed for the intention-to-treat sample with the last observation carried forward for missing data. At pretreatment, all participants met diagnostic criteria for PTSD. At 6-month follow up, 60.4% of the CPT group, 56% of the WA group, and 61.7% of the CPT-C group no longer met criteria for PTSD, as measured by the CAPS. No significant difference in PTSD diagnostic status between the groups at 6-month

follow up was found. At pretreatment, 50% of the participants met criteria for Major Depressive Disorder according to the SCID. At posttreatment, 24% met criteria for Major Depressive Disorder and 20.7% met criteria at 6-month follow up. Again, no significant differences between the groups on this measure were found. Based on these data and contrary to predictions, it was concluded that the full protocol for CPT-SA is not superior to either component alone, but that all CPT, CPT-C, and WA were successful at treating PTSD as well as secondary symptoms, namely Major Depressive Disorder (Resick et al., 2008).

The limitations of the study include only female participants and the lack of additional assessment points to detect differences between the treatments (Resick et al., 2008).

Cognitive Processing Therapy Versus Prolonged Exposure

Randomized clinical trial. An earlier study examined data on the differences in treatment response for a group of women (n=121) with and without a history of CSA who had experienced rape (Resick, Nishith, & Griffin, 2003). The analysis was part of a randomized controlled trial designed to determine the efficacy of a six-week CPT or six-week PE protocol for female rape survivors (Resick, Nishith, Weaver, Astin, & Feuer, 2002). This initial analysis compared symptoms of PTSD, depression, and indicators of complex trauma response such as dissociation, self-reference difficulties, and tension reduction behaviors between the two groups (Resick et al., 2003).

The average age of the participants was 32 years and they had an average of 14.3 years of education. Seventy-one percent of the women were white, 25% were African American, and the remaining 4% were from other racial groups. The majority of participants (75.7%) were never married, divorced, or separated. Of the 121 participants, 41% had a history of child sexual

abuse. Neither the examined article nor the parent article described the means of recruiting

participants (Resick et al., 2003).

The CAPS was used to measure PTSD and the BDI to measure depression. The Trauma

Symptom Inventory measured short- and long-term outcomes from trauma. This assessment

inventory includes scales that indicate levels of dissociation, dysfunctional sexual behavior,

intrusive experiences, impaired self-reference, and sexual concerns. In addition, a standardized

trauma interview developed for this study, covering demographics, trauma history, information

about the index rape, social support, and treatment history, was conducted. This standardized

interview incorporated the Sexual Abuse Exposure Questionnaire and the Physical Punishment

Scale of Assessing Environments – III, both designed to assess history of childhood abuse

events, both sexual and physical. Assessments occurred pretreatment, post-treatment, and at

three-month and nine-month follow-up (Resick et al., 2003).

A repeated measures MANOVA was performed to compare the total scores on the CAPS

and the BDI between the two groups (Resick et al., 2003). Significant improvements were found

on the CAPS or BDI scores from pre- to post-treatment for both groups. These gains were

maintained through nine-month follow up. A MANOVA to compare the groups at pretreatment

on the three Trauma Symptom Inventory factors (Self, Trauma, and Dysphoria) found that those

with a childhood abuse history scored significantly higher on the Self and Trauma factors, but

indicated no difference on the Dysphoria factor between the two groups. A post hoc univariate

analysis revealed that both groups had significant improvement on all three factors at post-

treatment assessment, however the childhood abuse group continued to score higher on Self and

Trauma factors. A nonsignificant MANOVA result showed that once pretreatment scores were

taken into consideration, there were no differences in Self and Trauma factors on the Trauma

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Symptom Inventory between the child sexual abuse and non-child sexual abuse groups at post-treatment. These results indicated that both CPT and PE short-term protocols were effective at reducing PTSD symptoms as well as the more complex symptoms related to childhood sexual abuse (Resick et al., 2003).

As all participants in this study had experienced rape as an adult, it is of interest whether the index trauma used for treatment was the more recent event or an event that occurred in childhood. This is an important methodological issue because it may have affected the differences between the two groups. Furthermore, it is important consider if improving at similar rates is an appropriate measure of success for those who experienced childhood sexual abuse or perhaps there is an optimal functioning threshold to determine success. Finally, it is important to determine whether improvements were maintained over a longer period of time and whether participants experienced any interpersonal traumas subsequent to the treatment study (Resick et al., 2003).

Skills Training in Affective and Interpersonal Regulation (STAIR)

Skills Training in Affective and Interpersonal Regulation (STAIR) was developed to address affect regulation and interpersonal difficulties experienced by survivors of CA (Cloitre, Koenen, Cohen, & Han, 2002). STAIR specifically addresses disturbances in recognizing and identifying emotions, managing difficult emotions, distress tolerance, and ability to experience positive emotions. The hypothesis was that addressing these deficits would allow adult survivors of CA to engage in prolonged exposure (Cloitre et al., 2002). Past research had shown PE to be effective at ameliorating the effects of childhood abuse in adult samples (McDonagh et al., 2005), however there was a high drop-out rate for survivors of CA.

Randomized clinical trials. A randomized clinical trial designed to test the efficacy of STAIR followed by modified PE was completed (Cloitre et al., 2002). The treatment was organized into two phases. The first phase was eight, one-hour sessions of STAIR therapy conducted weekly. The second phase consisted of four weeks of 1.5-hour sessions of modified PE conducted twice weekly. Traditional PE involves exposure to both trauma narratives and to in vivo trauma cues. For this study, in vivo exposures were eliminated and three new components added. The first new component had the therapist guiding the participant to use emotion regulation skills learned in the first phase. Secondly, the participant identified the presence of difficult emotions such as anxiety, fear, dissociation, and sadness during the exposure. Finally, the participant and therapist worked together to identify negative interpersonal schemas embedded in the trauma narrative and compare those schemas to more adaptive interpersonal schemas created during the STAIR portion of the therapy (Cloitre et al., 2002).

Participants in this study were 58 women recruited by means of community advertisements and word of mouth. They were randomized to either the active treatment group or a WL control condition. The average age of participants was 34 years (SD=7.22) and 89% had either completed college or had some college. The ethnicity breakdown for the sample showed that 46% were Caucasian, 20% were African American, and 15% were Hispanic, with the remaining participants identifying as Asian, Caribbean, and Native American. The majority of the sample was either single or divorced (66%). Annual income was split between more than $30,000 (26%), between $15,000 and $30,000 (43%), and less than $15,000 (31%). Nearly half (48%) of the participants experienced physical and sexual abuse, 39% experienced sexual abuse only, and 13% had experienced physical abuse only (Cloitre et al., 2002).

The Childhood Maltreatment Interview Schedule and the Sexual Assault and Additional Interpersonal Violence Schedule were used to assess for trauma history at pretreatment. Outcome measures included the CAPS, the SCID-I, the Modified Posttraumatic Stress Disorder Symptom Scale, the General Expectancy of Negative Mood Regulation Scale, the Anger Expression subscale, the Toronto Alexithymia Scale, the BDI, the Dissociation Scale, and the State-Trait Anxiety Inventory. Assessment measures were collected at pretreatment, mid-treatment, post-treatment, and at 3- and 9-month follow up (Cloitre et al., 2002).

MANOVAs were used to compare the two groups on symptom domains at pre-, mid-, and immediately posttreatment. The domains examined were PTSD symptoms, affect regulation difficulties, and interpersonal problems. Group was a between subjects variable and time was a within subjects variable. The Group X Time interaction effects were significant in all three domains: PTSD symptoms (Wilks's $\Lambda = 12.61$, $p < .01$), affect regulation (Wilks's $\Lambda = 2.85$, $p < .01$), and interpersonal problems (Wilks's $\Lambda = 4.68$, $p < .01$). Pairwise t-tests revealed that total scores on the CAPS were improved at 3-month follow-up ($M = 26$, $SD = 17.4$), $t(29) = 2.23$, $p = .04$. No other differences were noted at 3-month follow up, indicating that all other gains were maintained. At 9-month follow up, CAPS total score continued to improve over scores observed at 3-months ($M = 22$, $SD = 14.5$), $t(16) = 2.82$, $p = .01$. Interpersonal and functional measures also showed significant improvement at 9-month follow up: the Inventory of Interpersonal Problems ($M = .84$, $SD = .54$), $t(15) = 2.4$, $p = .03$; the Social Adjust Scale ($M = 1.83$, $SD = .48$), $t(16) = 2.21$, $p = .04$; and the Interpersonal Support Evaluation List ($M = 34$, $SD = 8.1$), $t(16) = 3.29$, $p = .01$. A strong therapeutic alliance in Phase-I was a predictor of positive outcomes in Phase-II ($r = -.62$, $p < .03$), as were improvements in mood regulation ($r = -.47$, $p < .03$) (Cloitre et al., 2002).

The study findings indicate that a phase-based treatment approach is valuable in treating chronic PTSD. It may be that alliance building, assessment of client strengths, and the opportunity for the survivor to develop emotion regulation skills without the burden of exposure therapy allowed for consolidation of gains during Phase-I prior to moving on to Phase-II exposures (Cloitre et al., 2002).

The limitations of the study include the small number of participants, exclusion criteria, and the female only sample. Further limitations include the lack of mid-point outcome data reporting. This information could potentially show how much skills training and therapeutic alliance influenced improvement in scores. It is possible that symptoms improved during Phase-I of the treatment and without analyzing this data it is impossible to know how much can be attributed to Phase-I versus Phase-II treatment (Cloitre et al., 2002).

A second study (Cloitre et al., 2010) addressed some shortcomings of the 2002 research. This randomized controlled trial used three treatment arms to examine the efficacy of STAIR therapy followed by modified PE (STAIR/Exposure). STAIR/Exposure was compared against two control conditions: supportive counseling followed by exposure (Support/Exposure) and STAIR followed by supportive counseling (STAIR/Support). The STAIR/Exposure treatment condition was 16 weeks in duration as described in the preceding study, and other treatment arms matched STAIR/Exposure for time and dosage. The purpose of the study was to assess the adverse affects of exposure therapy in treating PTSD related to early life trauma. Comparing STAIR/Exposure to Support/Exposure enabled evaluation of the advantages of adding skills training prior to conducting exposure therapy. Comparing STAIR/Exposure to STAIR/Support provided baseline data concerning adverse effects in a nonexposure treatment with the same controls (Cloitre et al., 2010).

Participants were 104 women between the ages of 18 and 65 years with a diagnosis of PTSD related childhood physical or sexual abuse. Assessment measures were administered at pretreatment, post-treatment, and 3- and 6-month follow up. PTSD was diagnosed using the CAPS, which was also used as a treatment outcome measure along with the SCID-I, the PTSD Symptom Scale-Self Report, the Negative Mood Regulation Scale, the Inventory of Interpersonal Problems, the BDI, State-Trait Anxiety Inventory, and the Interpersonal Support Evaluation List (Cloitre et al., 2010).

An intent-to-treat analysis was conducted with data from all participants according to their randomization. The primary interest was in the main effect of treatment and the interaction between treatment and time. Main effects for treatment were measured at the alpha level of 0.05 (two-sided). Effect sizes were estimated using Cohen's *d* using a standardization based on the pooled standard deviation of the three treatment conditions at baseline. To assess the significance of between-treatment differences, logistic regression and likelihood ratio tests were conducted (Cloitre et al., 2010).

The study results indicated that diagnostic status was not statistically different between the groups at post-treatment assessment with many of the participants being negative for PTSD at that time (Cloitre et al., 2010). Full remission, which was defined as a score of 20 or less on the CAPS, was achieved by 27% of participants in the STAIR/Exposure group, 24% in the STAIR/Support group, and 6% of the Support/Exposure group. The remission rate was significantly higher for those in the STAIR/Exposure condition than for participants randomized to the Support/Exposure arm of the study. Remission maintenance at 3- and 6-month follow up differed significantly between the groups with 55% of the STAIR/Exposure participants maintaining PTSD-negative status, 37% of STAIR/Support participants, and 21% of the

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Support/Exposure participants. Follow-up pairwise comparison showed that the likelihood of maintaining remission was greater in the STAIR/Exposure condition than in the Support/Exposure condition. Taken altogether, the results indicate that the STAIR/Exposure treatment was superior to Support/Exposure in attaining persistent remission from PTSD. Additional analyses showed that STAIR/Exposure also resulted in reducing problems in emotion regulation, anger expression, and anxiety. Furthermore, STAIR/Exposure was more efficacious at improving interpersonal problems than the other treatment conditions (Cloitre et al., 2010).

Seeking Safety Plus Revised Prolonged Exposure

Seeking Safety is a coping skills training therapy specifically developed for individuals with dual diagnosis of substance use disorder and PTSD (Najavits, Schmitz, Gotthardt, & Weiss, 2005). There are 25 topics and each topic introduces a new coping skill relevant to both diagnoses. Examples of the 25 topics include items such as grounding, honesty, compassion, integration of split selves, and anger management. The goals of Seeking Safety are abstinence from substances and amelioration of PTSD symptoms.

In the proceeding study, prolonged exposure was used to meet the needs of the participating population. Rather than focusing on a single traumatic memory in a single exposure session, participants were allowed to fluidly process multiple memories or events, including painful memories related to substance use (Najavits et al., 2005). Therapists were available to participants at all times throughout the therapy by pager. This was implemented to address the highly impulsive nature of this population. Exposures were moderated based on the individual's needs and tolerance. For example, if a participant had used substances, exposure did not take place that week.

Pilot study. While the majority of treatment outcome studies for C-PTSD focus on female participants, only men who were survivors of childhood abuse were recruited for this study (Najavits et al., 2005). This pilot study included five men with comorbid substance use disorder and C-PTSD (Najavits et al., 2005).

The participants were recruited via fliers posted at a hospital in a small, New England town as well as by word of mouth. All participants were Caucasian with an average age of 37 years. Most were married (60%), all worked full-time and were in the lower to middle class income bracket with an average monthly income of $2,920. The average age for first trauma was 8.8 years. Participants reported experiencing between two to ten traumas (Najavits, et al., 2005).

Participants attended a maximum of 30 sessions over the course of five months in exchange for completing assessments. No other compensation was offered. Participants were given freedom to choose which and how many sessions to attend. All five participants attended the maximum 30 sessions, indicating a low drop-out rate. Participants attended an average of 12 Seeking Safety sessions and eight exposure sessions. They were also allowed to be in other therapy during their participation in the study (Najavits et al., 2005).

Treatment outcome data was reported for the Addiction Severity Index, Trauma Symptom Checklist – 40 (TSC-40), Global Assessment of Functioning, World Assumptions Scale, Social Adjustment Scale, and safety questionnaires. Data was collected at intake and at treatment completion. Two-tailed, paired-samples *t*-tests were performed comparing intake scores to end of treatment scores. Total scores for the TSC-40 were reduced at post-treatment with significant reductions on the anxiety, dissociation, and sexual abuse trauma subscales. There were trends towards improvement on two other subscales of the TSC-40, depression and sleep problems, though these improvements did not reach the level of significance. The

meaningfulness subscale of the World Assumptions Scale improved significantly. No improvement was reported for the other two subscales of the World Assumptions Scale. For the Social Adjustment Scale, a trend toward improvement was found for work role area, one of the seven subscales. Participants reported positive satisfaction with the therapy. They were significantly more willing to engage in the Seeking Safety portion of the protocol (Najavits et al., 2005).

The diversity of improvements amongst this small sample is notable as significant gains were found in drug use, family functioning, and trauma symptoms, including dissociation. Particularly noteworthy, participants reported less suicidal ideation at treatment completion. The study findings need to be considered in the context of the limitations associated with the study design. First, the study had a very small, homogeneous sample, which reduces the ability to generalize the study findings to other populations. Additionally, there no follow-up data were collected, therefore it is unknown whether the improvement in the study outcomes were maintained over time (Najavits et al., 2005).

Trauma Focused Group Therapy (TFGT)

Trauma focused group therapy is a manualized intervention that involves 24, 90-minute sessions of group therapy conducted weekly. In session, participants explore and activate traumatic memories to gain a better understanding of how trauma impacts sense of self, affective experiences, and interpersonal functioning (Classen et al., 2011). Cognitive restructuring is used to help participants gain an emotional understanding of traumatic events so that the trauma and related memories no longer impair current experience and functioning. Psychoeducation regarding the impact of trauma, as well as how childhood trauma affects current relationships and functioning is incorporated throughout the therapy.

Pilot study. A pilot study to help determine whether it was necessary and helpful for therapists to focus on survivors' memories of childhood trauma, or if it was better to focus on current problems was conducted (Classen, Koopman, Nevill-Manning, & Spiegel, 2001). Fifty-five women were recruited through newspapers, fliers, and radio advertisements. Participants were all over the age of 18 years, 52% were married, 37% were single, 4% were divorced or separated. The ethnic breakdown was 64% European American, 15% Hispanic or Latina, 8% Black or African American, 4% Native American, and 10% identified as "other." The sample was well educated with 44% of participants possessing a four-year college degree, 33% reporting some college, and 17% with graduate or professional school degrees. The remaining 6% had high school diplomas. For those who reported household income, 17% were below $20,000, 39% were between $20,000 and $39,999, 21% were between $40,000 and $59,999, 6% were between $60,000 and $79,999, and 15% were above $80,000. All participants met DSM-IV criteria for PTSD (Classen et al, 2001).

Participants were randomized to TFGT, Present-focused Group Therapy (PFGT), or waitlist control group. Active treatment conditions consisted of one hour weekly sessions for 24 weeks. All participants completed the TSC-40, the Inventory of Interpersonal Problems, and the Sexual Experiences Survey at pretreatment and posttreatment. A one-tailed *t*-test for independent samples was conducted to determine statistical significance between groups. For participants who reported sexual revictimization on the Sexual Experiences Survey, a chi-squared analysis was used to examine the significance of treatment versus waitlist condition. Due to the small sample size, preliminary outcome differences between active treatment conditions and waitlist control were reported (Classen et al, 2001).

The active treatment group showed significantly greater reductions in dissociation and sexual trauma than waitlist controls (Classen et al, 2001). Greater reduction in scores for the treatment group on measures of anxiety, sexual problems, and total TSC-40 score were reported, however these differences did not reach statistical significance. On the Inventory of Interpersonal Problems, the treatment group reported significantly greater reduction than waitlist control in non-assertiveness, being exploitable, and vindictiveness. The treatment group also showed a statistical trend towards greater improvements over waitlist control in the areas of social avoidance, being cold, overly nurturing, intrusive, and domineering, however these differences did not rise to the level of statistical significance. A chi-square analysis was performed to examine whether there was a difference between treatment and control groups on sexual revictimization, however no statistical difference between groups was found. These findings indicated that group therapy for CSA survivors was beneficial; however, because of the small sample size, the study findings cannot be generalized to other populations (Classen et al, 2001).

Randomized clinical trial. An RCT was later conducted with the same design as the above pilot study. The participants in this study were all considered at-risk for HIV infection (Classen et al., 2011). The purpose was to examine the efficacy of TFGT compared with PFGT at reducing HIV risk behavior and PTSD symptom severity for adult female CSA survivors. One-hour sessions were conducted weekly for 24 weeks.

Participants were 166 women over the age of 18 with a history of CSA. They were randomized into the TFGT, PFGT, or waitlist control group (Classen et al., 2011). The average age of participants was 36, the majority had a bachelor's degree or some college, and were employed full or part time. Household income for most participants fell in the $20,000 to

$40,000 range. The majority of participants were White/European American: 66.7%, 58.9%, and 63.6% for the TFGT, PFGT, and waitlist control group, respectively. Black participants made up 11.1%, 5.4%, and 7.3% of the sample for TFGT, PFGT, and waitlist control groups, respectively. 8.9% of the PFGT group identified as Mexican American as did 9.1% of the waitlist control group. Participants who identified as other Hispanic/Latino made up 9.3% of the TFGT group, 8.9% of the PFGT group, and 5.5% of the control. Asian Americans made up 5.6% of the TFGT group, 8.9% of the PFGT group, and 11.1% of the control group. Native Americans comprised 5.4% of the PFGT cohort and 1.8% of the control. Those who identified as "other" were 7.4% of the TFGT group, 7.1% of the PFGT group, and 10.9% of the waitlist control group. Participants were fairly evenly split across relationship statuses with 31.5% of TFGT, 35.7% of PFGT, and 41.8% of waitlist control groups reporting that they had never married. Those who reported that they were either married or living together comprised 35.2%, 30.4%, and 30.9% of the TFGT, PFGT, and waitlist control groups, respectively. Individuals who reported that they were divorced, separated, or widowed made up 29.6% of TFGT, 25% of PFGT, and 21.8% of waitlist control groups. Several participants indicated their relationship status as "other" and they comprised 3.7% of the TFGT group, 8.9% of the PFGT group, and 5.7% of the waitlist control group (Classen et al., 2011).

Assessments were given at baseline, immediately posttreatment, and six months posttreatment with the exception of the Posttraumatic Growth Inventory, which was given at baseline and six-month follow up (Classen et al., 2011). Other assessment measures included the PTSD Checklist, the Sexual Experiences Survey, the Drug and Alcohol Use Interview, the Sexual Risk Behavior Assessment Schedule, the Inventory of Interpersonal Problems, and the Trauma Symptom Inventory. Data analysis used intention-to-treat and all participants were

analyzed in their assigned group. Outcome measures were analyzed using an ANOVA and one sample *t*-tests were computed to assess change over time for each condition (Classen et al., 2011).

Contrary to the a priori hypothesis, the study findings indicated that PFGT was more effective at reducing HIV risk behavior than TFGT, however there was no advantage when compared to waitlist control. These results did not support using either group therapy to reduce sexual revictimization or HIV risk behaviors. Likewise, no difference between the two treatment groups for measures of PTSD severity was found, which also conflicted with the a priori assumptions that TFGT would outperform PFGT. Group treatment did, however, result in less severe PTSD than waitlist control. For secondary measures, TFGT had a significantly greater reduction than PFGT in anger/irritability. For the remaining areas of impaired self-reference, depression, dissociation, and sexual concerns, the overall model revealed no significant differences between groups, however there was a statistical trend for improvement amongst the treatment groups compared to waitlist control. Based on this data, it was concluded that group therapy can affect a range of problems related to C-PTSD and have a significant affect on PTSD severity (Classen et al., 2011).

Combined Cognitive Processing, Skills Training, and Supportive Group Therapy

A pilot study of a group intervention was conducted that combined three theoretical frameworks to inform eight or 16-sessions of group therapy (Sikkema et al., 2007). One element of the group intervention involved a cognitive understanding of trauma symptoms as an approach/avoidance dialectic. From this perspective, intrusive memories are an attempt by the survivor to understand and integrate traumatic memories into consciousness and avoidance of internal and external cues is an attempt to avoid anxiety. Group therapy involved establishing

support and trust amongst participants so that survivors could share their personal stories and express emotions related to the abuse. This is described as behavioral exposure. Another element was psychoeducation regarding coping skills. Group therapists taught relaxation techniques, positive self-talk, and cognitive restructuring as skills for managing distressing emotions. Changeable stressors were managed from a communicative problem solving approach. Finally, the group was used as an opportunity for participants to learn interpersonal skills (Sikkema et al., 2007).

Pilot study. A pilot study was conducted to examine whether the aforementioned group treatment was effective at improving psychological functioning and well-being of HIV-positive individuals with a history of CSA (Sikkema et al., 2007). Twenty-eight men and women were randomized to either 15 group sessions of HIV and trauma coping skills, 15 support group sessions, or waitlist control. Participants were recruited from a prior study on HIV related bereavement as well as through fliers posted in the community. Seven men and 21 women were included in the study. The average age of the men was 47 years and the women averaged 42 years of age. The majority (men: 85.8%, women: 85.7%) of participants had a 12th grade or higher education. The race breakdown for the men was 85.7% African American and 14.3% "other." The group of women was comprised of 66.7% African Americans, 19% "other," 9.5% White, and 4.8% Hispanic or Latina. The majority (85.7% of men and 66.7% of women) of participants made less than $10,000 per year, with the remainder of participants making between $11,000 and $30,000. Most participants identified as heterosexual with 28.6% of men and 4.8% of women identifying as homosexual, and 28.6% of men and 9.5% of women identifying as bisexual (Sikkema et al., 2007).

The Trauma Symptom Inventory was used as an outcome measure at pretreatment and immediately post-treatment. Clinical significance was used to assess change. Clinical significance was defined using a Reliable Change Index, which was computed using the variance of a normative sample against which to compare the scores of the participants. Participant change was considered either reliably deteriorated, not changed, reliably improved, or recovered based on whether scores were greater than the Reliable Change Index in a negative or positive direction. As HIV-positive norms were unavailable, the normative data from the Trauma Symptom Inventory scoring manual was used to construct clinically significant cutoffs and Reliable Change Indexes for the 10 Trauma Symptom Inventory clinical scales (Sikkema et al., 2007).

Analysis of the outcome data showed that 76.9% of participants exhibited clinically meaningful change on at least one of the ten Trauma Symptom Inventory scales. However, the median number of scales that participants improved on was one. For the mood and anxiety scales, 77.4% of participants showed no meaningful change. Most (71.2%) of participants showed no meaningful change on the trauma-related symptoms. The behavioral difficulties cluster showed the highest rate of positive change with 21.3% of participants scoring in the reliable improvement or recovery range. A majority of the scales in the cluster (65%) showed no meaningful change. Aggregating the change scores across all 10 Trauma Symptom Inventory scales resulted in 71.3% of scales showing no change. The results of the study suggest that the intervention can improve trauma-related symptoms amongst HIV-positive CSA survivors, despite the lack of change for majority of participants, as most participants improved on at least one Trauma Symptom Inventory scale (Sikkema et al., 2007).

Eye Movement Desensitization and Reprocessing

Eye movement desensitization and reprocessing (EMDR) therapy was designed to alleviate distress related to traumatic memories (Shapiro, 1989). The patient attends to an awareness of an image of the memory, a negative statement about the self, and/or their physical response. While maintaining this awareness, the therapist uses bilateral physical stimulation. Most commonly, the therapist moves their hand left to right while the patient follows the movement with their eyes. This is known as saccadal eye movements. Other bilateral stimulation, such as repeatedly tapping the left then right shoulder or repeatedly playing a tone first in the left ear and then the right, can also be used. Throughout the session, the client reports their subjective distress. The memory is considered processed when subjective distress is significantly relieved (Shapiro, 1989).

Pilot study. The first published study of EMDR for a population of females with a history C-PTSD was conducted in order to evaluate the effectiveness of a brief intervention (Scheck, Schaeffer, & Gillette, 1998). In this study, 60 women between the ages of 18 and 25 years were recruited by means of fliers delivered to municipal agencies. The majority of participants were Caucasian (62%) with African American (15%), Hispanic (15%), and Native American (8%) making up the remainder of the sample. The average amount of education was 12 years. Participants were randomly assigned to receive either two sessions EMDR or two sessions of active listening, which served as the control group. There were no significant differences between groups for age, education level, or ethnicity (Scheck et al., 1998).

The BDI, the State-Trait Anxiety Inventory, the Penn Inventory for Posttraumatic Stress, the Impact of Events Scale, and the Tennessee Self-Concept Scale were used to measure symptomatology. Subjective Units of Distress were also collected during treatment to measure

participants' distress levels. Data was collected at pretreatment, immediately post-treatment, and

at 90-day follow up. Scores were analyzed using factorial ANOVAs with type of treatment as a

between-subjects factor and pre-post as a within-subjects factor (Scheck et al., 1998).

There were significant pre-post improvements for participants in both conditions, and

those in the EMDR group showed significantly better improvement than the active listening

group on the BDI, the Penn Inventory for Posttraumatic Stress, the State-Trait Anxiety

Inventory, and the Impact of Events Scale. Follow up data was collected using the BDI and the

Impact of Events Scale in a non-standardized format, therefore this data was not submitted to

statistical analysis (Scheck et al., 1998).

Clinical significance was based on normative samples for the demographics represented

in the participant sample. Norms were developed for the Tennessee Self-Concept Scale, the

State-Trait Anxiety Inventory, the BDI, and the Penn Inventory for Posttraumatic Stress. No

normative sample was available for the Impact of Events Scale because item content on that tool

relates to a specific trauma. Upon comparing z scores, mean scores for participants in the EMDR

group fell within one standard deviation of the mean for the normative scores. For the active

listening group, only mean scores for the State-Trait Anxiety Inventory fell within one standard

deviation of the normative mean. The Tennessee Self-Concept Scale measures self-esteem.

Analysis of data from this measurement showed no significant difference between the EMDR

group and the AL group, however both groups had significantly improved scores on this scale

(Scheck et al., 1998).

The absence of long-term data and restricted age range coupled with a broad definition of

dysfunctional behavior of the sample are study limitations. Dysfunctional behaviors were

defined as arrests, promiscuity (four or more partners in a year), runaway behavior, and drug and

alcohol use. Additionally, participants were recruited through municipal agencies and it is not uncommon for this population to be distrustful of government entities (Scheck et al., 1998). Lack of behavioral measures and absence of treatment fidelity measures also limit our ability to assess the validity of the treatment (Scheck et al., 1998).

Randomized experimental evaluation. A study to examine the efficacy of EMDR for adult female survivors of CSA was performed (Edmond, Rubin, & Wambach, 1999). A total of 59 participants were recruited through newspaper advertisements and fliers mailed to agencies in central Texas. The majority (85%) of the participants were white, the mean age was 35 years, and the education mean was 15 years. Most participants (62%) were employed and the average salary was $29,178 per year. More than one-third (36%) of the participants were married, 24% were single, 20% were divorced, and 17% were cohabitating. The participants were randomly assigned to EMDR, routine individual treatment, or WL control group. Routine individual treatment was defined as any treatment approach routinely followed by therapists to treat symptoms and issues arising from childhood sexual abuse (Edmond et al., 1999).

Individuals in the active treatment groups received six, 90-minute individual therapy sessions. SUDS and Validity of Cognition scores were recorded approximately three times per session for both the EMDR group and the routine treatment group. Assessments were conducted at pretreatment, immediately post-treatment, and at three-month follow up. Outcome measures included the State-Trait Anxiety Inventory, the Impact of Events Scale, the BDI, and the Belief Inventory. Participants in the WL control group also completed measures at the end of six weeks, prior to engaging in their choice of therapy. The control group was excluded from the follow up data as most had received treatment in the intervening three months (Edmond et al., 1999).

A MANOVA was used to examine the significance of differences in posttest scores among the three groups across four outcome measures (State-Trait Anxiety Inventory, Impact of Events Scale, BDI, and Belief Inventory). The same procedure was used to examine overall significance between treatment groups at follow up. Using Wilks's lambda, it was determined that 39% and 32% of the variance in the dependent variables at posttest and follow up, respectively, was accounted for by treatment condition. This is indicative of large treatment effects. By conducting univariate analyses of variance, it was found that results on the BDI at posttest did not reach statistical significance. However, at follow up, the difference between the EMDR and the routine treatment group did reach significance on the BDI. On the State-Trait Anxiety Inventory, results were significant at posttest and follow up. Results for the Impact of Events Scale were significant at posttest, but not at follow up. However at posttest, both the EMDR and routine treatment group scored significantly better than the control group. Results for the EMDR and the routine treatment groups were significantly better than control at posttest, but they did not differ from each other at posttest or follow up (Edmond et al., 1999).

Participants in the EMDR group scored significantly better than the control group at posttest on every outcome measure, however there was no significant difference between the EMDR group and the routine treatment group. The lack of difference between EMDR and routine treatment at posttest indicates that EMDR was not more effective than routine treatment (Edmond et al., 1999).

The number of participants (n=59) means that lack of statistical significance between EMDR and routine treatment groups at posttest should be interpreted with caution due to the potential risk of Type II error. The small number of sessions is also a limitation of the study (Edmond et al., 1999).

A subsequent study was published reporting the results of an 18-month follow up to the above study to investigate the hypothesis that participants in the EMDR group would continue to see improved symptoms and trauma resolution over time (Edmond & Rubin, 2004). The 42 participants in this later study were 35% Caucasian, 5% African American, 2% Hispanic, 2% Asian American, 2% mixed ethnicity, and 5% identified as "other." The mean age of participants was 36 years and mean education was 15.2 years. Sixty-two percent were employed full time and the average income was $30,400 per annum. Thirty-five percent of participants were married, 23% were divorced, 23% were single, 14% were cohabitating, and 5% were widowed. Ninety-one percent of participants had obtained therapy to address CSA in the intervening months since they left the prior study. Over half of those who sought therapy reported that they targeted the same issue that had been the focus of treatment in the original study, indicating that the issue had not been resolved to the participant's satisfaction during the study. Forty percent of the participants had belonged to the routine treatment group, 33% to the EMDR group, and 26% to the control group (Edmond & Rubin, 2004).

The same four outcome measures as the original study were used: the State-Trait Anxiety Inventory, Impact of Events Scale, BDI, and the Belief Inventory. A Multivariate Analysis of Covariance (MANCOVA) was used to test the overall significance of differences of 18-month follow up scores for the three treatment groups. As differences in 18-month follow up scores proved to be significantly different between the three treatment groups, a separate univariate analysis of variance was administered for each outcome measure. Significant differences were discovered in improvement between the EMDR group and the control group on all four outcome measures, however no significant differences were found between the EMDR group and the routine treatment group (Edmond & Rubin, 2004). It is important to note that most (91%) of the

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participants had received therapy subsequent to participating in the research, which may have significantly impacted the study outcomes.

Taken altogether, EMDR was found to be effective at ameliorating trauma related difficulties and the EMDR group maintained gains at 18-month follow up. However, there were no significant differences between the EMDR group and the routine therapy, therefore no claim can be made about the difference between EMDR and routine therapy for this population. There were limitations to the study design to consider that include small sample size, which can increase the risk of Type II error. Also, the participants were volunteers and those who volunteer for such studies may be unlike those who do not volunteer. As previously noted, the results may also be limited by the confounding treatments received by participants in the intervening 18-months (Edmond & Rubin, 2004).

<center>Non-Exposure-Based Paradigms</center>

Resource Development Installation (RDI)

Resource Development Installation (RDI) is a component of EMDR that focuses on strengthening positive memories (Korn & Leeds, 2002). The therapist does this by identifying the client's needed resources, asking them to think of a time when they had that resource, and then engaging in the EMDR protocol while the client keeps that memory in mind (Korn & Leeds, 2002). In the proceeding study, only RDI was used and the exposure component of EMDR was not included in the treatment.

Case studies. Two case reports were described in a 2002 study of a RDI for C-PTSD (Korn & Leeds, 2002). The purpose of the study was to describe an RDI only protocol as well as examine outcomes on two trauma measures. Participants were clients who were seeking treatment in an outpatient clinical practice. The two participants were women in between the

<center>65</center>

ages of 30 and 39 years. They were seen for weekly 90-minute sessions and the study period was three weeks. One participant was a divorced college graduate who worked as a full-time bank teller. She reported sexual abuse by her father from age four through age 12 years. The second participant was a single junior college graduate working as a secretary who lived with her boyfriend at the time of the study. She reported physical abuse by her father from an early age until she left home at age 16 years. She had a history of substance abuse from age 14 years, and had been clean and sober for three years. Both participants met criteria for C-PTSD as determined by the SCID. They also met criteria for PTSD, Major Depressive Disorder, and Borderline Personality Disorder (Korn & Leeds, 2002).

Data for outcome measures, the SCL-90-R and Trauma Symptom Inventory, was collected at pretreatment and immediately post-treatment. Clinically relevant change on these measures was established as one half of a standard deviation on *t*-scores. Participant I showed clinically relevant improvement in the areas of depression, anxiety, defensive avoidance, and dissociation. Participant II showed clinically relevant improvement on depression, hostility, anger/irritability, dysfunctional sexual behaviors, and tension reduction. Positive behavioral changes were also noted during therapy and were maintained at one-month follow up. It should be noted that the two participants remained in therapy throughout the follow up period. The findings from the study indicate that strengthening participants' resources through RDI may be an effective strategy for reducing symptoms of PTSD related to childhood abuse (Korn & Leeds, 2002). However, the small sample size, lack of control condition, the confounding relationship between study participants and researchers (i.e., the lead author was the therapist), and the ongoing therapy during the study limit the generalizability of the study findings and make it difficult to assess the validity of RDI.

Cognitive Restructuring Without Exposure

   Pilot study. A 2005 study among five male participants examined a CBT-based treatment program for males sexually abused in childhood (Romano & De Luca, 2005). Sessions were planned for twice weekly, individual sessions for 20 weeks, however the majority of participants were only able to attend sessions once per week. The treatment targeted survivors' feelings of self-blame, anger, and anxiety. The participants ranged in age from 23 to 37 years and were recruited through notices sent to mental health agencies in Winnipeg, Canada. All five participants disclosed at least a single incident of CSA which was defined as sexual contact prior to the age of 16 years with a perpetrator at least five years older or in a position of power over the participant (Romano & De Luca, 2005).

   Assessments were administered pretreatment, immediately post-treatment, and at one- and six-month follow up. To monitor feelings of self-blame, participants were administered the Blame Scale. This measure determines the level of blame the participant places on himself with for what they did or how they acted in regard to the experienced CSA. In addition to situational self-blame, the Blame Scale also yields information regarding characterological self-blame. To examine feelings of anger the Multidimensional Anger Inventory, which yields an overall anger score, was used. To monitor feelings of anxiety, the State-Trait Anxiety Inventory, which measures general tendency to experience anxiety as well as discrete response to specific anxiety provoking situations, was employed (Romano & De Luca, 2005).

   Descriptive statistics were reported for the assessments. No analyses were conducted in this preliminary study. Self-blame for behavior related to the CSA decreased from post-treatment and generally remained at post-treatment levels (Romano & De Luca, 2005). Characterological self-blame decreased from pre-treatment scores, but either increased

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moderately at follow up or returned to pre-treatment levels. Anger decreased significantly and generally remained low at follow up, at approximately the same level found in a sample of male university students. Regarding anxiety, participants experienced a considerable decrease in state anxiety from pre- to post-treatment and state anxiety remained at normative levels at follow up. Trait anxiety also decreased from pre- to post-treatment assessment, however at follow up trait anxiety was reported to be slightly higher than the normative sample. The study findings indicate that the intervention reduced self-blame, anger, and anxiety, but did not impact characterological self-blame (Romano & De Luca, 2005). It is important to note that the results are preliminary and are limited by the nature of self-report questionnaires, the lack of a control group, small sample size, lack of trauma-related measures (i.e., PTSD, depression, interpersonal difficulties) and lack of statistical analysis (Romano & De Luca, 2005). Therefore, it is difficult to evaluate the validity of this intervention to effectively treat trauma populations.

Mindfulness Based Stress Reduction (MBSR)

Mindfulness Based Stress Reduction is an eight week long group program that focuses on three techniques: body scanning, mindfulness meditation, and yoga postures (Grossman, 2004). Body scanning is a prolonged mindfulness skill that involves lying on one's back while focusing on attention on the body, starting from the toes and moving up through the various regions. Mindfulness, as defined by MBSR's creator, involves non-judgmental awareness of the present moment (Grossman, 2004). This is thought to heighten the individual's awareness and sensitivity to the present, consequently improving awareness of thoughts, emotions, and behaviors and enhancing ability to copy with difficult situations. This is also believed to help break the cycle of rumination and worry, which are common maladaptive cognitive processes (Frewen, Evans, Maraj, Dozois, & Partridge, 2008).

Pilot study. A 2010 pilot study examined the efficacy of eight weeks of two-and-a-half to three-hour MBSR classes in reducing symptoms of depression, anxiety, and PTSD for adult survivors of CSA (Kimbrough, Magyari, Langenberg, Chesney, & Berman, 2009). Twenty-seven participants were recruited through newspaper and radio advertisements and fliers distributed in the community. The demographics breakdown was 89% female, 78% white, 52% married or living with a partner, 59% college graduates or higher, 52% had income over $50,000, and the mean age was 45 years old. Outcomes were measured using the PTSD Checklist, the BDI-II, and the Brief Symptom Inventory along with the Mindfulness Attention Awareness Scale. Data was collected at pretreatment, four weeks after treatment began, immediately posttreatment, and 16 weeks posttreatment. Data were assessed using repeated measures regression analysis. Cohen's *d* was calculated to assess effect size (Kimbrough et al., 2009).

Analysis of the data showed that scores on the BDI were significantly improved immediately posttreatment. When follow up data were collected, BDI scores had risen, however the improvement from baseline was still significant. Anxiety symptoms were also significantly improved at posttreatment and these gains were maintained at follow up. Similarly, scores on the Mindfulness Attention Awareness Scale were significantly improved at post-treatment with gains maintained at follow up. Scores on the PTSD Checklist were significantly improved at post-treatment. Though the mean rose slightly at follow up, the change from baseline remained significant. Given the significant improvement on all measures, it was concluded that MBSR was effective for the participants in this small pilot study and should be examined in more rigorous research. The lack of a control group was noted as a limitation of the study. Participants also participated in individual therapy during the course of this study, which is a

confounding factor when considering the results. However, participation in MBSR may have led

participants to better tolerate individual therapy (Kimbrough et al., 2009).

CHAPTER IV

DISCUSSION

All but one (Sikkema et al., 2007) of the 20 cognitive and behavioral based studies described reported improvement on measures of PTSD symptoms and severity, depression, anxiety, and anger. Only six studies in this analysis reported measures of self-concept and interpersonal functioning (Classen et al., 2001; Classen et al., 2011; Cloitre et al., 2002; Cloitre et al., 2010; McDonagh et al., 2005; Owens et al., 2001; Scheck et al., 1998), though there is agreement that these areas are negatively affected in cases of childhood interpersonal trauma. Results were mixed for those that reported on measures of self-concept and interpersonal functioning.

The majority of cognitive and behavioral therapies for C-PTSD use an exposure protocol to treat symptoms. Of the 20 studies included in this paper, 17 used an exposure paradigm. Undeniably, exposure to feared thoughts and situations reduces arousal and distress through extinction, however amelioration of anxiety is far from the only measure of mental health for adults with a history of childhood abuse. While by no means a comprehensive list, interpersonal functioning, developmental issues and attachment, the ability to use mature psychological defenses, self-esteem, self-efficacy, and the ability to experience a range of emotions safely are all areas of psychological health and functioning that are largely missing from the studies examined in herein.

Psychodynamic Psychotherapy for Adult Survivors of Childhood Abuse

There were not enough studies of psychodynamic treatment to draw strong conclusions about the ability of psychodynamic therapy to treat C-PTSD. Overall, only two studies of psychodynamic therapy for adult survivors of childhood trauma were identified (Lundqvist &

Ojehagen, 2001; Morrison & Treliving, 2002; Price, Hilsenroth, Callahan, Petretic-Jackson, & Bonge, 2004) and one study of Interpersonal Therapy (Krupnick et al., 2008), which is derived from psychodynamic and attachment theories.

Psychodynamic formulations of trauma draw on theories of family dynamics as well as attachment theory. Psychodynamic theory explains emotional dysregulation experienced by childhood abuse survivors in terms of their inability to form inner representations of loving caregivers. Secure attachment in childhood leads to greater emotional awareness and ability to regulate emotions. Childhood physical and sexual abuse disrupts secure attachment formation, resulting in adults who experience difficulty forming healthy attachments (Brown, 2009). This is one factor that may lead to social isolation for these individuals.

Internal working models of relationships, formed in childhood, supply the pattern for organizing adult personality and relationships. When these models are formed in an environment of abuse, interpersonal difficulties are bound to arise later in life. Psychodynamic treatment, therefore, focuses on understanding these maladaptive relationship patterns while attempting to help the survivor discover healthier ways of relating to others.

Cognitive-behavioral formulations of trauma posit that PTSD develops due to a breakdown in the extinction mechanism. As such, CBT therapies rely on exposure to trauma memories to decrease arousal and distress. These therapies require challenging maladaptive thoughts such as negative views of the self and others, overgeneralization of danger, and pessimism about the future. Once identified, individuals attempt to replace these thoughts with more realistic, adaptive thoughts. That is not to say that there is a complete absence of attention to interpersonal issues or relationship patterns in CBT. Core beliefs, an area of focus in CBT, are often formed in the context of early childhood relationships. In attempting to affect unhealthy

core beliefs resulting from childhood abuse, the CBT therapist undoubtedly touches on early attachment relationships.

Homogeneity of Participants

Ethnic and cultural minorities are underrepresented in the studies presented. Regarding the studies reported herein, only one of the CBT studies specifically mentioned cultural factors. This study reported that African American participants were significantly more likely to drop out of their treatment study prematurely. One of the psychodynamic studies (Krupnick et al., 2008) focused exclusively on low-income ethnic and racial minorities. One area of future research should focus on the cultural factors that affect dropout rates to ameliorate attrition. Understanding these factors will also allow development of treatments that are culturally appropriate for various individuals. Future research should take cultural issues into consideration when recruiting participants. Studies of survivors from various ethnic and cultural groups need to be conducted to inform adaptation of treatments in a culturally sensitive way for individuals from varying backgrounds.

Justification for a New Approach

The theoretical formulations of C-PTSD symptoms provide the basis for treatment. Just as no theory alone fully explains the development of C-PTSD related to childhood abuse, no single therapy adequately addresses the constellation of associated sequelae.

The CBT studies reviewed mainly focused on reducing symptoms of PTSD, depression, and anxiety. For participants who remained in therapy for the duration of the study, symptoms were typically significantly reduced. This indicates that cognitive and behavioral therapies result in significant improvement of PTSD symptoms for adult survivors of childhood abuse. Dropout rates, however, are high, ranging from 19-51% of participants in the studies examined. There are

many possible reasons for the high drop out rate and it is difficult to pinpoint. Some survivors may not tolerate exposure to distressing memories, others may not have access to concrete recollections. Another possibility is that participants have concerns about areas of functioning, such as relationships, self-esteem, and self-concepts, which are not being addressed by the therapies examined (Schottenbauer, Glass, Arnkoff, & Gray, 2008).

Problems with self-esteem and self-concept were rarely explicitly addressed in the studies reviewed. For those studies that measured these constructs, results were mixed with participant improvement on some measures, but not on others. One study examined overall self-esteem using the Tennessee Self-Concept Scale and found no difference in outcomes between the treatment and control groups (Scheck et al., 1998). Another study reported post-treatment improvements on self-esteem subscales of the Personal Beliefs and Reactions Scale and the World Assumptions Scale, but no improvements at follow up (Owens et al., 2001).

The strongest evidence for improvement in interpersonal difficulties exists for STAIR + Modified Prolonged Exposure, a phase-based therapy that first focuses on psychoeducation to improve emotion regulation and interpersonal functioning. Participants in the STAIR + Modified Prolonged Exposure condition showed significant improvement on measures of interpersonal problems and interpersonal support at post treatment. These measures continued to improve at follow up across two studies (Cloitre et al., 2002; Cloitre et al., 2010).

The few psychodynamic studies examined all focused to some degree on interpersonal and social functioning. Two of the three studies reported participant improvement on measures of self-esteem. While these studies also reported improvements in some areas symptomatology, two of the three reported no significant improvement in anxiety symptoms related to PTSD.

As previously mentioned, the ISTSS recommends a tiered approach to treating adult survivors of childhood abuse. However, clinical practice rarely progresses according to a manual. As such, a flexible, integrative approach is needed to help clinicians who work with survivors.

An Adapted Model for Treating Adult Survivors of Childhood Trauma

The ISTSS recommendation of phased treatment goes a long way towards helping guide therapists treating adult survivors of childhood abuse. STAIR therapy followed by prolonged exposure (STAIR+PE) is one model that uses a phased-based approach. The two studies examining STAIR+PE evidenced improvements in both symptoms and interpersonal functioning, however this therapy does not adequately address the clinical needs of adult survivors of childhood trauma. In the first phase, STAIR+PE focuses on improving emotion regulation and interpersonal skills. The second phase is built around resolving issues related to trauma memories and experiences through prolonged exposure therapy (Cloitre et al., 2010). The third phase recommended by the ISTSS, consolidating gains and transitioning from treatment to work or education, and social and community life (Cloitre et al., 2011), was not examined in these studies, but is addressed in the proposed model.

The proposed adapted model includes resolution and understanding of relationship patterns, attachment issues, and psychological defenses to the STAIR+PE treatment model. Psychodynamic theory, with an emphasis on these areas, is an overarching guiding principle. In the initial phase, immature and mature defenses would be described alongside emotion regulation and interpersonal skills. Developmental and attachment effects on the creation and maintenance of symptoms and functioning would also be described in the psychoeducation portion of the first phase. Defenses and the effects of childhood trauma on attachment are

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described to facilitate insight and understanding of how the individual is affected by these as they are explored in the second phase.

A flexible approach is necessary in the second phase of treatment. Some survivors will have concrete memories of abuse that they find distressing. In this case, the clinician should consider an exposure approach such as prolonged exposure or traditional cognitive processing therapy. Others may have memories that are more abstract or involve sensations such as sounds, smells, and body feelings, to name a few. The clinician may determine that these individuals would benefit from processing these memories in a more abstract way. These survivors may benefit from other approaches such as art therapy or writing about these images more creatively than is called for in traditional cognitive processing therapy. Many survivors, particularly those who were abused at a very young age, may have no conscious memories of the abuse. For these individuals, exposure is not an option and therapy would proceed with focus on psychodynamic therapy and specific behaviors.

As survivors either confront memories of interpersonal trauma or focus on relationship patterns in the second phase, relationships with the abuser and other adults in their lives during the trauma are highlighted and explored. Psychodynamic therapy is flexibly integrated into the second phase to guide survivors towards insights regarding how unhealthy and abusive relationships in childhood affect their current interpersonal relations. As survivor and therapist move through multiple traumas and relationships, dominant relationship patterns are likely to reappear and other patterns may be discovered. The job of the therapist is to recognize these patterns and assist the survivor in exploring how they are helping or hindering them in the present.

Phase two also focuses on examining psychological defenses with the goal of restructuring and replacing immature defenses with mature defenses. In psychodynamic theory, psychological defenses evolve in the course of psychosocial development as a way of dealing with wishes, needs, affects, and impulses (Schottenbauer et al., 2008). Trauma in childhood can lead to developing maladaptive defenses (Vaillant, 1971), allowing the survivor to avoid feared affects (McCullough, 2003). Recognizing and relinquishing these defenses takes place in phase two, allowing the individual access to a greater range of emotions. Letting go of immature defenses has been associated with reduced psychopathology, reduction of affective conflicts, improved interpersonal relations, and more adaptive behavior (McCullough, 2003; Schottenbauer et al., 2008). For these reasons, defenses are explicitly addressed in this proposed model.

Integrating exposure-based therapy with a psychodynamic focus on relational patterns and defense mechanisms, allows therapy to progress in multiple domains. Exposure diminishes the fear responses of hypervigilance and hyperarousal while attention to maladaptive relationship patterns and breaking down maladaptive defenses helps the survivor develop healthier ways of relating to themselves and others. This is likely to impact other areas disrupted by childhood abuse such as sense of self, attachment difficulties, and ability to develop and maintain lasting relationships.

Consolidating gains and readying the individual for greater involvement in social activities is the third phase endorsed by the ISTSS. During this phase, positive changes in the survivor's interpersonal functioning, attachment style, ego defenses, personality functioning, self-esteem, and self-concept are emphasized. Learning is consolidated through discussion about how these improvements have enhanced the survivor's life and social functioning, as well as

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what future improvements the survivor anticipates. Psychodynamic therapy in this stage would also focus on the meaning of trauma in the survivor's life, emphasizing integration of trauma memories into the individual's sense of self (Krupnick et al., 2008).

The addition of psychodynamic material and therapy to the model necessitates the addition of sessions. The STAIR+PE model requires 16 sessions evenly divided between skills training and exposure. The proposed model would add 14-18 sessions for a total of 30-34 sessions. Two new sessions would be added to phase one to accommodate psychoeducation on the topics of ego defenses and developmental and attachment issues related to C-PTSD resulting from childhood abuse. Eight to 12 sessions are added to the second phase as this is where the bulk of the work is taking place. This number of sessions was chosen based on short-term psychodynamic therapy models for PTSD (Schottenbauer et al., 2008), which consist of 12 sessions of therapy. A range of sessions is given to allow a flexible approach. The additional sessions allow time to examine relationship patterns unveiled as the survivor discusses their childhood traumas, incorporate understanding of how the individual developed defenses as a result of traumatic experiences, and explore how these patterns and defenses are adaptive or maladaptive in the present. Two sessions are proposed for the third, consolidation phase. These final sessions focus on gains made during the initial two phases. The survivor describes how these changes benefit them in their own words, with a focus on the present. Termination of therapy is addressed along with relapse prevention.

The number of sessions is more than twice the typical 12-16 sessions dictated by insurance companies. However, the extra sessions are necessary for individuals with complex presentations. Complicated patterns of behavior and emotional difficulties that take years to develop often take longer than a few months to unravel. Thus, this model may be more easily

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implemented in mental health settings where there is no limit on the number of sessions. Further, clinicians should use their expertise to modify the sessions as needed to meet time, financial, or insurance constraints. Many of the studies reviewed in this paper involve protocols that are much shorter in length yet demonstrate efficacy in reducing trauma related symptoms. This is acknowledged, and it is noted that the treatments described in the results section target very specific symptoms. The proposed model offers a holistic approach targeting symptoms, behaviors, and inter- and intrapersonal functioning, simultaneously.

This adapted model is proposed to use with adult women and men who experience the sequelae of childhood physical and sexual abuse. The evidence reveals that STAIR therapy already does a good job of addressing emotion regulation. The additional psychodynamic components involve understanding defenses, restructuring immature defenses, as well as recognizing maladaptive relational patterns in order to employ more adaptive ways of relating to oneself and others. It has been suggested that psychodynamic therapy also targets issues of self-esteem and self-concept by helping the individual establish the meaning of trauma in their life and incorporate trauma memories into their self-concept (Krupnick et al., 2008).

Future Research

An important aspect of the proposed adapted model is the ability to operationalize the constructs and examine their effect on psychiatric symptoms and corresponding behavior. This is important because integrated approaches have not been empirically studied. Furthermore, studies examining psychodynamic approaches to treating adult survivors of childhood trauma are lacking all together. To examine the efficacy of this approach, the treatment would first need to be manualized. Case and pilot studies to refine the treatment need to occur followed by studies that use a longitudinal design, preferably a randomized clinical trial with a control group.

CONCLUSION

The study of treatments for adult survivors of childhood trauma is nascent and most of the available studies focus on exposure paradigms. No single therapy is a panacea for the myriad sequelae of childhood physical and sexual abuse experienced by adult survivors. A flexible approach that incorporates best practices from CBT and psychodynamic theories has not been examined. Yet it is clear that childhood abuse affects attachment and interpersonal schemas, therefore a dynamic approach should be incorporated when working with survivors.

The model of treatment recommended by the ISTSS initiated important dialogue about stabilizing survivors emotionally and instilling coping skills prior to engaging in work with traumatic memories. While this approach allows for the much-needed gain of emotional skills and amelioration of trauma related distress, it does not sufficiently address other areas affected by childhood abuse. An approach that incorporates attention to maladaptive relational patterns, restructuring immature defenses, and difficulty forming healthy attachments to others is required.

Table 1

Cognitive and Behavioral Intervention Studies for C-PTSD

Authors	Year	Study Type	Intervention	N	Gender	Age	Tx Dropout Rate	Target Trauma	Main Results
Klassen & Gazan	1986	Pilot	Cognitive Restructuring	N=11	Women	Not Reported	Not Reported	CSA	Clinically significant improvement in distorted beliefs and measures of depression for most participants who were above the cutoff points at pretreatment.
Chard, et al.	1997	Case Study	CPT-SA	N=2	Women	22 & 33	N/A	CSA	Improvement on measures of PTSD symptoms and depression.
Scheck	1998	RCT	EMDR	N=22	Women	16-25	29%	CA & CSA	Significant pre/post improvement on measures of PTSD severity, depression, and anxiety.
Edmond, et al.	1999	Randomized Experimental Evaluation	EMDR	N=59	Women	Mean: 35	None dropped	CSA	Statistically significant improvement in depression scores at follow up, but not posttreatment; statistically significant improvement in anxiety at posttreatment and follow up; statistically significant improvement in PTSD related distress at posttreatment, but not follow up
Owens, et al.	2001	Quasi-Experimental	CPT-SA	N=53	Women	Mean: 33	Not reported	CSA	Significant improvement in treatment group on measures of feelings of safety and trust, power, esteem, intimacy, beliefs about the benevolence of the world, and self-worth.

					Women			CSA	Statistically significant reduction in dissociation and repeated sexual trauma for both tx groups, no statistically significant difference between tx groups.
Classen, et al.	2001	Pilot	TFT vs. PFT	N= 55		16-64		CSA	Statistically significant reduction in dissociation and repeated sexual trauma for both tx groups, no statistically significant difference between tx groups.
Korn & Leeds	2002	Case Study	EMDR	N=2	Women & Men	31 & 39	N/A	CA	Clinically relevant improvement in depression, anxiety, avoidance, dissociation, hostility, anger, dysfunctional sexual behaviors, and tension.
Cloitre, et al.	2002	RCT	STAIR+Modifi ed PE	N= 58	Women	Mean: 34	22%	CA	Significant improvement in PTSD symptoms, affect regulation, and interpersonal difficulties.
Resick	2003	RCT	CPT & PE	N= 121	Women	Mean: 32	CPT: 26.8% PE: 27.3%	CSA	Significant improvement on Trauma Symptom Inventory factors (Self, trauma, and dysphoria).
Edmond & Rubin	2004	RCT	EMDR	N= 42	Women	Mean: 36	N/A (18-mo follow up study)	CSA	Significant improvement of EMDR over WL control for measures of depression, anxiety, distress related to PTSD; no difference between EMDR group and routine tx group.
Sikkema, et al.	2007	Pilot	CPT, Skills Training, Support Group	N= 28	Women & Men	Mean age of men: 47; mean age of women: 42	Not reported	CSA	No meaningful change on 71.3% of Trauma Symptom Inventory scales.
McDonagh	2005	RCT	PE, In Vivo, Cognitive Restructuring	N= 74	Women	18-64	41%	CSA	Half of CBT treatment group no longer met criteria for PTSD dx at posttreatment
Romano & DeLuca	2005	Pilot	CBT	N=5	Men	23-37	0%	CSA	Decreases in anger and anxiety, but no decrease in self-blame. (No

								statistical analysis, pre-posttreatment comparison only)
Chard	2005	RCT	CPT-SA	N=71	Women 18-56	18%	CSA	Significant improvements over time on measures of PTSD symptoms, depression, and dissociative experiences.
Najavits, et al.	2005	Pilot	Seeking Safety + PE	N=5	Men Mean: 37	0%	CA	Significant improvement in trauma symptoms, global functioning, assumptions about the world, social adjustment, and safety.
Resick	2008	RCT	CPT	N=152	Women Mean: 35	CPT: 51% WA: 45% CPT-C: 43%	CA & CSA	All treatments resulted in majority participants no longer meeting criteria for PTSD and in improvements on measures of depression.
Cloitre	2010	RCT	STAIR + Exposure	N=104	Women 18-65	STAIR/Exposure: 15.2% STAIR/Support: 26.3% Support/Exposure: 39.4%	CA	Remission from PTSD achieved by 27% of STAIR/Exposure group and 24% of STAIR/Support group. More participants from STAIR/Exposure maintained remission at follow up.
Kimbrough, et al.	2010	Pilot	MBSR	N=27	Women & Men Mean: 45	15%	CSA	Significant improvement on measures of depression and anxiety from pre- to posttreatment.
Steil, et al.	2011	Pilot	Cognitive Restructuring	N=9	Women 28-57	Not reported	CSA	Statistically significant improvement in PTSD severity, measured by Posttraumatic Diagnostic Scale .
Classen	2011	RCT	TFGT vs. PFGT	N=166	Women Mean: 36	TFGT: 41% PFGT:	CSA	No significant differences between treatment groups on

						19%		measures of PTSD severity, however therapy groups improved over WL control. TFGT had significantly greater improvement over PFGT on anger measures.

References

American Psychiatric Association., & American Psychiatric Association. DSM-5 Task Force.

(2013). *Diagnostic and statistical manual of mental disorders : DSM-5* (5th ed.).

Washington, D.C.: American Psychiatric Association.

Association, A. P. (1994). *Diagnostic criteria from DSM-IV*. Washington, D.C.: The

Association.

Association, A. P. (2000). *Diagnostic and statistical manual of mental disorders : DSM-IV-TR*.

Washington, DC: American Psychiatric Association.

Barone, L. (2003). Developmental protective and risk factors in borderline personality disorder:

A study using the Adult Attachment Interview. *Attachment & Human Development, 5*(1),

64-77. doi:10.1080/1461673031000078634

Bohus, M., Dyer, A. S., Priebe, K., Krüger, 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

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*.

New York, NY, US: Basic Books.

Brassard, M. R., Germain, R., & Hart, S. N. (1987). *Psychological maltreatment of children and

youth*. New York: Pergamon Press.

Breslau, N., Davis, G. C., Andreski, P., Peterson, E. L., & Schultz, L. R. (1997). Sex differences

in posttraumatic stress disorder. *Archives of General Psychiatry, 54*(11), 1044-1048.

doi:10.1001/archpsyc.1997.01830230082012

Briere, J. (1992). *Child abuse trauma : theory and treatment of the lasting effects*. Newbury Park, Calif.: Sage Publications.

Briere, J., Kaltman, S., & Green, B. L. (2008). Accumulated childhood trauma and symptom complexity. *J Trauma Stress, 21*(2), 223-226. doi:10.1002/jts.20317

Briere, J., & Runtz, M. (1987). Post sexual abuse trauma: Data and implications for clinical practice. *Journal of Interpersonal Violence, 2*(4), 367-379. doi:10.1177/088626058700200403

Briere, J., & Zaidi, L. Y. (1989). Sexual abuse histories and sequelae in female psychiatric emergency room patients. *The American Journal of Psychiatry, 146*(12), 1602-1606. doi:10.1176/ajp.146.12.1602

Brown, D. (2001). (Mis) Representations of the Long-Term Effects of Childhood Sexual Abuse in the Courts. *Journal of Child Sexual Abuse, 9*(3/4), 79.

Brown, D. (2009). Assessment of attachment and abuse history, and adult attachment style. In C. A. Courtois, J. D. Ford, C. A. Courtois, & J. D. Ford (Eds.), *Treating complex traumatic stress disorders: An evidence-based guide.* (pp. 124-144). New York, NY, US: Guilford Press.

Bryer, J. B., Nelson, B. A., Miller, J. B., & Krol, P. A. (1987). Childhood sexual and physical abuse as factors in adult psychiatric illness. *The American Journal of Psychiatry, 144*(11), 1426-1430.

CDC. (2016). Child Abuse and Neglect: Definitions.   Retrieved from http://www.cdc.gov/violenceprevention/childmaltreatment/definitions.html

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:10.1037/0022-006X.73.5.965

Chard, K. M., Weaver, T. L., & Resick, P. A. (1997). Adapting cognitive processing therapy for

    child sexual abuse survivors. *Cognitive and Behavioral Practice, 4*(1), 31–52.

    doi:10.1016/S1077-7229(97)80011-9

Choi, H., Klein, C., Shin, M. S., & Lee, H. J. (2009). Posttraumatic Stress Disorder (PTSD) and

    Disorders of Extreme Stress (DESNOS) symptoms following prostitution and childhood

    abuse. *Violence Against Women, 15*(8), 933-951. doi:10.1177/1077801209335493

Classen, C., Koopman, C., Nevill-Manning, K., & Spiegel, D. (2001). A preliminary report

    comparing trauma-focused and present-focused group therapy against a wait-listed

    condition among childhood sexual abuse survivors with PTSD. *Journal of Aggression,*

    Maltreatment & Trauma, 4(2), 265-288. doi:10.1300/J146v04n02_12

Classen, C. C., Palesh, O. G., Cavanaugh, C. E., Koopman, C., Kaupp, J. W., Kraemer, H. C., . .

    . Spiegel, D. (2011). A comparison of trauma-focused and present-focused group therapy

    for survivors of childhood sexual abuse: A randomized controlled trial. *Psychological*

    Trauma: Theory, Research, Practice, and Policy, 3(1), 84-93. doi:10.1037/a0020096

Cloitre, M., Courtois, C. A., Charuvastra, A., Carapezza, R., Stolbach, B. C., & Green, B. L.

    (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on

    best practices. *Journal of Traumatic Stress, 24*(6), 615-627. doi:10.1002/jts.20697

Cloitre, M., Garvert, D. W., Brewin, C. R., Bryant, R. A., & Maercker, A. (2013). Evidence for

    proposed ICD-11 PTSD and complex PTSD: a latent profile analysis. *European Journal*

    Of Psychotraumatology, 4. doi:10.3402/ejpt.v4i0.20706

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. doi:10.1037/0022-006X.70.5.1067

Cloitre, M., Stolbach, B. C., Herman, J. L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: childhood and adult cumulative trauma as predictors of symptom complexity. *J Trauma Stress, 22*(5), 399-408. doi:10.1002/jts.20444

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. *The American Journal of Psychiatry, 167*(8), 915-924. doi:10.1176/appi.ajp.2010.09081247

Courtois, C. A. (2004). Complex trauma, complex reactions: Assessment and treatment. *Psychotherapy: Theory, Research, Practice, Training, 41*(4), 412-425. doi:10.1037/0033-3204.41.4.412

Courtois, C. A. (2009). *Treating Complex Traumatic Stress Disorders (Adults): Scientific Foundations and Therapeutic Models* (C. A. C. a. J. D. Ford Ed.). New York, NY: The Guildord Press.

Craven, R. F., & Hirnie, C. J. (2003). *Fundamanetals of Nursing Human Health and Function*. Philadelphia: Lippincott Williams & Wilkins.

Dorrepaal, E., Thomaes, K., Smit, J. H., van Balkom, A. J. L. M., Veltman, D. J., Hoogendoorn, A. W., & Draijer, N. (2012). Stabilizing group treatment for complex posttraumatic stress disorder related to child abuse based on psychoeducation and cognitive behavioural

therapy: A multisite randomized controlled trial. *Psychotherapy and Psychosomatics,*
81(4), 217-225. doi:10.1159/000335044

Dorrepaal, E., Thomaes, K., Smit, J. H., Veltman, D. J., Hoogendoorn, A. W., van Balkom, A. J.
L. M., & Draijer, N. (2013). Treatment compliance and effectiveness in complex PTSD
patients with co-morbid personality disorder undergoing stabilizing cognitive behavioral
group treatment: A preliminary study. *European Journal Of Psychotraumatology, 4*.
doi:10.3402/ejpt.v4i0.21171

Dvir, Y., Ford, J. D., Hill, M., & Frazier, J. A. (2014). Childhood Maltreatment, Emotional
Dysregulation, and Psychiatric Comorbidities. *Harv Rev Psychiatry, 22*(3), 149-161.
doi:10.1097/hrp.0000000000000014

10.1097/HRP.0000000000000014.

Edmond, T., & Rubin, A. (2004). Assessing the Long-Term Effects of EMDR: Results from an
18-Month Follow-Up Study with Adult Female Survivors of CSA. *Journal of Child
Sexual Abuse, 13*(1), 69-86. doi:10.1300/J070v13n01_04

Edmond, T., Rubin, A., & Wambach, K. G. (1999). The effectiveness of EMDR with adult
female survivors of childhood sexual abuse. *Social Work Research, 23*(2), 103-116.
doi:10.1093/swr/23.2.103

Ehlers, A., Clark, D. M., Hackmann, A., McManus, F., & Fennell, M. (2005). Cognitive therapy
for post-traumatic stress disorder: development and evaluation. *Behav Res Ther, 43*(4),
413-431. doi:10.1016/j.brat.2004.03.006

Ehring, T., Welboren, R., Morina, N., Wicherts, J. M., Freitag, J., & Emmelkamp, P. M. G.
(2014). Meta-analysis of psychological treatments for posttraumatic stress disorder in

adult survivors of childhood abuse. *Clinical Psychology Review, 34*(8), 645-657. doi:10.1016/j.cpr.2014.10.004

Fergusson, D. M., McLeod, G. F. H., & Horwood, L. J. (2013). Childhood sexual abuse and adult developmental outcomes: findings from a 30-year longitudinal study in New Zealand. *Child Abuse & Neglect, 37*(9), 664-674. doi:10.1016/j.chiabu.2013.03.013

Finkelhor, D. (1994). The international epidemiology of child sexual abuse. *Child Abuse & Neglect, 18*(5), 409-417. doi:10.1016/0145-2134(94)90026-4

Foa, E. B., & International Society for Traumatic Stress, S. (2009). *Effective treatments for PTSD : practice guidelines from the International Society for Traumatic Stress Studies*. New York: Guilford Press.

Ford, J. D., Stockton, P., Kaltman, S., & Green, B. L. (2006). Disorders of Extreme Stress (DESNOS) Symptoms Are Associated With Type and Severity of Interpersonal Trauma Exposure in a Sample of Healthy Young Women. *Journal of Interpersonal Violence, 21*(11), 1399-1416. doi:10.1177/0886260506292992

Frewen, P., Evans, E., Maraj, N., Dozois, D., & Partridge, K. (2008). Letting Go: Mindfulness and Negative Automatic Thinking. *Cognitive Therapy and Research, 32*(6), 758-774. doi:10.1007/s10608-007-9142-1

Friedman, M. J. (2013). Finalizing PTSD in DSM-5: Getting Here From There and Where to Go Next. *Journal of Traumatic Stress, 26*(5), 548-556. doi:10.1002/jts.21840

Friedman, M. J., Keane, T. M., Resnick, P. A., & Phelps, P. A. (2008). Handbook of PTSD: Science and Practice. *Families systems & health., 26*(2), 220.

Goodwin, R. D., Hoven, C. W., Murison, R., & Hotopf, M. (2003). Association Between Childhood Physical Abuse and Gastrointestinal Disorders and Migraine in Adulthood. *American Journal of Public Health, 93*(7), 1065-1067. doi:10.2105/AJPH.93.7.1065

Grossman, P. N. L. S. S. W. H. (2004). Mindfulness-based stress reduction and health benefits: a meta analysis. *Journal of Psychosomatic Research, 57*(1), 35-43. doi:10.1016/S0022-3999(03)00573-7

Heim, C., & Nemeroff, C. B. (2009). Neurobiology of posttraumatic stress disorder. *CNS Spectr, 14*(1 Suppl 1), 13-24.

Herman, J. (1992). Complex PTSD: A Syndrome of Survivors of Prolonged and Repeated Trauma. *Journal of Traumatic Stress, 5*(3), 377-391.

Herman, J. (1997). *Trauma and Recovery*. New York: Basic Books.

Horowitz, M. J. (1974). Stress Response Syndromes: Character Style and Dynamic Psychotherapy. *Archives of General Psychiatry, 31*(6), 768-781. doi:10.1001/archpsyc.1974.01760180012002

Ivey, G. (2006). A method of teaching psychodynamic case formulation. *Psychotherapy (Chic), 43*(3), 322-336. doi:10.1037/0033-3204.43.3.322

Jacobson, A. (1989). Physical and sexual assault histories among psychiatric outpatients. *The American Journal of Psychiatry, 146*(6), 755-758.

Jacobson, A., & Richardson, B. (1987). Assault experiences of 100 psychiatric inpatients: Evidence of the need for routine inquiry. *The American Journal of Psychiatry, 144*(7), 908-913.

Janet, P. (1925). *Psychological Healing*.

Kardiner, A., & Spiegel, H. (1947). *War stress and neurotic illness*: Hoeber.

Kendler, K. S., Bulik, C. M., Silberg, J., Hettema, J. M., Myers, J., & Prescott, C. A. (2000). Childhood sexual abuse and adult psychiatric and substance use disorders in women: An epidemiological and cotwin control analysis. *Archives of General Psychiatry, 57*(10), 953-959. doi:10.1001/archpsyc.57.10.953

Kessler, R. C. (2000). Posttraumatic stress disorder: The burden to the individual and to society. *Journal of Clinical Psychiatry, 61*(Suppl 5), 4-14.

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. doi:10.1001/archpsyc.1995.03950240066012

Kimbrough, E., Magyari, T., Langenberg, P., Chesney, M., & Berman, B. (2009). Mindfulness intervention for child abuse survivors. *Journal of Clinical Psychology, 66*(1), 17-33. doi:10.1002/jclp.20624

10.1002/jclp.20624.

Klassen, C., & Gazan, M. (1986). Cognitive Restructuring of Distorted Beliefs Associated With Childhood Sexual Abuse. *Journal of Social Work & Human Sexuality, 4*(1-2), 46-69. doi:Journal of Social Work & Human Sexuality, Vol. 4, No. 1-2, 1986, pp. 49–69

Kolb, L. C. (1987). A neuropsychological hypothesis explaining posttraumatic stress disorders. http://dx.doi.org/10.1176/ajp.144.8.989*, 144*(8), 989-995.

Korn, D. L., & Leeds, A. M. (2002). Preliminary evidence of efficacy for EMDR resource development and installation in the stabilization phase of treatment of complex posttraumatic stress disorder. *Journal of Clinical Psychology, 58*(12), 1465-1487. doi:10.1002/jclp.10099

Krupnick, J. L., Green, B. L., Stockton, P., Miranda, J., Krause, E., & Mete, M. (2008). Group
interpersonal psychotherapy for low-income women with posttraumatic stress disorder.
Psychotherapy Research, 18(5), 497-507. doi:10.1080/10503300802183678

Lane, R. D., & Schwartz, G. E. (1987). Levels of emotional awareness: A cognitive-
developmental theory and its application to psychopathology. *The American Journal of
Psychiatry, 144*(2), 133-143.

Lanius, R. A., Bluhm, R. L., & Frewen, P. A. (2011). How understanding the neurobiology of
complex post-traumatic stress disorder can inform clinical practice: a social cognitive and
affective neuroscience approach. *Acta Psychiatrica Scandinavica, 124*(5), 331-348.
doi:10.1111/j.1600-0447.2011.01755.x

Lonergan, M. (2014). Cognitive behavioral therapy for PTSD: The role of complex PTSD on
treatment outcome. *Journal of Aggression, Maltreatment & Trauma, 23*(5), 494-512.
doi:10.1080/10926771.2014.904467

Lundqvist, G., & Ojehagen, A. (2001). Childhood sexual abuse. An evaluation of a two-year
group therapy in adult women. *European Psychiatry, 16*(1).

Lyons-Ruth, K., Dutra, L., Schuder, M. R., & Bianchi, I. (2006). From infant attachment
disorganization to adult dissociation: Relational adaptations or traumatic experiences?
Psychiatric Clinics of North America, 29(1), 63-86. doi:10.1016/j.psc.2005.10.011

MacMillan, H. L., Fleming, J. E., Streiner, D. L., Lin, E., Boyle, M. H., Jamieson, E., . . .
Beardslee, W. R. (2001). Childhood abuse and lifetime psychopathology in a community
sample. *The American Journal of Psychiatry, 158*(11), 1878-1883.
doi:10.1176/appi.ajp.158.11.1878

MacMillan, H. L., Tanaka, M., Duku, E., Vaillancourt, T., & Boyle, M. H. (2013). Child

    physical and sexual abuse in a community sample of young adults: results from the

    Ontario Child Health Study. *Child Abuse & Neglect, 37*(1), 14-21.

    doi:10.1016/j.chiabu.2012.06.005

Main, M., & Morgan, H. (1996). Disorganization and disorientation in infant strange situation

    behavior: Phenotypic resemblance to dissociative states. In L. K. Michelson, W. J. Ray,

    L. K. Michelson, & W. J. Ray (Eds.), *Handbook of dissociation: Theoretical, empirical,*

    and clinical perspectives. (pp. 107-138). New York, NY, US: Plenum Press.

McCullough, L. E. (2003). *Treating affect phobia: A manual for short-term dynamic*

    psychotherapy: Guilford Press.

McDonagh, A., Friedman, M., McHugo, G., Ford, J., Sengupta, A., Mueser, K., . . . Descamps,

    M. (2005). Randomized Trial of Cognitive-Behavioral Therapy for Chronic

    Posttraumatic Stress Disorder in Adult Female Survivors of Childhood Sexual Abuse.

    Journal of Consulting and Clinical Psychology, 73(3), 515-524. doi:10.1037/0022-

    006X.73.3.515

Morrison, A., & Treliving, L. (2002). Evaluation of outcome in a dynamically orientated group

    for adult males who have been sexually abused in childhood. *British Journal of*

    Psychotherapy, 19(1), 59-75. doi:10.1111/j.1752-0118.2002.tb00062.x

Najavits, L., Schmitz, Gotthardt, & Weiss, R. (2005). Seeking Safety Plus Exposure Therapy: An

    Outcome Study on Dual Diagnosis Men. *Journal of Psychoactive Drugs, 37*(4), 425-435.

    doi:Journal of Psychoactive Drugs, Vol. 37, No. 4, 2005: pp. 425–435

Nijenhuis, E. R. S. (2008). Somatoform Dissociation. *Journal of Trauma and Dissociation, 1*(4),

    7-32. doi:Journal of Trauma & Dissociation, Vol. 1, No. 4, 2000: pp. 7–32

Owens, G. P., Pike, J. L., & Chard, K. M. (2001). Treatment effects of cognitive processing

therapy on cognitive distortions of female child sexual abuse survivors *. *Behavior*

Therapy, 32(3), 413–424. doi:10.1016/S0005-7894(01)80028-9

Pelcovitz, D., van der Kolk, B., Roth, S., Mandel, F., Kaplan, S., & Resick, P. (1997).

Development of a Criteria Set and a Structured Interview for Disorders of Extreme Stress

(SIDES). *Journal of Traumatic Stress, 10*(1), 3-16.

Perrin, M., Vandeleur, C. L., Castelao, E., Rothen, S., Glaus, J., Vollenweider, P., & Preisig, M.

(2014). Determinants of the development of post-traumatic stress disorder, in the general

population. *Social Psychiatry and Psychiatric Epidemiology, 49*(3), 447-457.

doi:10.1007/s00127-013-0762-3

Price, J. L., Hilsenroth, M. J., Callahan, K. L., Petretic-Jackson, P. A., & Bonge, D. (2004). A

pilot study of psychodynamic psychotherapy for adult survivors of childhood sexual

abuse. *Clinical Psychology & Psychotherapy, 11*(6), 378-391. doi:10.1002/cpp.421

Resick, P. A., Bovin, M. J., Calloway, A. L., Dick, A. M., King, M. W., Mitchell, K. S., . . .

Wolf, E. J. (2012). A critical evaluation of the complex PTSD literature: implications for

DSM-5. *J Trauma Stress, 25*(3), 241-251. doi:10.1002/jts.21699

Resick, P. A., Galovski, T. E., Uhlmansiek, M. O. B., 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(2), 243-258. doi:10.1037/0022-

006X.76.2.243

Resick, P. A., Nishith, P., & Griffin, M. G. (2003). How well does cognitive-behavioral therapy treat symptoms of complex PTSD? An examination of child sexual abuse survivors within a clinical trial. *CNS Spectrums, 8*(5), 351-355.

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 & Clinical Psychology, 70*(4), 867-879.

Romano, E., & De Luca, R. V. (2005). An individual treatment programme for sexually abused adult males: description and preliminary findings. *Child Abuse Review, 14*(1), 40-56. doi:10.1002/car.880

Roth, S., Newman, E., Pelcovitz, D., van der Kolk, B., & Mandel, F. S. (1997). Complex PTSD in Victims Exposed to Sexual and Physical Abuse: Results from the DSM-IV Field Trial for Posttraumatic Stress Disorder. *Journal of Traumatic Stress, 10*(4), 539-555.

Saunders, B. E., Villeponteaux, L. A., Lipovsky, J. A., Kilpatrick, D. G., & Veronen, L. J. (1992). Child sexual assault as a risk factor for mental disorders among women: A community survey. *Journal of Interpersonal Violence, 7*(2), 189-204. doi:10.1177/088626092007002005

Scheck, M. M., Schaeffer, J. A., & Gillette, C. (1998). Brief psychological intervention with traumatized young women: the efficacy of eye movement desensitization and reprocessing. *Journal of Traumatic Stress, 11*(1), 25-44.

Schottenbauer, M. A., Glass, C. R., Arnkoff, D. B., & Gray, S. H. (2008). Contributions of psychodynamic approaches to treatment of PTSD and trauma: A review of the empirical

treatment and psychopathology literature. *Psychiatry: Interpersonal and Biological Processes, 71*(1), 13-34. doi:10.1521/psyc.2008.71.1.13

Shapiro, F. (1989). Eye movement desensitization: A new treatment for post-traumatic stress disorder - ScienceDirect. *Journal of Behavior Therapy and Experimental Psychiatry, 20*(3), 211-217.

Shaw, B. A., & Krause, N. (2002). Exposure to physical violence during childhood, aging, and health. *Journal of Aging and Health, 14*(4), 467-494. doi:10.1177/089826402237179

Shorey, H. S., & Snyder, C. R. (2006). The role of adult attachment styles in psychopathology and psychotherapy outcomes. *Review of General Psychology, 10*(1), 1-20. doi:10.1037/1089-2680.10.1.1

Sikkema, K. J., Hansen, N. B., Kochman, A., Tarakeshwar, N., Neufeld, S., Meade, C. S., & Fox, A. M. (2007). Outcomes from a group intervention for coping with HIV/AIDS and childhood sexual abuse: Reductions in traumatic stress. *AIDS and Behavior, 11*(1), 49-60. doi:10.1007/s10461-006-9149-8

Spermon, D., Darlington, Y., & Gibney, P. (2010). Psychodynamic psychotherapy for complex trauma: targets, focus, applications, and outcomes. *Psychology research and behavior management, 3*, 119-127. doi:10.2147/PRBM.S10215

Springer, K. W., Sheridan, J., Kuo, D., & Carnes, M. (2007). Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women. *Child Abuse & Neglect, 31*(5), 517-530. doi:10.1016/j.chiabu.2007.01.003

Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. A. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood*. New York, NY, US: Guilford Publications.

Steil, R., Jung, K., & Stangier, U. (2011). Efficacy of a two-session program of cognitive restructuring and imagery modification to reduce the feeling of being contaminated in adult survivors of childhood sexual abuse: a pilot study. *Journal of Behavior Therapy and Experimental Psychiatry, 42*(3), 325-329. doi:10.1016/j.jbtep.2011.01.008

10.1016/j.jbtep.2011.01.008. Epub 2011 Feb 3.

Styron, T., & Janoff-Bulman, R. (1997). Childhood attachment and abuse: Long-term effects on adult attachment, depression, and conflict resolution. *Child Abuse & Neglect, 21*(10), 1015-1023. doi:http://dx.doi.org/10.1016/S0145-2134(97)00062-8

Thompson, M. P., Arias, I., Basile, K. C., & Desai, S. (2002). The association between childhood physical and sexual victimization and health problems in adulthood in a nationally representative sample of women. *Journal of Interpersonal Violence, 17*(10), 1115-1129. doi:10.1177/088626002236663

Ullman, S. E., & Brecklin, L. R. (2002). Sexual assault history, PTSD, and mental health service seeking in a national sample of women. *Journal of Community Psychology, 30*(3), 261-279. doi:10.1002/jcop.10008

Vaillant, G. E. (1971). Theoretical Hierarchy of Adaptive Ego Mechanisms: A 30-Year Follow-up of 30 Men Selected for Psychological Health. *Archives of General Psychiatry, 24*(2), 107-118. doi:10.1001/archpsyc.1971.01750080011003

van der Kolk, B. A. (2005). Developmental Trauma Disorder: Toward a rational diagnosis for children with complex trauma histories. *Psychiatric Annals, 35*(5), 401-408.

Widom, C. S. (1999). Posttraumatic stress disorder in abused and neglected children grown up. *The American Journal of Psychiatry, 156*(8), 1223-1229.

Winnicott, D. W. (1965). *The Maturational Processes and the Facilitating Environment*. New York: International Universities Press.

Wise, L. A., Zierler, S., Krieger, N., & Harlow, B. L. (2001). Adult onset of major depressive disorder in relation to early life violent victimisation: a case-control study. *Lancet (London, England), 358*(9285), 881-887.

World Health, O. (1993). The ICD-10 classification of mental and behavioural disorders : diagnostic criteria for research.