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Emotional Processing in Self-Narratives as a Predictor of Outcome in Emotion Focused Therapy for Child Abuse Trauma (EFTT)

By Shayna Nussbaum

A Thesis
Submitted to the Faculty of Graduate Studies through the Department of Psychology in Partial Fulfillment of the Requirements for the Degree of Masters of Arts at the University of Windsor

Windsor, Ontario, Canada 2014

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ABSTRACT

The present study is the first to test a model of emotional change processes in self-focused sessions of emotion-focused therapy for trauma (EFTT), whereby early expressions of distress (e.g., fear, shame) shift to Advanced Meaning Making (AMM) states (e.g., assertive anger, grief) in later sessions. Archival data (videotaped sessions, self-report measures) from a previous study (Paivio, Jarry, Chagigiorgis, Hall, & Ralston, 2010) were utilized. Emotional processing was rated using the Classification of Affective Meaning States (CAMS; Pascual-Leone & Greenberg, 2007). Result of odds ratio analyses revealed increases in expression of AMM in late sessions compared to early sessions. Results of a factorial ANOVA revealed reduced depression for clients in which AMM were present in late sessions. Results provide preliminary support for the proposed model of change in self-narratives during EFTT.

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CHAPTER 1: INTRODUCTION

Objective

The objective of this study is to test a model of emotional change processes in self-narratives over the course of emotion-focused therapy for complex child abuse trauma (EFTT; Paivio & Pascual-Leone, 2010).

Importance

Complex child abuse trauma involves repeated exposure to violence, often at the hands of loved ones and caregivers, and typically has more severe and complex long-term effects compared to exposure to a single traumatic event (Pelcovitz, Kaplan, DeRoss, Mandel, & Salzinger, 2000). Prevalence of childhood abuse is disturbingly high with international estimates in community samples ranging from 12% to 36% depending on type of abuse (Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011; Stoltenborgh, Bakermans-Kranenburg, Alink, & van IJzendoorn, 2012). Furthermore, up to 90% of clients in clinical samples report histories of child abuse (Pilkington & Kremer, 1995).

Complex trauma in childhood is particularly devastating because it interferes with core developmental tasks (van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Thus childhood abuse and neglect are associated with a constellation of long-term effects including symptoms of posttraumatic stress disorder, depression, anxiety, problems with emotion regulation (both avoidance and dysregulation), interpersonal difficulties, and chronic feelings of shame, worthlessness, insecurity, lack of confidence, unclear self-identity, and maladaptive behaviors, such as substance abuse and self-harm, to cope with painful negative feelings (van der Kolk et al., 2005). These self related problems are

particularly devastating and can interfere with all aspects of functioning. Thus there is a need for effective treatments to address these difficulties and to understand how change in therapy occurs in order to maximize benefits.

Emotion-focused therapy for complex trauma (EFTT; Paivio & Pascual-Leone, 2010) is an effective treatment for child abuse trauma (Paivio, Jarry, Hall, Ralston, & Chagigiorgis, 2010; Paivio & Nieuwenhuis, 2001) and several studies support the importance of emotional processes in client change (e.g., Mundorf & Paivio, 2011; Paivio, Hall, Holowaty, Jellis, & Tran, 2001). However, most of these studies have focused on resolution of trauma and issues with perpetrators. Only one study to date (Mundorf, 2013) has specifically focused on client experience of self by analyzing the quality of client self-narratives over the course of EFTT.

The present study will build on Mundorf's qualitative analyses using an empirically verified model of emotional change processes (Pascual-Leone & Greenberg, 2005) specifically in client self-narratives over the course of EFTT. This model specifies the components that characterize productive emotional processing. Accordingly, these components are a shift from global distress, to maladaptive emotional processes (e.g., fear, shame), through negative self-evaluation and unmet needs, to adaptive emotional processes (e.g., assertive anger, grieving, compassion for self), and finally to greater self-acceptance and agency. This study used a psychometrically sound measure (Classification of Affective-Meaning States: CAMS; Pascual-Leone & Greenberg, 2005) to identify the model components during self-narratives for clients (N = 16) in early and late sessions of EFTT. It is expected that more productive components will be observed in late sessions and in better outcome cases. Identifying the in-session affective processes

that characterize better outcome will be an invaluable guide for clinicians in facilitating healthy processes and maximizing client change.

Definitions of Child Abuse Trauma

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, American Psychiatric Association, 2000), defines trauma as a threat of physical harm or death to self or other, or a compromise to the integrity of self. The most recent manual (DSM-5, American Psychiatric Association, 2013), adds "exposure to actual or threatened death, serious injury, or sexual violence," experiencing, witnessing, or hearing of a traumatic event that has happened to a family or close friend, or repeated work related exposure to trauma, as might happen to emergency responders. Other aspects of trauma include experiences of humiliation, rejection, and neglect (Shapiro & Maxfield, 2002). There is a distinction made between Type I and Type II (Complex) trauma (Terr, 1991). Type I trauma is defined as a single episode of a traumatic experience, such as a motor vehicle accident (Terr, 1991). Type II, or complex trauma involves exposure to multiple, interpersonal, long-term traumatic events (Pelcovitz, Kaplan, DeRosa, Mandel, & Salzinger, 2000). Complex trauma most often refers to abusive attachment relationships in early life, but can refer to continued trauma during adulthood (Courtois & Ford, 2013), and has more deleterious effects than single incident trauma (Pelcovitz et al., 2000).

Different Types of Childhood Maltreatment

Childhood maltreatment is defined differently across studies (e.g. Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011; Stoltenborgh, Bakermans-Kranenburg, & van IJzendoorn, 2013; Stoltenborgh, Bakermans-Kranenburg, Alink, &

van IJzendoorn, 2012; Stoltenborgh, Bakermans-Kranneburg, van IJzendoorn, & Alink, 2013), especially regarding emotional abuse. These different definitions lead to a wide range of estimates regarding prevalence. The current study's definition of child abuse follows that of the Childhood Trauma Questionnaire (CTQ; Fink, Bernstein, Handelsman, Foote, & Lovejoy, 1995) because the CTQ was used to assess extent of abuse and neglect in the study's sample. The CTQ definition of abuse applies to all relationships, including parents and siblings. The categories of abuse that are included involve sexual abuse, defined as sexual threats, being forced to watch others' sexual behavior, and sexual contact, including rubbing, fondling, and sex. Physical abuse is defined as being hit, kicked, thrown up to a wall, locked up, burned, choked, or assaulted with weapons. Emotional abuse is defined as being yelled at, criticized, humiliated, threatened, blamed, controlled, or ignored. Emotional neglect is defined as a lack of love and attention. Physical neglect is defined as a lack of supervision, food, clothing, and medical treatment.

Prevalence

Community samples. A meta-analysis of 217 studies conducted between January 1980 and January 2008, with 331 independent samples, and 9,911,748 participants, was conducted by Stoltenborgh et al. (2011). Researchers found a significant difference between informant report (0.4%) and self-report (12.7%) of child sexual abuse, with an overall prevalence rate of 11.8%. Moderator analyses were conducted on self-report studies only, and found higher rates of abuse for females (18%) than for males (7.6%). Females in Australia reported the highest rates of sexual abuse, where males reported the highest rates in Africa. Asia found the lowest rates of sexual abuse for both genders.

Males reported higher sexual abuse rates in developing countries. No difference was found for the age of participants in the studies.

A recent meta-analysis of worldwide child physical abuse (Stoltenborgh et al., 2013) was conducted using 111 studies, with 168 independent samples collected between January 1980 and January 2008. A total of 9,698,801 participants were included in the analysis. A significant difference was found between informant studies and self-report studies, with informants reporting a 0.3% rate of abuse, while 22.6% of participants in self report studies indicated a history of abuse. There were no gender or cultural differences, however, the authors attribute methodological differences to the varying reported rates across studies.

Another meta-analysis was conducted by Stoltenborgh et al. (2012) in regard to emotional abuse between January 1980 and January 2008. Twenty-nine studies were included, with a total of 7,082,279 participants. Differences were again found between self-report studies (36.6%) and informant-report prevalence rates (0.3%), with an overall prevalence rate of 26.7%. No significant differences were found for gender, race, economy, or continent, indicating that emotional abuse is a universal phenomenon. In self report studies, fully randomized samples found lower prevalence rates (19.0%) than modified randomized samples (52.9%) or convenience samples (40.3%), indicating that procedural issues accounted for some of the differences. Large variations were found in prevalence rates across self-report studies, which can be partially explained by sample characteristics, definitional issues, procedure, response rates, and year of publication.

A meta-analysis of the available publications regarding childhood neglect between January 1980 and January 2008 was also conducted by Stoltenborgh et al.

(2012). This study included 16 studies, with a total of 59,655 participants. No significant differences were found between rates of physical neglect (16.3%) and emotional neglect (18.4%), and no differences were found for gender. Procedural differences in both the emotional and physical neglect samples accounted for significant differences in reported prevalence rates.

In the most recent Canadian Incidence Study of Reported Child Abuse and Neglect, (Public Health Agency of Canada, 2010), sites were selected as representative of Child Welfare sites across Canada, and cases that were opened between October 1 and December 31, 2008 were included. Cases involving children over the age of 15, siblings who were not investigated, and non-abuse cases were excluded from analysis. A total of 235,842 investigations were included, which was a rise from the 1998 incidence study, but not a significant change from the 2003 study. Thirty-six percent, or 85,440 cases were substantiated. Sexual abuse accounted for 3% of cases in this sample. It should be noted that the cases included in this study only accounted for substantiated parent-perpetrated abuse, and as such, this rate likely underestimates the incidence of sexual abuse. Physical abuse accounted for 20% of cases, emotional abuse for 9%, and neglect and exposure to partner violence each accounted for 34% of cases.

In Ontario, adults who had been contacted as children in the first wave (1983) of the Ontario Child Health Study were contacted for a third wave of data collection between 2000 and 2001, (MacMillan, Tanaka, Duku, Vaillancourt, & Boyle, 2013). A total of 1928 participants were contacted, and self-report rates of child abuse were collected. Sexual abuse was reported more frequently by women (22.1%) than men

(8.3%). Physical abuse was reported more frequently by men (33.7%, 21.5% severe) than by women (28.2%, 18.3% severe). Emotional abuse and neglect rates were not reported.

Clinical samples. In an epidemiological survey,1411 adult female twins were assessed for childhood sexual abuse and mental health disorders (Kendler et al., 2000). History of abuse was associated with all disorders, with higher associations found for bulimia and substance dependence. Greater severity of abuse was associated with higher associations to mental disorders. In twin pairs with only one individual having been exposed, the abused twin was at higher risk of mental illness.

Differences in prevalence rates depend largely on methodological differences. All forms of abuse, however, affect millions of children worldwide. Child abuse is associated with multiple long-term effects and numerous disorders (see section below). This leads to high prevalence rates in the treatment of numerous disorders (e.g. posttraumatic stress disorder for rape; depression; borderline personality disorder; and social anxiety). Thus up to 90% of clinical samples report a history of childhood abuse (Pilkington & Kremer, 1995)

Effects of Child Abuse Trauma

Paivio and Pascual-Leone (2010) posit three major inter-related sources of disturbance for victims of child abuse. The first is the overwhelming experience of repeated exposure to trauma which is associated with symptoms of posttraumatic stress disorder and cognitive and behavioral correlates. Malevolent attachments to caregivers are the second main source of disturbance. Perceptions of self and others develop in attachment relationships (Ainsworth & Bowlby, 1991). Rejection by attachment figures leads to a sense of the self as worthless or bad, and others as undependable. The third

source of disturbance is reliance on avoidance as a coping strategy. Emotion regulation is learned in early attachment relationships (Ainsworth & Bowlby, 1991). Children who have been abused are not taught how to regulate emotion and are vulnerable to feeling overwhelmed or to over-controlling their emotions in order to cope (Paivio & Pascual-Leone, 2010). Without support and emotional coping, children frequently learn to rely on avoidance (Gottman, Katz, & Hooven, 1996). They have an impaired understanding of themselves and their own reactions, and rely on maladaptive coping behavior including substance abuse and self-harm (see Effects section below). This reliance of emotional avoidance leads to negative health outcomes (Pennebaker, 1997; Hildebrandt & Hayes, 2012).

Posttraumatic Stress Disorder (PTSD; DSM-IV-TR, American Psychiatric Association, 2000; DSM-5, American Psychiatric Association, 2013) is one of the main effects of exposure to trauma. PTSD is defined by symptom clusters of re-experiencing the trauma (e.g., intrusive memories, nightmares, flashbacks), avoidance of reminders of the trauma (e.g., people, places, events, feelings), and hyperarousal (e.g., sleep disturbance, anger, irritability). Cognitive disruptions as well as changes in beliefs about the self, world, control, and safety are correlates of PTSD. These include guilt and inappropriate blame of self and others for the traumatic events, as well as a lack of awareness of their own feelings and disrupted memories concerning traumatic events. Comorbidity with other disorders such as depression, generalized anxiety, social anxiety, and personality disorders are common, as are maladaptive coping behaviors such as self-injury and substance abuse.

Disorders of Extreme Stress Not Otherwise Specified (DESNOS; van der Kolk et al., 2005), more recently referred to a complex PTSD (Courtois & Ford, 2009) has been posited as a more complete description of the wider array of symptoms that are common for people who have experienced repeated early interpersonal trauma. This kind of abuse is often perpetrated by caretakers and other attachment figures, leads to a more complex constellation of effects in addition to PTSD, has an earlier onset, and an increased chance of additional symptoms. Complex PTSD stemming from relational violence and betrayal in attachment relationships during childhood is primarily characterized by impairments in emotion regulation and relational capacities, and self-related disturbances. Impairments in emotion regulation include under-regulation of emotions such as anger, guilt, and shame. Studies have linked childhood abuse, especially physical abuse, with chronic rage, ineffective anger suppression and violence (Maneta, Cohen, Schulz, & Waldinger, 2012), as well as anxiety (van der Kolk et al., 2005), and shame (Kim, Talbot, & Cicchetti, 2009).

Victims often learn to regulate these powerful negative feelings through chronic avoidance of emotion (numbing, shutting down, or suppression) and maladaptive behaviors such as substance abuse and self-harm (van der Kolk, et al., 2005). Chronic avoidance can result in lack of awareness of internal experience (alexithymia) and identity confusion. For example, studies have linked alexithymia, which involves difficulties identifying and labeling feelings, to a history of emotional neglect (Aust, Hartwig, Heuser, & Bajbouj, 2013), and to childhood neglect, physical and emotional abuse (Paivio & McCulloch, 2004). Paivio and McCullough also found that alexithymia mediated the relationship between childhood abuse and self-injurious behavior. Sexual

abuse survivors who blame themselves and are more ashamed are more likely to experience symptoms of dissociation in later life (Feiring, Cleland, & Simon, 2010), with stigmatization at abuse discovery predicting dissociative symptoms six years later.

Impairments in relational capacities include difficulties with intimacy, interpersonal trust, parenting difficulties, idealization of the perpetrator, risk of revictimization, and victimizing others.

Complex child abuse trauma also is associated with profound self-related disturbances, which are the focus of the present study. The sense of self is derived from experiences with and messages from attachment figures in early life (Ainsworth & Bowlby, 1991). A secure attachment with parents teach the individual healthy emotional regulation, a sense of safety, and a sense of the self as worthy. Abusive and neglectful relationships with attachment figures, teaches the child to perceive themselves as worthless, unlovable, negligible, and incompetent, and vulnerable to rejection and abandonment. From an emotion-focused perspective, chronic feelings of inferiority and low self-worth, seeing the self as inherently bad and worthless stem from a core shame based sense of self developed in early attachment relationships, (Paivio & Pascual-Leone, 2010). Individuals with a core shame-based sense of self will not believe that they are worthy of being treated well, and may not believe that they can, or deserve to be "happy". They are less likely to defend themselves from maltreatment, and to pursue goals that will contribute to their wellbeing (Kim, Talbot, & Cicchetti, 2009).

A sense of insecurity or low self-confidence also commonly stems from experiences of abuse and neglect in childhood (Paivio & Pascual-Leone, 2010) such that the abused individual may avoid feelings and situations that seem to be insurmountable.

Chronic experiential avoidance is associated with a variety of health disturbances (Pennebaker, 1999; Hildebrandt & Hayes, 2012), and perpetuation of PTSD symptoms (Foa, Riggs, & Gershuny, 1995). Low self-confidence also can affect current interpersonal relationships in several ways. Individuals may not express their needs within relationships, and may not defend themselves against maltreatment (Rellini, Zvolensky, & Rosenfield, 2012), especially when emotion dysregulation is also present. Additionally, research indicates that victims of child abuse are more likely to experience self-destructiveness, guilt, shame, feeling misunderstood, and having distorted beliefs, such as idealization or demonization of perpetrators (van der Kolk et al., 2005). Emotional abuse has been related to problems of self (Donovan & Brassard, 2011), including depression, and future relational victimization (van der Kolk et al., 2005). Emotionally abused girls can have additional self-esteem difficulties, while boys are more likely to be delinquent (van der Kolk et al., 2005).

Treatments for Complex Child Abuse Trauma

Psychological treatments for complex trauma address the above disturbances. There are several principles that are common across treatment approaches including: ensuring safety in and outside of therapy; focus on emotion regulation, primary reducing dysregulation; memory work; strengthening sense of self; and improving relational capacities (Courtois & Ford, 2013). Different approaches have different theories about what contributes to change.

Cognitive Behavioral Therapy (CBT). The underlying theory of CBT for trauma is that habituation to trauma feelings and memories will reduce symptoms of PTSD (Foa, Hearst, Ikeda, & Perry, 1995). Exposure is accompanied by skills training

and challenging maladaptive cognitions (Cloitre et al., 2010). These therapeutic interventions seek to reduce distress and increase tolerance, leading to more adaptive affective, cognitive, and behavioural functioning (Cloitre et al., 2010). There are several cognitive behavioral therapies for trauma.

Dialectic Behavior Therapy (DBT) for Borderline Personality Disorder (BPD) (Carter, Wilcox, Lewin, Conrad, & Bendit, 2010), may be conducted with clients who have a history of child abuse, because childhood trauma history is prevalent in individuals with BPD (Bornovalova et al., 2013). In addition, components of this therapy are integrated into other cognitive behavioral therapies for trauma (e.g. Cloitre et al., 2010). DBT combines group and individual formats, with a focus on validation of client experience and perceptions and reducing self- destructive behaviors. Carter et al. (2010) studied a sample that included 70 female clients with BPD, 33 of whom were assigned to treatment as usual, and 37 were assigned to DBT. Quality of life improved more for clients with DBT than treatment as usual.

Skills Training in Affect and Interpersonal Regulation & Exposure (STAIRS; Cloitre et al., 2010) is another CBT approach that consists of eight sessions of skills training and eight exposure based sessions. The skills training portion is similar to DBT, with a focus on emotion regulation and management, distress tolerance, interpersonal problems, maladaptive schemas, flexibility and awareness of social context. Exposure includes in vivo exposure to specific narratives of childhood and adult trauma. One hundred and four women with PTSD related to child physical or sexual abuse were included in the study, and were randomly assigned to STAIR and exposure, STAIR and support (client directed help), or exposure and support groups. The combination STAIR

and exposure group was more effective in reducing symptoms and had lower dropout rates than the other two groups.

Cognitive Processing Therapy for childhood sexual abuse (CPT-SA; Resick, Nishith, & Grinning, 2003) is a 17 week combined group and individual therapy, consisting of 90 minute weekly groups, and 60 minute individual therapy. CPT consists of clients' review of "rules" that they developed to interact with the world in childhood, writing accounts of the sexual abuse, and challenging maladaptive cognitions and beliefs. In one study, (Chard, 2005), women with PTSD related to childhood abuse were randomly assigned to groups, with 36 in CPT-SA, and 35 in a minimal attention waitlist group. Clients in the waitlist group were given nondirective, brief counseling as required. Large effect sizes were found for the treatment condition in improvement of trauma symptoms and depression. Dropout from CPT was reported at 18%.

Eye Movement Desensitization and Reprocessing (EMDR; Shapiro, 2013) uses bilateral stimulation (visual, auditory and tactile) while visualizing traumatic material in order to reprocess. The first session builds a "safe place" including visualization and hypnosis, and subsequent sessions use EMDR in conjunction with visualization of traumatic material. Visualizations of positive interactions with attachment figures are used to create a positive association with EMDR. In one study (Edmond, Rubin, & Warnbach, 1999) female child sexual abuse survivors were randomly assigned to groups, with 20 receiving EMDR, 20 receiving routine individual treatment, and 19 assigned to a delayed treatment control group. Six 90 minute treatment sessions were given to both treatment groups. Differences were found between groups at mid-therapy and endpoint. Significant reductions were found for depression, anxiety, and trauma symptoms for the

EMDR group, with greater changes than treatment as usual for depression and anxiety, and reductions over control for all symptoms at posttest.

Psychodynamic Psychotherapies. Psychodynamic psychotherapy for trauma focuses on unconscious processes, interpretation of defenses or maladaptive interpersonal patterns (Cort et al., 2012). Interpersonal Psychotherapy (IPT; Cort et al., 2012) views symptoms in an interpersonal context and posits that changes in current lifestyle and relationships will improve symptoms. In an efficacy study (Talbot et al., 2011), sixteen sessions of individual therapy with a focus on current interpersonal and lifestyle changes were conducted with 37 women with a history of child sexual abuse and depression randomly assigned to IPT and 33 women assigned to treatment as usual. IPT was found to be effective over treatment as usual in reducing depression, PTSD symptoms and shame.

There are a number of other prominent approaches in the clinical literature that have yet to be empirically supported. For example, Relational Treatment for Complex Trauma (Pearlman & Courtois, 2005) focuses on mending attachment problems through an awareness of and attendance to internal shifts, for example, dissociation in the client during moments of strong emotional experiencing. The therapist collaborates with the client to maintain a good therapeutic alliance and to create corrective attachment experiences. Another example is Accelerated Experiential Dynamic Psychotherapy (AEDP; Gleiser, Ford, & Fosha, 2008), which focuses on modulating emotion in the therapeutic setting, and creating a supportive, empathetic therapeutic relationship using an attachment based approach. Courtois' and Ford's (2013) Phase-Oriented Integrative Model for Treatment of Posttraumatic Self-Dysregulation is a phase specific approach.

The first phase of therapy focuses on safety, stabilization and engagement. In this phase, the client is stabilized and educated about trauma, reduction of self-harming behavior, building on the client's strengths, and building emotion regulation. The second phase focuses on exposure and emotion based techniques to process trauma memories. The final phase of treatment focuses on increasing self-worth, consolidating gains, and facing personal issues.

Emotion-focused Therapy for Trauma (EFTT)

EFTT (Paivio & Pascual-Leone, 2010) is the context for the present study. EFTT is a short term (16 to 20 sessions), evidence based approach grounded in experiential therapy theory and research (Greenberg & Paivio, 1997) which, in turn, draws on current emotion theory and research (Ekman & Cordaro, 2011). EFTT also integrates theory and research in the areas of trauma and attachment. EFTT is based in principles of the general model of emotion-focused therapy (EFT) applied to complex trauma. The following section outlines distinctive features of the general model of EFT.

General model of EFT. The primary source of new information in experiential approaches, including EFT, is client "experiencing" (Paivio & Pascual-Leone, 2010). During this process, the client explores their subjective internal experience, primarily feelings and associated meanings, and constructs new meaning from this process.

Another feature of EFT is a "marker driven" approach to intervention.

Accordingly, the therapist is constantly aware of client's emotional state, in order to introduce the appropriate intervention based on client in-session indicators of particular emotional processing difficulties. For example, if the client expresses self-criticism, it is a marker to address this problem possibly through a two chair dialogue between the

critical, dominant self, and the vulnerable self who feels judged and ashamed. The goal is to strengthen the vulnerable part of self, and to shift to more adaptive self-evaluations.

EFT also draws on emotion theory in viewing emotions as a source of information about cognitions, wants, needs, bodily experience, interpersonal interactions, and memories that can guide adaptive functioning (Greenberg, 2012). This network of information is embedded in emotion "schemes" or structures. Similar experiences or feelings activate structures/schemes and the constituent beliefs, memories, action tendencies or intensions so these are available for exploration and change (Greenberg, 2008). Particular basic adaptive emotions give specific adaptive information about the environment. As an example, anger informs about violation, threat of harm, or interference with goals; fear informs about threat of harm; and happiness informs that goals are being reached (Lazarus, 1991).

EFT also specifies particular types of emotions, associated emotional processing difficulties, and appropriate interventions (Greenberg & Paivio, 1997).

Adaptive emotion. Primary adaptive emotions are direct reactions to an external stimulus that inform adaptive functioning. Examples include anger at violation, informing the individual to establish interpersonal boundaries, or sadness at loss informing the self to ultimately accept the loss and move forward. The typical processing difficulty associated with primary adaptive emotion is their avoidance because they are painful or threatening. The appropriate intervention is to access avoided adaptive emotions in order to access the associated adaptive information.

Maladaptive emotion. There are three main types of maladaptive emotion.

Primary maladaptive emotions are direct responses to external stimuli but do not inform

adaptive functioning. They include experiences such as conditioned overgeneralized fear that is common in trauma, and a core maladaptive sense of self as worthless/insecure as is common in child abuse trauma. The latter are complex emotions but are activated as a whole rather than by underlying thoughts or feelings as in secondary emotions, described below. The appropriate interventions are to access and counter-condition or restructure the primary maladaptive emotional response.

Secondary or defensive emotions are secondary responses to thoughts or underlying more primary feelings. Fear about experiencing anger toward a caregiver at wrongdoing or anger to cover painful sadness would be examples. Secondary emotions are maladaptive because they do not inform an appropriate reaction to outside stimuli. The appropriate intervention is to by-pass secondary emotions and access underlying primary adaptive emotion. Complex secondary emotions such as depression involve complex cognitive-affective processes and the appropriate intervention is to explore and change the maladaptive constituents (e.g., self-critical thoughts).

Instrumental emotions are primarily used in order to attain some goal, for example, anger to control others or sadness to get support. These emotions are acknowledged and explored to understand the purpose that the client is attempting to fulfill, and more adaptive ways of getting needs met are taught.

Productive emotional processing in EFT. Productive emotional processing is based on a model of change which describes the transformation from maladaptive to healthy and productive emotional experience (Greenberg & Paivio, 1997). More recently, Pascual-Leone and Greenberg (2007) refined and verified this model of change in an initial sample of six clients, and a subsequent sample of 34 clients. The model describes a

shift from undifferentiated negative affect, such as general distress, through maladaptive fear, shame, and anger, and into adaptive sadness, grief, self-compassion, and assertive anger. This shift takes place through the identification of negative self-evaluations and unmet needs. The Classification of Affective-Meaning States (CAMS; Pascual-Leone & Greenberg, 2005) measures the components of this model. A number of studies have used the CAMS to verify this change process across diverse therapy approaches (Kramer, Pascual-Leone, Despland, & deRoten, in press; McNally, Timulak, & Greenberg, in press; Pascual-Leone, 2009; Pascual-Leone & Greenberg, 2005). For example, a study analyzed 34 single sessions of separate clients, (Pascual-Leone & Greenberg, 2007). The clients completed therapy as part of four separate clinical trials. The focus of therapy was depression and/or interpersonal issues. Clients with good treatment outcome were more likely to have good within-session effects as measured by the CAMS (13 of 17) than those with poor in-session effects (4 of 17), accounting for 13% of the variance in outcome. Good outcome clients were more likely to reach advanced components of the CAMS, including grief and self-soothing as opposed to poor outcome clients. Clients were also found to proceed through the CAMS in a sequential order.

The present study will be the first to use the CAMS to assess changes in client experience of self (self-narratives) over the course of EFTT.

EFT specifically for complex trauma (EFTT). EFTT is based on the general principles of emotion focused therapy described above and integrates the research and theory of trauma and attachment (Paivio & Pascual-Leone, 2010). Basic tenants of trauma theory are that trauma memories are encoded in experiential memory largely in the form of images, feelings, and somatic experience, and that recovery requires

integrating the experiential and linguistic systems, that is, verbally symbolizing the meanings of traumatic experiences (Pennebaker, 1997). Another major tenant is that while avoidance of trauma feelings and memories are adaptive in the short term, in the long term avoidance perpetuates disturbance and prevents processing (Foa, Hearst-Ikeda, & Perry, 1995). Thus most experts agree that exposure and emotional processing are necessary for change. Changing fear structures related to trauma requires that the fear structure be activated, and that new information be integrated. From a traditional behavioral perspective, this includes learning through exposure that one is capable of tolerating trauma feelings and memories.

EFTT also draws on attachment theory and research because child abuse trauma typically takes place in the context of attachment relationships. As described in an earlier section, *e*motion regulation and relational difficulties and core maladaptive sense of self as worthless, unlovable, incompetent are characteristic of complex child abuse trauma developed in insecure attachment relationships (Ainsworth & Bowlby, 1991).

trauma). EFTT shares common factors with other treatments for complex trauma, as described above, but includes a number of distinctive features (Paivio & Pascual-Leone, 2010). First, EFTT was developed for both men and women dealing with different types of child abuse and emotional neglect, as opposed to an exclusive focus on female sexual abuse survivors. Second, emotional processing in EFTT refers to meaning making through approaching feelings, rather than habituation or challenging of cognitions as in CBT (Greenberg, 2012). The goal is to increase the breadth of emotional experience accessible to the client. The focus is on accessing adaptive emotion and its associated

adaptive information in order to help change maladaptive meaning and emotions, such as fear and shame, and creating adaptive associated meaning through emotional transformation.

Third, advanced empathic responding is a primary intervention of EFTT, with particular attention paid to accessing, labeling, and experiencing emotion, as well as emotion regulation (Paivio & Pascual-Leone, 2010).

Fourth, EFTT is based on an empirically verified model of steps in the process of resolving issues with perpetrators/attachment figures using an empty-chair dialogue technique (Greenberg & Foerster, 1996). Steps that discriminated clients who resolved issues from those who did not included intense expression of adaptive emotion, such as anger or sadness, expression of the associated unmet need and entitlement to that need, and a shift in perceptions of self and abusive/neglectful other. Clients shifted to a better understanding, and holding the other accountable for harm, and shifted to increased selfacceptance, assertiveness, and separation from the other. This model of resolution was modified to meet the needs of trauma clients (Paivio & Shimp, 1998). For trauma clients, self-related difficulties such as fear, avoidance and shame are blocks to resolution and require more time and attention in therapy. As well, reprocessing of trauma material can be more intensely painful and frightening than tasks in general EFT. Therefore, more attention must be paid to safety and reducing client fear and vulnerability to avoid retraumatization. Experiencing tasks also may be more difficult due to the heightened probability of avoidance and alexithymia. As a result of this, EFTT may be more directive than other Emotion Focused Therapies, due to frequent client avoidance.

Finally, empty-chair work was re-conceptualized as imaginal confrontation (IC) in order to emphasize trauma-work as well as interpersonal process. Overall, steps in the model of resolution provide guidance for the clinician throughout treatment (Paivio & Pascual-Leone, 2010).

The primary goals of EFTT (Paivio & Pascual-Leone, 2010) are (1) to reduce avoidance and increase emotional awareness, (2) to reshape attitudes toward self, specifically to reduce fear, avoidance, guilt, shame, and self-blame, and (3) to resolve issues with abusive and neglectful others, usually early attachment figures.

The posited mechanisms of change in EFTT are the therapeutic relationship and emotional processing of trauma material (Paivio & Pascual-Leone, 2010). The therapeutic alliance serves two functions. The first is to create an environment of safety to facilitate disclosure and trauma exploration. The second is to model corrective interpersonal experiences with the therapist to help counteract negative attachment experiences. This assists in improving the client's sense of self.

Emotional processing involves the therapist assisting the client in accessing and exploring trauma feelings and memories which were previously overwhelming and avoided. The client accesses and explores maladaptive primary emotions, such as shame and fear, in order to understand and change them. The client accesses adaptive emotions to change maladaptive emotions. This is the process of emotional transformation described above. As an example, in the process of exploring sexual molestation, maladaptive shame at involvement is acknowledged and fully accessed and adaptive anger at violation is simultaneously activated. This informs the client of the perpetrators' (rather than their own) culpability and responsibility for harm, which reduces shame and

improves self-esteem. Another route to transformation would be accessing adaptive sadness and grief in order to activate self-soothing regarding loss of the innocence of childhood. This activates self-compassion to replace the self-blame and shame.

This process of resolving issues with perpetrators is comparable to that conceptualized and assessed using the CAMS (Pascual-Leone & Greenberg, 2007) measure described in an earlier section. Accordingly to the CAMS model, productive emotional processing begins with expression of global distress which is differentiated into fear, shame, and rejecting anger. These maladaptive emotions activate associated negative self-evaluations and expression of unmet needs which, in turn, expression of hurt, grief, self-soothing, or assertive anger. These productive emotions help the client to create new meaning regarding a situation, and to improve their sense of self.

Phases and major interventions in EFTT. Advanced empathic responding and promotion of client experiencing are major interventions that are used throughout EFTT therapy (Paivio & Pascual-Leone, 2010). The functions of empathy (Paivio & Laurent, 2001) include allowing the client to accept their own experience, activate emotion, regulate emotion, and to access and explore meaning to increase understanding of emotion for the client. Empathy creates a safe space for the client to disclose and explore their emotional experience for meaning in vivo. Promotion of client experiencing is an aspect of emotional processing in therapy, activating emotions so that they are salient and can be explored for meaning.

The first three sessions of therapy are devoted to creating an attachment bond with the client through expression of compassion for the client, collaboration on goals, and introduction of the Imaginal Confrontation (IC) or Empathic Exploration (EE)

procedure. IC is based on the empirically verified model of resolution using a Gestalt-derived empty-chair procedure, as described above (Greenberg & Foerster, 1996). The task is to confront imagined abusive/neglectful others, and to express thoughts and feelings about abuse. It is emotionally evocative, activating core material, including fear, avoidance and shame, so that they are available for exploration and change. EE was developed for clients who declined IC. Paivio et al. (2001) found that a substantial minority of clients did not participate in IC procedures. It is an alternative, less evocative procedure to explore issues with abusive/neglectful others with the therapist. The first phase of therapy is marked by clients' exploration of their history of abuse, the effects on the self, and goals for treatment. Maladaptive emotional responses may surface, including shame at abuse, fear, feelings of incompetence at being able to cope, and self-directed anger. IC or EE is introduced in session four. These evocative interventions activate core material including fear, avoidance and shame.

The second phase is primarily directed toward self related work. The client explores and addresses fear, avoidance, self blame and associated meanings, including maladaptive cognitions and unmet needs. Self efficacy, or a reduction in maladaptive fear, must be increased in order for the client to confront trauma memories and imagined perpetrators. Self blame must also be resolved in order to access issues of the relationship with the perpetrator. Interventions include two-chair dialogue, memory work, as well as imaginal confrontation of perpetrators or empathic exploration of abuse issues in interaction with the therapist. Painful memories are approached, explored for emotion, and integrated into a more complex view of self (Paivio & Pascual-Leone, 2010). In two-chair dialogue the client is encouraged to create a dialogue between their critical self and

their vulnerable self. The critical self expresses anger toward, and blaming the self for the abuse. The vulnerable self expresses maladaptive shame at having participated in abuse, and accesses the need for self-soothing and self comforting, defending the self by the expression of responsibility of the abusive other for the harm, and adaptive sadness at the loss of innocence, thus reducing shame and self blame. In memory work, the therapist brings memories of situations in which a maladaptive sense of self was activated, focusing on the details that heighten emotional engagement. The client explores feelings about themselves and the other, and transforms them by accessing alternate healthy resources, such as adaptive anger and its associated need for respect, or sadness and compassion for the self.

The third phase focuses on resolution of issues with perpetrators through expression of anger and sadness during IC and EE procedures. The clients confront abusive and neglectful caregivers, and explore the full impact of traumatic events on self and relationships. Productive emotional processing related to self is primarily acknowledging sadness at losses, compassion for self, anger at violation, self-assertion and confidence. There is a growing acknowledgment of self as being worthwhile and deserving of unmet needs for attention, love, and security. In addition, there is increased pride and acknowledgement of strengths and accomplishments, and an increased capacity for joy.

Phase four involves integration of experiences, exploration of changes that have happened in therapy, connections to present functioning, and exploration of goals for after therapy.

Research in EFTT

Outcome. A quasi-randomized controlled trial of EFTT was conducted, with 39 female and seven male participants (Paivio & Nieuwenhuis, 2001). Eleven (24%) of the clients met Axis II diagnosis, and 27 (59%) met criteria for PTSD diagnosis. Most clients (76%) reported multiple types of abuse but were asked to focus primarily on one issue and perpetrator during therapy. Seven of the clients primarily focused on physical abuse, 14 were primarily concerned with emotional abuse, and 25 focused on sexual abuse. The study compared 22 clients assigned to EFTT to 24 clients on a wait list, followed by delayed treatment. The pre-post therapy effect sizes for 39 therapy completers on six outcome dimensions, including trauma symptoms, interpersonal problems, resolution of abuse issues, and self-esteem, ranged. from 1.03 to 2.64 standard deviations, and gains were maintained at six months follow-up. These are considered large effects (Lambert & Bergin, 1994).

In a recent study Paivio et al. (2010) conducted a randomized clinical trial comparing two versions of EFTT, each with a different re-experiencing procedure (IC and EE). Forty-five clients (24 female, 21 male) completed therapy, with 25 in the EE condition and 20 in the IC condition. Significant improvements were found on eight outcome measures, which included psychopathology, self-related and interpersonal difficulty, and trauma resolution. Large effect sizes (η^2 = .91 overall) were found for treatment pre- and post-therapy. No significant differences were found in effects for condition.

Change processes. Several studies have been conducted that support the posited mechanisms of change in EFTT. For example, Paivio and Patterson (1999) studied the

therapeutic alliance for 33 clients from the Paivio and Nieuwenhuis (2001) outcome study. Strong alliances were found early in therapy, and alliance improved over therapy. Early alliance difficulties related to abuse and neglect dissipated over the course of therapy and did not interfere with outcome. Alliance quality was related to improved symptoms, resolution of traumatic events, and self-affiliation at the end of therapy.

Another study of 33 clients in the Paivio & Nieuwenhuis (2001) sample examined the quality of anger expressions during the IC procedure (Carriere, 2004). Healthy anger expression was defined as adaptive (aid in functioning), assertive, with appropriate arousal, and some meaning exploration). Results indicated that healthy anger expression during IC was associated with resolution of abuse issues, as well as interpersonal issues and target complaints.

Another study of 29 clients in the Paivio & Nieuwenhuis (2001) sample analyzed client identified helpful events (Holowaty & Paivio, 2012). In questionnaires and post-therapy interviews, clients identified the most helpful events in therapy. These events were then located in therapy sessions and compared to researcher identified neutral events in terms of level of experiencing and arousal. Results indicated that both helpful and control events had moderate levels of experiencing, but that client-identified helpful events were characterized by higher levels of arousal and more two chair work regarding self-conflict.

Another study conducted on the Paivio and Nieuwenhuis (2001) sample examined the contributions of client engagement in the IC procedure to outcome (Paivio et al., 2001). The Levels of Engagement Scale (LES) was used to assess engagement with trauma material during the IC procedure (observer ratings) on three dimensions:

psychological contact with the imagined other; involvement in the IC procedure; and emotional expression. Results indicated that higher engagement during IC predicted resolution of issues with the abusive or neglectful others at outcome, above contributions made by the therapeutic alliance. Another study examined engagement in both the IC and EE procedure (Chagigiorgis, 2009), using the Paivio et al. (2010) sample. Engagement in IC and EE was measured using the LES and a comparable client self-report (PSQ; Paivio et al., 2010). Both observer-rated and client reported engagement were related to some dimensions of outcome during the EFTT with IC and EFTT with EE conditions.

Another study (Ralston, 2006) using the Paivio et al (2010) sample compared processes for 15 clients each during the IC and EE procedures. Processes included observer-rated emotional experiencing and arousal, client reported alliance quality and engagement. Results indicated higher emotional arousal in early and late sessions, as well as higher experiencing in late sessions during the IC procedure when compared to EE. Emotional experiencing contributed to client change in both interventions.

A study of narrative quality (Mundorf & Paivio, 2011) was conducted on 37 clients in the Paivio et al. (2010) sample. Trauma narratives written before and after therapy were analyzed for quality (temporal focus, negative and positive emotion words, coherence, depth of experiencing). Results indicated that greater access to negative emotion words, more positive emotion words, and greater depth of experiencing at preand post-treatment predicted dimensions of trauma resolution at outcome.

All of the above research is consistent with the fundamental assumption underlying EFTT, that productive emotional experience and expression are features of good outcome. All of the above studies also focus primarily on trauma narratives and the

primary re-experiencing procedures used to resolve issues with perpetrators. The only study to date that has focused specifically on self-related processes, despite it being a primary focus of therapy, is a recent qualitative analysis of change in self-experience in EFTT (Mundorf, 2013). Mundorf (2013) qualitatively examined transcriptions of self narratives during EFTT sessions for 35 clients drawn from the Paivio et al (2010) sample. Themes found in the initial phases of therapy included unclear self identity, lack of participation in life, dissociation, lack of self efficacy, and feelings of worthlessness. Themes related to change processes included blaming the perpetrator, emotional experiencing, and increased self awareness. New experiences of self near the end of therapy included themes of self acceptance and self efficacy. This lends preliminary support for distinct change in self experience during EFTT, and assumptions that emotional processes are an important aspect of that change. These themes are also consistent with the mechanisms of emotional change posited by the CAMS model described earlier. (Pascual-Leone & Greenberg, 2005).

The present study extends Mundorf's (2013) research. The study focuses on emotional processes specifically related to self as essential targets of change in EFTT. The study proposes a shift from maladaptive to adaptive feelings toward the self during the second phase of therapy. This shift is seen as a necessary antecedent to abuse resolution.

The Present Study

There is a high prevalence of childhood abuse in community and clinical samples (Stoltenborgh et al., 2011; Stoltenborgh et al., 2013; Pilkington & Kremer, 1995) and numerous long-term negative effects of repeated exposure to abuse, violence,

and neglect in attachment relationships (van der Kolk et al., 2005). One major effect of child abuse trauma is damage to the sense of self. This includes lack of clarity and confusion about self identity, chronic feelings of guilt, shame, worthlessness, self blame, anxiety, fear, and powerlessness (Mundorf, 2013; van der Kolk et al., 2005). These feelings have profoundly negative effects on functioning. Reducing self related problems is a main task of therapies for child abuse trauma, including EFTT. EFTT is an effective treatment that focuses on changing maladaptive emotion regarding self by accessing information associated with adaptive emotion (Paivio & Pascual-Leone, 2010). This adaptive information includes clarity about feelings and values, assertive anger at violation, sadness at loss, compassion for self, and acknowledgement of pride and personal strength, which help the construction of new meaning regarding the self. This is viewed as a necessary step in the resolution of abuse issues and change.

Abundant research supports the importance of emotional processes including arousal, experiencing, emotional engagement with trauma material, and healthy anger expression to client change in EFTT (Carriere, 2004, Chagigiorgis 2009, Ralston 2004). Most studies have focused on emotional processes during IC and EE. Less research has been conducted on the role of these emotional processes specifically related to self experience. This study is an extension of Mundorf's (2013) research into the processes of change in self during EFTT. The present study is the first to examine experience of healthy emotional processing during self narratives as a mechanism of change in EFTT. The present study compares the presence and absence of emotional processes using an empirically validated measure in terms of outcome as measured by self-esteem and depression change (CAMS, Pascual-Leone & Greenberg, 2005) to assess

change in self-narratives. Although clients in the Paivio et al (2010) study benefitted from therapy overall, the present study assessed how the presence of emotional processing relates to differences in outcome for comparatively better or poorer fairing clients in the sample.

Hypotheses

- Better outcome clients will express advanced emotion states of the CAMS (e.g. self-soothing, assertive anger, hurt/grief) during self-narratives more often than poorer outcome clients.
- Better outcome clients will express advanced states of the CAMS in selfnarratives more in later sessions of therapy compared to poorer outcome clients.
 This will indicate improvement in emotional processing over time for good outcome clients.

CHAPTER 2: METHOD

This study used a subset of archival data collected between 2002 and 2004 at the University of Windsor (Paivio et al., 2010). The data consisted of videotaped therapy sessions and self-report measures for a subset of clients who completed EFTT. Clients gave written consent indicating that they understood the benefits, risks, and rights of participation in the study, and to the video and audio taping of sessions. Clients consented to retention of tapes for research after having completed therapy. The original outcome study (Paivio et al., 2010) received approval from the University of Windsor Research Ethics Board.

Recruitment and Screening

As outlined by Paivio et al. (2010), participants were recruited through advertisements in newspapers, posters and referrals. Participants first were screened by telephone for having a history of child abuse trauma, then underwent a 90 minute selection interview. Questions assessed history or mental health, child abuse, and interpersonal functioning as well as current functioning, symptoms, diagnoses, and compatibility with EFTT. Individuals completed the PTSD Symptom Severity Interview (PSSI; Foa, Riggs, Dancu, & Rothbaum, 1993). One hundred and sixty three clients were screened, 56 clients began therapy, and 45 clients completed therapy.

Individuals were excluded if they reported present substance abuse issues, suicidality or self-injurious behavior, current involvement in domestic violence or other crises, were under age 18, or had a recent change in psychoactive medication.

Individuals who met criteria for Bipolar 1 disorder, psychosis, or an eating disorder were also excluded. Participants were included in the study if they were considered suitable

for short term emotionally evocative therapy. Suitability factors included motivation and capacity to form a therapeutic relationship, as well as a willingness to focus on their childhood abuse history.

Client Characteristics

The majority of clients in the original outcome study (Paivio et al., 2010) were Caucasian (88.9%), married (48.9%), had children (*M*=2.07; *SD*=1.94), were employed (71.1%), had post-secondary education (75.6%), and a household income of more than \$40,000 per year (57.8%). The mean age of clients was 45 years (*SD*=13), and most reported multiple forms of abuse (69%). However, clients were asked to identify the type of abuse and relationship that was the focus of therapy. Most clients focused on sexual abuse (55.6%), followed by emotional abuse (22.2%), physical abuse (13.3%) and neglect (8.9%). Unresolved problems with parents were the primary focus of therapy for all clients. Identified primary perpetrators were mostly fathers or stepfathers (44.5%) or mothers (31.3%), while 4.4% identified brothers, 6.7% other relatives, and 13.3% identified non-relatives as the primary perpetrators of abuse. Clients met criteria for severe abuse specified on the Childhood Trauma Questionnaire (Bernstein & Fink, 1998). The majority of clients (62.2%) met diagnostic criteria for PTSD. One third of clients met criteria for personality pathology.

Therapies

Therapy consisted of 16 to 20 weekly one hour sessions of EFTT with either IC or EE as the primary re-experiencing procedure. As stated previously, tasks of therapy involve establishment of a good working alliance, work on fear and shame (self related problems), and resolving issues with perpetrators of abuse/neglect. When

necessary, in both versions of EFTT, standard anxiety reduction techniques were used with clients experiencing severe emotional dysregulation problems.

EFTT with Imaginal Confrontation. In this version of EFTT, the client imagines the abusive or neglectful other in an empty chair (Paivio et al., 2010). They express their feelings, needs, and thoughts to this imagined person directly. This procedure is typically introduced in the fourth session, and is based on the verified model of resolving issues with imagined others described in earlier sections (Greenberg & Foerster, 1996). Intervention principles used in IC are evoking trauma memories, and owning, attending to and expressing internal experience. The frequency of participation in IC was a function of individual client needs. Self-related issues, such as self-criticism or self-interruption, are explored using Gestalt-derived two-chair interventions.

EFTT with Empathic Exploration. This is an alternative version of EFTT using EE as the alternative procedure for resolving issues with perpetrators. EE is based on the same model of resolution and the same intervention principles as IC except without the empty chair. Rather, clients imagine the other and traumatic events in their "mind's eye" and explore thoughts and feelings with the therapist rather than the imagined other. EE is also typically introduced in the fourth session and the frequency of participation was based on individual client needs. Self-related issues are also explored exclusively in interaction with the therapist.

Therapists

Eleven therapists ranging in age from 27 to 57 years participated in the study (Paivio et al., 2010). All had previous experience conducting therapy with clients who have a history of trauma and were trained in EFTT. Seven of the therapists were

female, and four were male. One therapist was a master's level student, six were doctoral level, and all were in clinical psychology. Four of the therapists were post-doctoral clinical psychologists, and each saw between two and eight clients after attrition.

Therapies were held at the Psychology Research Centre or the Psychological Services

Centre at the University of Windsor. Weekly team meetings were held throughout the study with review of therapy videos and supervision provided by Dr. Paivio.

Procedure for the Original Outcome Study

Clients were randomly assigned to either IC or EE condition by coin toss (Paivio et al. 2010). Eight outcome measures were administered at pre- mid-, and post-therapy. The present study used two of these measures that most directly assess self-related difficulties.

Outcome Measures in the Present Study

Beck Depression Inventory II (BDI-II; Beck, Brown, & Steer, 1996). The BDI-II is a 21 item scale measuring depression symptoms. There are four responses per item relating to severity of each depression symptom within the previous two week period. Beck et al. (1996) reported an alpha level of .92.

Rosenberg Self Esteem Scale (RSE; Rosenberg, 1989). The RSE is a 10 item Likert scale measuring self-worth. Rosenberg (1989) reported alpha levels between .77 and .88.

Process Measure in the Present Study

The measure used in the present study to assess emotional processing during sessions is the Classification of Affective Meaning States (CAMS; Pascual-Leone & Greenberg, 2005).

Classification of Affective Meaning States (CAMS; Pascual-Leone & Greenberg, 2005). The CAMS is ordinal nominal scale for coding emotional states that comprise a model of emotional change. Emotional states are classified according to their theoretical stage in the process of change and each emotion class has a specific definition. Client utterances are coded for the presence or absence of each emotion state or category. Each emotion is evaluated on five criteria, with three overall factors. The first factor is emotional tone, which consists of the emotion and its action tendency. The second is involvement, which includes expression of arousal and non-verbal behaviors, as well as vocal quality. The final factor is meaning, which involves stance or adaptivity, as well as specificity. Stance or adaptivity refers to the extent to which the meaning is oriented toward a healthy outcome. The affective meaning states that comprise the CAMS are as follows: (1) Global Distress; (2) Specific Maladaptive Fear or Shame; (3) Generic Rejecting Anger; (4) Negative Evaluation; (5) Existential Need; (6) Specific Self Soothing; (7) Specific and Adaptive Assertive Anger; (8) Specific Adaptive Grief or Hurt; (9) Relief; (10) Acceptance and Agency; (11) Mixed/Uncodable; (12) End Code. Reliability for the measure was measured in several ways in the original study (Pascual-Leone & Greenberg, 2007), with re-rating of 27 out of the available 34 clients. The unitization of observations, or agreement on changes in state (and therefore code), was reported at 85.9% agreement. The nature of the CAMS can include sequential ordering of codes, the reported reliability was Cohen's κ =0.91. The agreement for duration of codes was reported at r=.76.

Procedure for the Present Study

Client and episode selection. The present study used the same criteria to define dialogue with self-focus or self-content in therapy sessions as that used in a previous qualitative study of self-focus in EFTT (Mundorf, 2013). Selection of tapes for analysis in the Mundorf study was based first on therapist notes about the content of sessions, followed by a review of potential sessions to verify the presence of self-relevant material. Self focus sessions were defined as those where self-related issues were explored for the majority of the session, and self-content sessions were defined as those where self-related issues were explored for a significant portion, but less than half of the session. The present study included only clients with early and late sessions containing significant self-related work. Mundorf identified seven clients who had at least three sessions with self focus, ten clients who had one session with self focus, and at least three sessions with self content, creating a sample of 17 clients. One of these 17 clients had not been included in the original outcome study (Paivio et al., 2010), and was dropped from the sample, leaving 16 clients in the current sample. Outcome was assessed by calculating the pre-post effect sizes of change on BDI-II (Beck, Brown, & Steer, 1996); and RSE (Rosenberg, 1989) scores for each client. There were 54 available early selfnarrative sessions, and 80 available late sessions. Sessions were selected for higher proportion of self-related content. Table 1 presents the range of sessions selected for analysis in the present study.

Table 1.

Sessions Selected for Analysis in the Present Study

	M Session #	SD	Range
Early Sessions	3.82	1.79	2 - 7
Late Sessions	14.65	1.61	11 - 17

Note: N = 16

Selection of therapy segments for analysis. Markers for the beginning and end of segments to be analyzed followed Mundorf's (2013) procedure as follows.

Markers for the beginning of self-related work were: references to the self, including self blame, or self-esteem; references to the client's self in relation to others, such as their perception of themselves in interpersonal relationships, others' perceptions of the client, their feelings about others' treatments of them, or their interpersonal needs; self-related emotions, such as pride, or self consciousness; existential thoughts; reference to self-interruption, or to multiple aspects of the self; or discussion in observed changes of self. Markers for the termination of self-focus were: clear change in topic; examples that diverge from the topic of self; inaudibility; client not elaborating on therapist introduced self-topic; therapist interjection; or a period of silence longer than one minute.

Training of raters. Two clinical psychology graduate students, including the principle researcher, were trained under the supervision of an expert rater on the CAMS (Dr. Antonio Pascual-Leone). Videotaped dialogue was rated according to the manual for the measure. A rating manual was created during the training process with additional rules to facilitate inter-rater reliability during data coding. Forty-four training tapes that were not included in the present data set were coded by both raters. Initially

tapes were rated together to reach a consensual understanding of criteria, and then rated separately in order to work toward reliability. Disagreements in ratings were discussed, and discrepancies were resolved after rating of each tape. Expert raters were consulted as necessary.

Rating procedure. Data were rated once .80 Cohen's *kappa* inter-rater agreement was established in the training procedure. The tapes were masked for treatment, session number, and were randomly selected for rating order. Each rater rated two thirds of taped segments, overlapping by one third to assess reliability. All sessions that were rated by each rater were discussed after independent ratings in order to control for rater drift. The entire videotape of each session was assessed by the principle investigator for multiple instances of self-related content, and each segment with selfrelated content was rated. Segments were rated from the start of self-related segments until they met termination criteria. Segments with no self-related content were not rated. Coding for the CAMS categories was conducted on a minute by minute basis. This provided one emotional category for each minute of self-content, as well as Need or Negative Evaluation codes where appropriate. Following these ratings, each session was coded for the presence or absence of each emotional category on the CAMS. The interrater reliability for the presence of CAMS emotions was Cohen's $\kappa = 0.75$, and reliability for the presence of collapsed CAMS categories (as detailed below in Table 5) was Cohen's $\kappa = 0.84$.

Data Analysis

Fisher's Exact Test was used in lieu of chi-square tests to test for differences between CAMS grouping variables based on the presence or absence of other

CAMS grouping variables. T-tests were used to test the first hypothesis that better outcome clients will express advanced emotion states on the CAMS more than poorer outcome clients. Presence or absence of states on the CAMS were grouping variables and change in BDI-II and RSE were dependent variables. Two-by-two factorial ANOVAs using presence or absence of Advanced Meaning Making of the CAMS in early and late sessions were used to test the second hypothesis, that better outcome clients will express more advanced states of the CAMS in later session self-narratives compared to poorer outcome clients. Change in BDI-II and RSE scores were the dependent variables. Alpha level was set at 0.05 for all analyses.

CHAPTER 3: RESULTS

Sixteen clients had self-focused sessions and were included in the outcome study. For seven of these clients, there was only one instance of self-focused sessions. In these cases, a self-content session was used for the second session rated. These clients were included in the current study. Seven of the total 11 therapists had clients in this data set.

Data Screening

Prior to conducting the main analyses, a missing data screen was conducted. Overall, only one participant (6.25%) in the sample was missing data for post-treatment RSE scores. Little's MCAR test was not significant, which indicates that the data was missing at random. Expectation maximization was thus used to replace the missing data point (Cohen, Cohen, West, & Aiken, 2003).

The data was then examined for violations of assumptions of the statistical tests to be used. Assumptions of normality were met for the pre- and post- treatment scores on the BDI-II and RSE. One participant was an outlier in regard to change in BDI-II, having shown an increase rather than decrease in BDI-II scores from pre to post-treatment. This participant was included in subsequent analyses due to the small sample size and the possible meaningfulness of the difference between this participant and others in the sample. The assumption of adequate sample size was violated for all tests. The adequate sample size for t-tests in this study is 105 participants, for 2x2 factorial ANOVA is 400 participants, and for chi-square tests is 220 (Howell, 2013). This is a limitation of the current study.

Demographic Characteristics

Demographic characteristics for the current sample are presented in Table 2. Clients ranged in age from 38 to 71 years. All clients had previous therapy experience. Most were of European descent and had children. Over half were male. Most met criteria for PTSD diagnosis pre-treatment (n=10, 62.5%).

Table 2.

Client Demographic Characteristics

Variable	М	SD
Age	52.63	9.27
Children	2.31	1.45
	n	%
Sex		
Male	9	56.3
Female	7	43.8
Ethnic Origin		
European	14	87.5
Aboriginal	1	6.3
Other	1	6.3
Marital Status		
Single	3	18.8
Common law	0	0
Married	7	43.8
Separated/divorced	6	37.5
Children (>=1)	13	81.25

Note: N = 16.

Table 2 cont.

Variable	n	%
Psychotropic Medication	3	18.8
Employment Status		
Full-time	12	75
Unemployed	4	25
Level of Education		
High School	5	31.3
Undergraduate	7	43.8
Postgraduate	4	25.0
Annual Income		
<\$20,000	1	6.3
\$20, 000 - \$39, 000	7	43.8
\$40, 000 - \$59, 000	4	25.0
> \$60, 000	4	25.0

Note. N=16

Pre-treatment client characteristics are presented in Table 3. Half of clients identified sexual abuse as the primary focus of therapy. Mothers and fathers were the primary perpetrators of abuse for most clients in this sample.

Table 3.

Client Clinical Characteristics Pre-Treatment

Variable	N	%
Abuse Type		
Physical	2	12.5
Emotional	5	31.3
Sexual	8	50
Neglect	1	6.3
Primary Abuser		
Father	9	56.3
Mother	6	37.5
Relative	1	6.3
PTSD Diagnosis	10	62.5
Axis II Pathology	5	31.3

Note: N=16

Table 3 cont.

Variable	M	SD					
Childhood Trauma Question	nnaire						
Total	73	15.62					
Emotional Abuse	16.81	5.26					
Physical Abuse	12.69	4.39					
Sexual Abuse	13.69	7.55					
Emotional Neglect	18.19	4.48					
Physical Neglect	11.63	4.06					
PTSD Symptom Severity In	terview (PSSI)						
Total	23.512	10.14					
Reexperiencing	5.95	3.57					
Avoidance	11.22	5.19					
Arousal	7.06	3.91					
Personality Diagnostic Questionnaire - 4							
Total	37.08	17.08					

Note. N = 16

Analyses were conducted to assess whether the current sample is comparable to others in the outcome study who were excluded from this research. A MANOVA was conducted comparing the current sample to the overall sample with the total pretreatment CTQ, PSSI, and PDQ-4 scores as dependent variables. This tests was not significant F(3,45) = 0.689, p = 0.563, indicating that the current subsample is comparable to others in the overall outcome study. Additionally, chi-square analyses

were conducted to compare the current sample to the overall sample on categorical pretreatment characteristics. The current sample did not significantly differ in terms of gender $\chi^2(1,45) = 1.607$, p = 0.205, presence of PTSD diagnosis $\chi^2(1,45) = 0.047$, p =0.828, or presence of Axis II pathology $\chi^2(1,45) = 0.000$, p = 1.000. The current subsample was compared to the overall sample in terms of BDI change t(43) = 0.925, p =0.360 and RSE change t(43) = 0.440, p = 0.662 from the beginning to the end of therapy, and no significant differences were found, The current subsample is therefore considered comparable to the larger sample of therapy completers on relevant assessed pre-treatment characteristics and outcome and can be considered representative of the larger group, despite its small size.

Process and Outcome Variables

Table 4 presents means and standard deviations for the outcome data included in analyses. Cohen's *d* change scores were calculated for each client by subtracting the post-treatment score for each measure from the pre-treatment score for each client and dividing this by the pooled standard deviation score for that measure. Each client's change scores are presented in Table 5. Table 5 indicates that although all clients except one (# 14) improved on at least one dimensions, most clients improved on both dimensions, there was considerable variability in the degree of pre-post change reported by clients in the sample.

Table 4.

Means and Standard Deviations of Outcome Variables

Measure	BI	OI-II	RSE		
	Pre-Treatment	Post-Treatment	Pre-Treatment	Post-Treatment	
M	23.09	8	25.5	8.13	
SD	8.27	8.55	9.11	6.85	

Note: N = 16; BDI-II = Beck Depression Inventory – II; RSE = Rosenberg Self-Esteem Scale

Table 5.

Client Outcome Scores

	BDI-II				RSI	<u> </u>
ID	Pre-T	Post-T	d	Pre-T	Post-T	d
1	20	4	1.9	28	16	1.39
2	18	2	1.9	18	20	-0.23
3	20	2	2.14	17	16	0.12
4	26	0	3.09	25	12	1.51
5	28	22	0.71	27	25	0.23
6	32	1	3.75	24	20	0.48
7	37	4	3.92	31	18	1.51
8	17	7	1.19	24	24	0
9	22	2	2.38	21	14	0.81
10	29	12	2.02	29	21	0.93
11	24	12	1.43	21	22	-0.12
12	34	10	2.85	22	12	1.16
13	12	0	1.43	19	10	1.04
14	7	28	-2.5	19	23	-0.46
15	15	3	1.43	17	14	0.35
16	28	19	1.07	23	17.8	0.6

Note: Pre-T = Pre-Treatment; Post-T = Post=Treatment; *d* = Cohen's *d*; BDI-II = Beck

Depression Inventory II; RSE = Rosenberg Self Esteem Scale.

Descriptive Data

The following are examples illustrate the CAMS categories as they were expressed during self narratives by clients in this sample. The current examples are quoted from 8 of the 16 clients in the study, and were chosen for their clear and succinct display of content.

Global Distress. Global Distress is a fairly broad category. One of the common themes included in this category was a vague sense of pain, with no clear subject or emotional tone. The following is an example: "I feel very negative... I just feel like I've lost my joy. There's just this negativity hanging over my head. I just don't feel like I have anything." (Client #16, session #5).

Another common theme of Global Distress was a plaintiff quality with an overgeneralized tone. The following is an example: "My needs were never met, never even accounted for. Never addressed." (Client #5, session #2).

Fear/Shame. Fear and shame were typically expressed by clients in the following ways: "After the abuse I never felt safe again, ever." (Client #15, session #6).

"I feel loneliness but I don't reach out and I don't feel connected to anybody. It's like I'm suffering by myself. Crying is weak, asking for help is weak, showing you're hurt is weak." (Client #16, session #5).

"It's those moments when I'm beating myself all to crap that I'm lost. I feel, not really lost, but I feel lost. Of who I am, what I want, how I can do this to myself.

How can I keep feeling this way?" (Client #3, session #13).

Rejecting Anger. Rejecting Anger was expressed by clients in this sample in the following ways: "I just hated him so much, and I hated the abuse, and I figured if he was dead it would stop." (Client #15, session #6).

"What I resent in that whole situation there is that she was so fucking dumb that she didn't know that I needed support." (Client #13, session #13).

Need. The following are needs as they were expressed by clients in this sample: "I need somebody who has been there, who can relate to me." (Client #16, session #5).

"I want to let them know that things are bothering me, so that they know I don't like it, even if they never change it." (Client #14, session #6).

Assertive Anger. The following are expressions of Assertive Anger that are typical of clients in this sample: "I felt appropriately angry." (Client #5, session #2).

"I will decide. I will make the choices, what I preferred, what I think is good for me first." (Client #10, session #17).

Hurt/Grief. The following is an example of Hurt/Grief expressed by clients in this sample: "Throughout my entire life. You look at it, what happened to this three year old child affected so many aspects of your life, and took away any chance of being really happy. It made it hard to open up to people. And trust and feel affection in any way." (Client #15, session #6).

Self-Soothing. Self-Soothing was typically expressed in the following ways by clients in this sample: "When you realize that you can't [forgive the abuser] and there's nothing wrong with that. Maybe it is a shortcoming that I can't, but I can't and I'm not going to lie about it, and that's ok." (Client #15, session #6).

"Years and years. It's taken 60 years to say, 'you're ok." (Client #14, session #6).

Relief. Relief was typically expressed in the following manner: "I know when I started talking about it I was looking at my lap, and in a minute I was looking straight at you." (Client #9, session #6).

Acceptance and Agency. The following is an example of Acceptance and Agency as it was expressed by clients in this sample: "It's something that is the way it is. It's determined a lot of my life, that action, but you also have to take back your life and live it. Just saying this is a good life for me. It allows me to function, and to actually live, not just get through the day." (Client #15, session #6).

CAMS Data Treatment

Table 6 presents data on the CAMS categories. The CAMS categories were combined into two variables representing Early Expressions of Distress and Advanced Meaning Making in session processes. Combining the data in this way allows for more power in statistical analyses, is consistent with previous CAMS research (e.g. Pascual-Leone & Greenberg, 2007), and is consistent with the theory that some emotional expression is less productive, while others are more helpful in promoting change (Pascual-Leone & Greenberg, 2007). The Early Expressions category included presence of Global Distress, Fear/Shame, and/or Rejecting Anger. The Advanced category included presence of Assertive Anger, Hurt/Grief, Self-Soothing, Relief, and/or Acceptance and Agency. The Need category was retained as an intermediate category, rather than being combined with Negative Evaluation, because there were no instances of

Negative Evaluation in the data set. Interrater reliability for the presence of CAMS groups (i.e. Early Expressions and Advanced Meaning Making) was Cohen's $\kappa=0.84$. Table 6.

CAMS Characteristics

	Early Session	Late Session	
Category	Present	Present	Odds Ratio
Early Expressions of Distress	16	14	N/A
Global Distress	15	13	N/A
Fear/Shame	14	9	1.33
Rejecting Anger	6	7	0.5
Advanced Meaning Making	5	9	4.8
Assertive Anger	1	4	N/A
Hurt/Grief	1	3	N/A
Self-Soothing	2	2	N/A
Acceptance & Agency	2	6	1.8
Relief	1	3	N/A
Need	2	1	N/A
Negative Evaluation	0	0	N/A
Uncodable	15	16	N/A

Note: N=16; CAMS = Classification of Affective Meaning States.

As observed in Table 6, fewer clients expressed Early Expressions of Distress in self-narratives during later sessions, and more clients expressed Advanced Meaning

Making during later sessions including Assertive Anger, Hurt/Grief, Acceptance and Agency, and Relief. Clients were 4.8 times as likely to express Advanced Meaning Making in late sessions than early sessions overall. Many of the odds ratios were impossible to calculate as there were not members of each group (e.g. all clients expressed Early Expressions of Distress in early sessions, leaving no group to compare them to).

Relationships Among Process Variables

The relationships among the CAMS category groupings were tested for early and late sessions to explore whether affective expression in early sessions related to how clients expressed emotion later in therapy, and whether there were differences between early and late expression on the CAMS. Fisher's Exact Test rather than Chi-Square was used to assess the differences between the grouped CAMS categories, because expected cell counts were fewer than 5 for many of the comparisons, rendering Chi-Square testing less accurate. These tests were used as a non-parametric analogue to a correlation matrix. Grouped CAMS categories were utilized, because there were 200 possible comparisons between individual affective states, which would inflate the Type-1 error rate. Results are presented in Table 7. None of these tests approached significance, indicating that there were no differences between the number of clients who expressed any CAMS groups in session as a function of the client's expression of any other CAMS group. Although Table 5 presented above indicates more expression of Advanced Meaning Making in late sessions, this was not statistically significant.

Table 7.

Differences between Presence/Absence of CAMS Groups in Early and Late Sessions

Fisher's Exact Tests	Early E	xpressions		Need	Advanced				
FISHELS EXACT LESTS	of I	Distress	ľ	neeu	Meanir	ng Making			
	Early	Late	Early	Late	Early	Late			
Early Expressions of Dis	Early Expressions of Distress								
Early Session	-								
Late Session	-	-							
Need									
Early Session	-	1	-						
Late Session	-	1	1	-					
Advanced Meaning Maki	ng								
Early Session	-	1	1	1	-				
Late Session	-	0.475	1	1	0.308	-			

Note: Comparisons could not be performed using early Early Expressions of Distress, because this category was present for all participants.

Hypotheses

Hypothesis 1. Better outcome clients will express advanced emotion states on the CAMS more than poorer outcome clients.

T-tests were performed to compare differences between Early Expressions of Distress, Advanced Meaning Making, and the expression of Need categories on the BDI-II and RSE. Presence or absence of each variable in early and late sessions were the

independent variables, and change on the BDI-II and RSE (Cohen's *d* presented in Table 5) were dependent variables. Results are presented in Table 8 and Table 9. No significant differences were found between presence and absence of CAMS categories in terms of change in depression (BDI-II) or self-esteem (RSE). Levene's Test of Equality of Variance was significant for the t-test comparing presence and absence of Need in early sessions on BDI scores, indicating a violation of the assumption. For this test, the t-test where equal variances are not assumed is reported.

Table 8.

BDI Change for Presence or Absence of CAMS Categories in Early and Late Sessions

		Presen	t		Absen	t		
Category	N	M	SD	N	M	SD	t	p
Early								
Expressions	;							
Early	16	1.795	1.474	0	-	-	-	-
Late	14	1.167	1.46	2	2.675	1.766	0.897	0.385
Need								
Early	2	-0.713	2.522	14	2.154	0.954	1.591	0.35
Late	1	1.903	-	15	1.788	1.525	-0.073	0.943
Advanced								
Early	5	0.785	1.935	11	2.254	1.009	2.032	0.062
Late	9	2.021	0.964	7	1.504	2.004	-0.684	0.505

Note: N=16, df=14 for all analyses; BDI-II = Beck Depression Inventory II.

Table 9.

RSE Change for Presence or Absence of CAMS Categories in Early and Late Sessions

		Preser	nt		Absent			
Category	N	M	SD	N	M	SD	t	p
Early Expressi	ons							
Early	16	0.583	0.637	0				
Late	14	0.533	0.628	2	0.928	1.766	0.811	0.431
Need								
Early	2	0.07	0.755	14	0.656	0.615	1.24	0.236
Late	1	1.392	-	15	0.529	0.62	-1.349	0.199
Advanced								
Early	5	0.139	0.502	11	0.784	0.604	2.074	0.057
Late	9	0.75	0.571	7	0.367	0.695	-1.213	0.245

Note: N=16, df=14 for all analyses; RSE = Rosenberg Self Esteem Scale

Hypothesis 2. Better outcome clients will express more advanced states of the CAMS in later session self-narratives compared to poorer outcome clients. This will indicate improvement in emotional processing over time for better outcome clients.

Two-by-two factorial ANOVAs were used to test the second hypothesis comparing Advanced Meaning Making in early and late sessions in terms of change in BDI and RSE scores. Groups were defined by "presence" or "absence" of Advanced Meaning Making in early and late therapy sessions, creating four groups – (1) clients

with absence of Advanced Meaning Making in both early and late sessions, (2) clients with Advanced Meaning Making present only in late sessions, (3) clients with Advanced Meaning Making only in early sessions, and (4) clients with Advanced Meaning Making in both early and late sessions. Two factorial ANOVAs were run to test change over time in Advanced Meaning Making, one with change in depression on the BDI-II as the dependent variable, and another with change in self-esteem on the RSE as the dependent variable. It was not possible to test whether changes over time in Early Expressions of Distress had any effect on outcome, because all participants expressed Early Expressions of Distress in early sessions, which meant no clients in groups 1, 2, and 4 described above.

In regard to the factorial-ANOVA of Advanced Meaning Making on BDI change, there were significant main effects for early Advanced Meaning Making F(1) = 18.765, p = 0.001 partial $\eta^2 = 0.610$, and for late Advanced Meaning Making F(1) = 11.744, p = 0.009 partial $\eta^2 = 0.495$. There was also a significant interaction between early and late display of Advanced Meaning Making in terms of change in BDI scores F(1) = 9.821, p = .009 partial $\eta^2 = 0.450$. Changes in BDI score for each group are presented in Table 10. There was less change for those who expressed Advanced Meaning Making in early sessions, more change for those who expressed Advanced Meaning Making in late sessions, and an interaction whereby the individual who expressed Advanced Meaning Making in early session but not late session saw an increase in depression, and those who did not express Advanced Meaning Making in early sessions but did in late sessions saw the largest improvements in depression. Assumption of equality of error variance upheld. However, significant results are likely

due to inclusion of one outlier who was the only case in which a client expressed Advanced Meaning Making in early but not late sessions, and was also the only case (see #14 in Table 5) in which there was an increase in BDI score at post-treatment. This case was included because it was the only example of Advanced Meaning Making expressed early but not late in therapy.

There were no significant main effects or interactions for the factorial ANOVA comparing groups expressing Advanced Meaning Making in early and late therapy sessions in terms of change in self-esteem (RSE).

Table 10.

BDI-II Change for Presence and Absence of Advanced Meaning Making (AMM) in

Early and Late Sessions

Group	N	BDI	SD
Absence of Early AMM	11	2.254	1.009
Absence of Late AMM	6	2.171	1.041
Presence of Late AMM	5	2.354	1.081
Presence of Early AMM	5	0.785	2.004
Absence of Late AMM	1	-2.497	N/A
Presence of Late AMM	4	1.605	0.710
Absence of Late AMM	7	1.504	2.004
Presence of Late AMM	9	2.021	0.964

Note: N = 16; BDI-II = M Beck Depression

Inventory II Change.

Supplementary Analyses

Analyses were conducted to assess whether demographic characteristics related to the expression of Early Expressions of Distress or Advanced Meaning Making or to the expression of Need. T-tests were conducted to tests for differences in age, CTQ, PSSI, and PDQ-4 scores on these CAMS groups. The majority of these analyses were not significant, with the following exceptions: Clients who expressed Advanced Meaning Making in early therapy reported more severe maltreatment on the CTQ (M = 86.80, SD = 15.55) than those who did not (M = 66.73, SD = 11.43), t(14) = -2.931, p = 0.011. Clients who expressed Advanced Meaning Making in late therapy reported more severe

personality pathology on the PDQ-4 (M = 28.14, SD = 7.67) than those who did not (M = 10.26, SD = 3.88), t(14) = -2.363, p = 0.033. Fisher's Exact Test was used to test for associations between the CAMS groupings and gender, PTSD diagnosis, and therapeutic intervention. No significant differences were found.

CHAPTER 4: DISCUSSION

Summary of Findings

The present study tested a theory of emotional change (Pascual-Leone & Greenberg, 2007) whereby the client moves from early expressions of distress including fear, shame, and rejecting anger, through negative self-evaluations and expression of unmet needs, to advanced meaning making processes including assertive anger and grief, and finally to acceptance and agency. The study specifically examined the contribution of client expressed emotion during self-narratives in early and late sessions of emotion-focused therapy for complex trauma (EFTT; Paivio et al., 2010). The present sample included women and men who sought therapy to deal with issues related to childhood sexual, physical, and emotional abuse as well as neglect. Self-narratives were defined as in-session episodes in which the client focused on issues related to the self and were selected according to previous research criteria (Mundorf, 2013).

Overall, results indicated that more clients expressed early distress (e.g., fear/shame) in reference to self during early sessions, and more clients expressed advanced meaning making processes (e.g., hurt/grief) when referring to self during late sessions of EFTT. This finding supports the underlying theory of emotional change, however, these differences were not statistically significant. The odds of expressing Advanced Meaning Making in late sessions was more than 4 times that of early sessions which indicates that even in this small sample, there evidence of emotional changes over the course of therapy.

Results concerning specific hypotheses are as follows:

Hypothesis 1. Contrary to expectations, a greater presence of more advanced emotional states was not observed for better outcome clients.

Hypothesis 2. Overall, hypothesis two was also not supported. Clients who expressed advanced meaning making processes late in therapy had greater improvement in depression (BDI-II) compared to those who did not. This finding is consistent with theory. However, clients for whom advanced meaning making processes were *absent* in early session narratives showed *greater* improvement in depression compared to those for whom Advanced Meaning Making were present in early sessions. This finding is contrary to expectations based on the underlying theory of change and may be at least partially explained by the presence of one outlier client. This individual who expressed advanced meaning making processes early but not late in therapy deteriorated in terms of depression. There were no significant findings for the presence of advanced meaning making processes early or late in therapy in terms of change in self-esteem (RSE).

Secondary analyses examined the influence of client pre-treatment characteristics on emotional processes. Results indicated that clients who reported more severe childhood maltreatment (CTQ) expressed more Advanced Meaning Making (e.g., adaptive anger, grief) during self-narratives early in therapy which may indicate that these expressions represent "pseudo" advanced processes or wishful thinking on the part of these clients. It is also possible that these clients have more access to emotions such as grief, hurt, or assertive anger, as they may experience less ambivalence about the validity of regarding their childhood experiences as abusive.

Clients who reported more severe personality pathology (PDQ4) expressed more Advanced Meaning Making during self-narratives late in therapy. It is conceivable clients had more severe self-related difficulties and thus found self-focused work more meaningful, and as such engaged more during these sessions. Gender, PTSD diagnosis, and treatment condition had no significant influence on emotional processes.

General Discussion

Research (e.g., van der Kolk et al., 2005) indicates that childhood abuse is associated with feelings of depression, shame, worthlessness, insecurity, lack of confidence, and unclear self-identity. The need to understand how change occurs to mitigate these problems is great. The current study lends some support to the utility of adaptive emotional expression in therapy at least being associated with a mitigation in depression (i.e. a reduction in feelings of sadness, irritability, worthlessness, hopelessness, anhedonia, lack of motivation, and cognitive difficulties.) Early abusive attachment relationships teach individuals to view themselves as worthless, unlovable, negligible, incompetent, and vulnerable to rejection (Ainsworth & Bowlby, 1991). One would therefore expect emotional avoidance, fear/shame, and maladaptive anger in early sessions. The focus of EFTT is to shift these according to the model of change (Paivio & Pascual-Leone, 2010). Although not statistically significant, fewer clients expressed fear/shame in late sessions as compared to early sessions.

The CAMS requires that the rated emotions be expressed in vivo, that is, they are experienced in the present moment with some degree of emotional arousal (rather than being talked about), and that they involve meaning and specificity. The observed presence of these emotions in the present study is therefore consistent with EFT and EFTT theory and process of therapy (Greenberg, 2012; Paivio & Pascual-Leone, 2010). The presence of these emotions also is consistent with other research on EFT and EFTT

(e.g. Greenberg, 2008; Greenberg & Foerster, 1996; Carriere, 2004; Ralston, 2006). Although these emotions are likely present in other approaches to therapy with survivors of complex trauma (e.g., CBT) they are not typically the focus of therapeutic intervention or posited mechanisms of change.

The observed presence of more advanced states during self-narratives in later sessions compared to earlier sessions is consistent with EFT theory (Greenberg & Pascual-Leone, 2008) and the EFTT treatment model (Paivio & Pascual-Leone, 2010). This finding is noteworthy given the small sample, even if these differences were not statistically significant. The EFTT model specifies early sessions will focus on self-related difficulties, such as fear, avoidance, and shame that are typical of untreated survivors of childhood abuse (Paivio & Pascual-Leone, 2010). Numerous studies and experts have documented feelings of worthlessness and insecurity as outcomes of these childhood experiences (van der Kolk et al, 2005). The reduction in Early Expressions of Distress and increase in Advanced Meaning Making observed in the current study also are consistent with prior research and the EFTT model.

The EFTT model specifies that the more these difficulties have been worked through, the better the client is able to focus on resolving issues with perpetrators. The model of resolution (Paivio & Pascual-Leone, 2010) on which therapy is based proposes expressed adaptive anger at violation and grief over loss as catalysts for change and increased self-acceptance and compassion toward self as process outcomes. Results of the RCT (Paivio et al., 2010) evaluating outcome for the sample included in this study also indicated clients' self-reported changes in their view of self – i.e., reduced distress, increased confidence and self-worth.

In testing the second hypothesis, clients who express advanced states or more adaptive emotion in late sessions reported greater reductions in depression (BDI-II) compared to those who did not. This was true of those who expressed Advanced Meaning Making in late sessions but did not express them in early sessions. Again, this is consistent with the general EFT model of change (Greenberg, 2012) underlying the CAMS measure - i.e. that more advanced emotional states must be predicated by less adaptive states – and again, this finding also is consistent with the EFTT model of therapy (Paivio & Pascual-Leone, 2010) and results of the RCT evaluating outcome (Paivio et al., 2010) described above.

It is noteworthy that prior research using the CAMS (Pasual-Leone & Greenberg, 2007) found these advances in emotional states within a single session for each client. Additionally Pascual-Leone and Greenberg, (2007), found that the expression of advanced states emerged following expressions of Need or Negative Evaluation, thus supporting the model that negative evaluation (e.g., I am no good) and expression of associated unmet need (e.g., for self-respect) are essential steps in the process of change, indeed, mechanisms of change (transformation from maladaptive to adaptive emotion). Unlike the Pascual and Greenberg study, the present study examined change from early to late sessions rather than within a single session and found few expressions of Need and no expressions of Negative Evaluation. It is unclear why this would be, given the nature of episodes sampled (focus on self) and previous qualitative research on the identical episodes (Mundorf, 2013) that at least alluded to negative self-concept as a core theme. Perhaps the selection of segments based on the quantity of self-related

content, rather than selection of segments based on emotional engagement during these segments led to the selection of less productive segments.

The individual who expressed Advanced Meaning Making (self-soothing or compassion) in early self-narratives but not in the late session could be considered to have deteriorated in terms of therapy processes. This is consistent with his reported deterioration in terms of depression on the BDI (e.g., increased negative view of self) at therapy termination. It is possible that the self-soothing (Advanced Meaning Making) expressed by this individual was more indicative of emotional avoidance, an attempt not to experience negative emotion. This would be consistent with the overall finding that clients who expressed advanced emotion in early sessions fared worse than those who did not. This is consistent with findings from another study of EFTT (Mundorf & Paivio, 2010) that a higher proportion of negative emotion during trauma narratives written *before* therapy predicted better outcome. It seems that clients who have access to negative feelings early in therapy do better than those who do not, likely, because these feelings are more immediately available for exploration, emotional processing, and change.

Sample and Sampling Issues. Another issue concerns the sample of clients for the current study which included moderately distressed individuals with the complex of disturbances typical of this client group (Courtois & Ford, 2013). However, the current sample included more males (56.3%) compared to most clinical samples reported in the literature (Watkins, 2012), including other studies of EFT (e.g. 17.6% Pascual-Leone & Greenberg, 2007; 26.5% Boritz, Angus, Monette, Hollis-Walker & Warwar, 2011; 43.5%, Greenberg, Warwar, & Malcolm, 2008; 41.9% Ellison, Greenberg, Goldman, &

Angus, 2009). Although not significant, more males also were included in the current study than in the entire sample of EFTT completers (46.7%, Paivio et al., 2010), and more than in a previous study of EFFT (15.2%, Paivio & Nieuwenhuis, 2001). This difference may help explain the modest results concerning emotional processes and change. There is ample research supporting men's restricted emotional expression as compared to women. Men tend to be less emotionally expressive than women in verbal situations such as therapy, may be less aware of their affective responses, be poorer at interpreting these responses, and find their emotions less acceptable to themselves and others (for a review, see Wong & Rochlen, 2005). Additionally, Ralston (2006) reported that 87% of clients in this sample met criteria for alexithymia at the beginning of therapy. The severe difficulties identifying and labelling emotional experience that define alexithymia is typical of this client population (Courtois & Ford, 2013). These restrictions in verbal emotional expressiveness would be evident in a therapy such as EFTT which explicitly focuses on emotional experience and expression and could help to explain modest findings in the present study.

The restricted demographic that were included in this study is a limitation to the generalizability of the findings. This study included clients who were suitable for short term therapy, which necessitated the exclusion of individuals who displayed more serious pathology such as substance abuse, schizophrenia, and bipolar disorder (Paivio et al., 2010). People who have suffered complex trauma are more likely to display serious pathology such as substance abuse (van der Kolk et al., 2005). Findings from this study are not generalizable to this very important portion of the population. Additionally, this

study included a largely white and middle class sample, which limits the generalizability of these findings across ethnic and socioeconomic lines.

Another issue concerns the sample of clients, which included a subset of therapy completers (Paivio et al, 2010), and a subset of sessions with self-related content (Mundorf, 2013). Although clients in the present study were comparable to those not included in terms of extent of abuse, posttraumatic symptoms, gender, age, personality pathology, and improvements in self-esteem and depression, the focus on self-related disturbance is considered the second phase of EFTT. Furthermore, resolving self-related issues (reduced fear and shame, and more adaptive processes) is a secondary process and considered a prerequisite for resolution (Paivio & Pascual-Leone, 2010). In the model of resolution on which EFTT is based, the presence of intense expression of emotion, expression of need, self-validation and self-assertion during empty-chair dialogue were found more frequently for clients who resolved (Greenberg & Foerster, 1996). It follows that a number of clients in the present study who still had substantial self-focus in later sessions were in the earlier stage of the process of change. It is possible that more emotional expression consistent with the model of change would be found in early and late imaginal confrontation and empathic exploration – re-experiencing procedures which explicitly activate emotional experience. It is possible that the selection of self-related IC or EE procedures would have yielded results that were more supportive of the model of change in EFTT (Paivio & Pascual-Leone, 2010). Although self-related difficulties are posited as difficulties that require considerable attention in a previous study (Mundorf, 2013), found self-related content separate from trauma exploration or IC/EE in only 22 of the total 45 clients who completed therapy (Mundorf, 2013). The present study

reduced the sample even further by including only 16 clients with the largest amount of self-related content.

One final sampling issue concerns the episodes in the present study which began and ended with client dialogue that focused on self. This is different from other research using the CAMS, wherein the rated segments began with displays of global distress and ended with the dissipation of emotional arousal (Pascual-Leone & Greenberg, 2007). This also may help to explain the more modest results with this measure of emotion. There is an implicit criterion of this measure that emotional arousal must be present, and doubling the criteria of selection to include both self-narrative and emotional arousal would have narrowed the data set even further.

Issues Concerning the CAMS Measure. Prior research in self-narrative in EFTT which included clients in the present sample found changes in the way that clients viewed themselves over the course of therapy (Mundorf, 2013). Clients began with lack of clarity in identity, self-blame, and shame, and progressed toward allowing emotion and shifting blame for abuse to the perpetrator, and finally toward more positive experiences of self, including acceptance, empowerment, and authenticity. These findings are consistent with the model of change as measured by the CAMS (Pascual-Leone & Greenberg, 2007). Since the Mundorf study reported negative self-evaluations, one would expect to find Negative Evaluation codes according to the CAMS in the present data set, but none were found. This partly could be due to the smaller sample and subset of the Mundorf sample (i.e. 32 sessions rather than 173 sessions). Additionally, this could be due to the very specific definitions for Negative Evaluation codes using the CAMS. These guidelines require the expression to be very explicit in its content, clearly

stated, present-focused, and clearly rooted in the self. This precludes descriptions of negative feelings toward self or using the voice of another to express negative self-evaluations, as well as poorly articulated negative self-evaluations. The nature of qualitative research such as that conducted by Mundorf (2013) is different than that of quantitative process research used in the present study, leading to limitations in comparability. Specifically, the qualitative nature of the previous study allowed for the inclusion of themes as they arose within narratives, rather than the coding of instances that met previously defined and narrower criteria. Additionally, the previous research did not assess statistically significant differences, but rather common themes in narratives.

Another issue concerns the extent of uncodable data in the present study. This is relevant for several reasons. In previous CAMS research (e.g. Pascual-Leone & Greenberg, 2005), lack of emotional arousal signaled the end of a segment to be coded. In the present study, on the other hand, the inclusion criteria were based on the presence of self-narrative, which allowed for the inclusion of dialogue in which there was little or no emotional arousal. Although the precise amount of uncodable data found in previous studies using the CAMS has not been reported, it is likely that criteria for defining episodes that was unrelated to emotional expression resulted in more uncodable material in the present study. Uncodable material in the present study made up an average of 47.80% (SD = 0.247) and 51.22% (SD = 0.200) of each segment in early and late sessions, respectively.

The author observed a broad range of reasons that dialogue could be considered uncodable, and these may have clinical relevance. For example, at times the client was speaking about self-related content without any indication of emotional involvement. Of

the 21 sessions coded by the author 13 of the sessions included this content. The following is an example:

"There was a lot of times I drank too much, I wasn't a violent drunk, I just got bombed. I did that a lot through my teens and twenties. I don't know exactly why I did except I had a hard time dealing with me, like when I was sober I was away and when I had a couple of drinks I was more relaxed."

Much of the remaining uncodable material involved clients describing their struggles with blocking their own emotions. There was no emotional arousal or expression during these segments. Eight of the 21 sessions coded by the author included these instances. The following are examples:

"I've always helped people deal with things, but I've never listened to myself. I didn't use my wisdom for myself. I'd get into trouble if I were to do what the right thing was. I had to camouflage things, I had to be dishonest with my feelings in my family."

"The reason I'm second guessing myself about how this is being taken. Seeing here I am disclosing, part of me is thinking how is that going to ripple out."

At other times, clients were discussing the value that preventing emotional expression provides them. This occurred in seven of the 21 sessions coded by the author. The following is an example from a self-critical split:

"You don't need anybody. It's safer when you're by yourself. You portray this...

You look strong, like you've got it together. They just can pile on more shit on you.

You can take it, you're tough. Just be alone. It's easier to be alone."

In four of the 21 sessions coded by the author the client spoke about the value of engaging in emotional expression without actually doing so, leading to uncodable content. The following are examples:

"I really do, very much want to experience real [emotion]. A couple of weeks ago, it wasn't complete freedom, but it was much less so. It was much less tension. And that was really nice."

"I want to experience more."

In four of the 21 sessions coded by the author the client engaged in self-interruption, that is, they stopped themselves from experiencing or expressing feelings just as they were becoming emotionally engaged. Although difficult to quote, the following are examples:

"I don't know if it's to distract, distract from what I'm saying or doing. I'm not really sure."

"Then I felt like I was in this negative state and then the next thing I knew I just, like I felt like it was more towards me even though it wasn't. I don't know if I'm making any sense."

The remaining uncodable content included 10 cases in which the client briefly discussed content that appeared unrelated to the therapeutic process, including digressions into chores, home renovations and the like. In eight cases the therapist was speaking for an extended period, leading to uncodable segments.

The above examples of uncodable data point to the prevalence and clinical relevance of emotional avoidance in EFTT and other trauma therapies. The purpose of EFT in general is to access adaptive emotion and its associated adaptive information to

change maladaptive meaning (Greenberg & Paivio, 1997). However, EFTT may differ from the general model because the client population is explicitly prone to difficulties with emotional over-control and expression (van der Kolk et al, 2005). This may be part of the reason (along with sample size) that the CAMS was a more powerful predictor of emotional change in previous research with other populations (e.g., Pascual-Leone & Greenberg, 2007), whereas the current research produced more modest findings. It is possible that the emotional processing differs with clients who experience the emotional avoidance characteristic of trauma populations.

The Analytic Strategy. The analytic strategy of identifying whether an emotion category was present or absent is consistent with previous research using the CAMS (Pascual-Leone & Greenberg, 2007). As well, according to EFT theory, primary emotions (such as anger, sadness, fear, and shame specified on the CAMS) are fleeting and not the consistent focus of therapeutic dialogue. Thus, once identified and labelled (and rated as present), the cognitive meaning of the emotion becomes the focus of dialogue (Greenberg & Paivio, 1997). However this present/absent rating strategy is different from much process research which reports proportions of particular categories (e.g. Mendes, Ribeiro, Angus, Greenberg, Sousa, & Goncalves, 2010; Paivio, Holowaty, & Hall, 2004; Couture-Lalande, Greenman, Naaman & Johnson, 2007; Greenberg, Ford, Alden, & Johnson, 1993). Analysis on a presence-absence level does not give a picture of the process occurring during episodes, and in the present study affected the procedure for establishing interrater reliability. Raters could agree that a particular emotion category was present in an episode, but had limited agreement on where (i.e. which specific one minute segment) an emotion category occurred. Interrater reliability was adequate at the

session level, however reliability was too low at the minute-by-minute level (i.e., limited agreement on the emotion category for specific one-minute segments of client dialogue) to make further analysis at this level tenable. This level of reliability was seen as necessary for assessing proportions and could help to explain why secondary analyses using proportions yielded no meaningful results. These limit the validity of findings in the present study, especially as the presence or absence of these affective states may be too crude a measure of emotional processing. That said, self and emotional problems are ubiquitous among adult survivors of childhood abuse and this is one of the few studies to specifically examine change in these domains.

Strengths of the Present Study

The present study was the first to assess how emotions are expressed in EFTT when clients are discussing their sense of self – an essential process in therapy with survivors of childhood maltreatment. Despite the small sample and limited statistical power, clients were observed to express more advanced emotional processing later on in therapy while discussing their sense of self. Thus, results suggest at least preliminary support for the model of emotional change. Additionally, the CAMS is a psychometrically sound measure based on a theory of change, and was used reliably in this study. EFTT is an efficacious treatment with objective measures of client outcome that allowed for an analysis of the mechanisms of change present in a treatment that is already known to be effective.

The clients had experienced more diverse types of childhood maltreatment compared to other studies of complex trauma which focus almost exclusively on women with histories of childhood sexual abuse (e.g., Cloitre et al., 2010; Resick, Nishith &

Grinning, 2003; Chard, 2005; Edmond, Rubin, & Warnbach, 1999; Talbot et al., 2011). This has implications for the generalizability of this research in that there is more support for the current findings to generalize with male clients as well as clients who have suffered a more broad range of childhood maltreatment

Limitations of the Present Study

There are several limitations of the present study which restrict the conclusions that can be drawn from the results. The strongest limitation of the current study is the small sample size of 16 (32 sessions) clients, which restricts the power of any statistical analysis and the ability to find true differences that may be present in the data.

Another limitation concerns the CAMS inter-rater reliability which was too low at the minute-by-minute level to pursue analysis of processes on a more finely grained level. The use of presence and absence of emotional categories in sessions allowed for adequate inter-rater reliability, but limited information about process of therapy, or sequencing of CAMS categories within sessions, no information about posited mechanisms of change (negative evaluations, needs), and no information about interventions used to facilitate processes.

Contribution of the Study and Directions for Future Research

Despite limitations, the present pilot study of emotional processes during self-narratives furthers understanding of therapy for child abuse trauma in general and EFTT in particular. There has been little research to date in regard to self-focus, even within EFT and EFT for trauma (Mundorf, 2013). Although resolving issues of self is a focus of therapy for complex trauma survivors and for EFTT (Paivio & Pascual-Leone, 2010), this is the first quantitative study to assess processes within this therapeutic work. Present

findings indicate that, although self-content is rich (Mundorf, 2010), there may be relatively low levels of emotional arousal during explicitly self-related exploration.

Results also may be informative regarding the nature of the sample and client group. This sample was more predominantly male with high levels of alexithymia compared to other clinical samples (Ralston, 2006) and these individuals frequently have more difficulty with explicit identification of emotions, which likely interferes with effective emotional processing.

Additionally, those who have suffered child abuse are apt to engage in emotional avoidance (van der Kolk et al., 2005), and the individuals in this sample are no exception (Paivio et al., 2010). It is possible that the CAMS has limited value in research with populations such as this, where sustained emotional arousal is rarer. The nature of the data in the current study indicates that the use of the CAMS requires a level of emotional arousal for reliability and utility with data. In addition to sampling episodes with emotion content, future research could modify the measure to include the addition of codes related to emotional avoidance which could render the measure more appropriate for this kind of population. Despite limitations, emotional change processes and self-narratives are important phenomena in therapy with this client group. This is the first study to specifically examine emotional processes specifically during exploration of self-related material in therapy for complex trauma. The study provides unique case illustrations of how the CAMS codes present themselves in clients with these problems. This also is the first study to assess this model of change overs the course of therapy. Moreover, results provided some support for the model of change, in that early expressions of distress, such as fear, shame, and rejecting anger were more likely to occur in early sessions while

expression of more advanced meaning making states, such as assertive anger, hurt, grief, acceptance and agency were far more likely in late session. The study also has generated future research, for example, using a more rigorous analytic strategy, a larger sample, a different sampling of episodes more likely to contain higher levels of emotional arousal, and examining therapist behavior that facilitate emotional processing. The study therefore contributes to a program of research that could have important implications for practice and training in how to promote productive emotional processing in this vulnerable client group.

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APPENDICES

Appendix A

Beck Depression Inventory II

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Change in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness

- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- I am so sad or unhappy that I can't stand it.

2. Pessimism

- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

3. Past Failure

0 I do not feel like a failure.

- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

4. Loss of Pleasure

- I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

6. Punishment Feelings

- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7. Self-Dislike

- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

8. Self-Criticalness

- 0 I don't criticize or blame myself more than usual.
- I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes

- 0 I don't have any thoughts of killing myself.
- I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

10. Crying

- 0 I don't cry any more than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

11. Agitation

- I am no more restless or would up than usual.
- 1 I feel more restless or would up than usual.
- I am so restless or agitated that it's hard to stay still.
- 3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 I have not lost interest in other people or activities

- 1 I am less interested in other people or things than before.
- 2 I have lost most of my interest in other people or things.
- 3 It's hard to get interested in anything.

13. Indecisiveness

- 0 I make decisions about as well as before.
- I find it more difficult to make decisions than usual.
- I have much greater difficulty in making decisions than I used to.
- 3 I have trouble making any decisions.

14. Worthlessness

- 0 I do not feel I am worthless.
- I don't consider myself as worthwhile and useful as I used to.
- 2 I feel more worthless as compared to other people.
- 3 I feel utterly worthless.

15. Loss of Energy

- 0 I have as much energy as ever.
- 1 I have less energy than I used to have.
- I don't have enough energy to do very much.
- I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

- 0 I have not experienced any change in my sleeping pattern.
- 1a I sleep somewhat more than usual.
- 1b I sleep somewhat less than usual.
- 2a I sleep a lot more than usual.

- 2b I sleep a lot less than usual.
- 3a I sleep most of the day.
- 3b I wake up 1-2 hours early and can't get back to sleep.

17. Irritability

- 0 I am no more irritable than usual.
- 1 I am more irritable than usual.
- 2 I am much more irritable than usual.
- 3 I am irritable all the time.

18. Changes in Appetite

- 0 I have not experienced any change in my appetite.
- 1a My appetite is somewhat less than usual.
- 1b My appetite is somewhat greater than usual.
- 2a My appetite is much less than before
- 2b My appetite is much greater than usual.
- 3a I have no appetite at all.
- 3b I crave food all the time.

19. Concentration Difficulty

- 0 I can concentrate now as well as ever.
- 1 I can't concentrate as well as usual.
- 2 It's hard to keep my mind on anything for very long.
- 3 I find I can't concentrate on anything.

20. Tiredness or Fatigue

0 I am no more tired or fatigued than usual.

- 1 I get more tired or fatigued more easily than usual.
- I am too tired or fatigued to do a lot of the things I used to do.
- I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

- 0 I have not noticed any recent change in my interest in sex.
- I am less interested in sex than I used to be.
- 2 I am much less interested in sex now.
- 3 I have lost interest in sex completely.

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Appendix B

Rosenberg Self Esteem Scale

- 1 = Strongly agree
- 2 = Agree
- 3 = Disagree
- 4 = Strongly disagree
- 1. I feel that I am a person of worth, at least on an equal basis with others...1 2 3 4
- 2. I feel that I have a number of good qualities... 1 2 3 4
- 3. All in all, I am inclined to feel that I am a failure... 1 2 3 4
- 4. I am able to do things as well as most other people... 1 2 3 4
- 5. I feel I do not have much to be proud of... 1 2 3 4
- 6. I take a positive attitude toward... 1 2 3 4
- 7. On the whole, I am satisfied with my life at present... 1 2 3 4
- 8. I wish I could have more respect for myself... 1 2 3 4
- 9. I certainly feel useless at times... 1 2 3 4
- 10. At times I think I am no good at all... 1 2 3 4

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Appendix C

Classification of Affective Meaning States

Coding Criteria:

1. Global Distress

- a. Vague, whining, hopeless, self-pity, irritability, confusion, expression of pain
- b. High arousal
- c. Non-agentic, no direction
- d. Unknown or minimal specificity, avoidant

2. Fear and Shame

- a. Withdrawal/closed down, fear, shame, loneliness, emptiness
- b. Moderate arousal
- c. Deep and enduring pain
- d. Clear and specific

3. Rejecting Anger

- a. Action tendency distance/destroy, frustration, hate, disgust
- b. High arousal
- c. Protestor stance
- d. Stress on wrongdoing, not self

4. Negative Evaluation

a. Clear statement of negative self evaluation, i.e. "I am unlovable/worthless/abandones/destroyed"

b. Absolute, internally attributed, and stable

5. Need

- a. Clear statement of existential need, i.e. "I need recognition/support/approval/affection/autonomy"
- b. Simple, internally attributed, and stable
- c. Need is unmet

6. Self-Soothing

- a. Caring, tenderness, nurturing. Reflexive, imaginary
- b. Adaptive and healthy
- c. Action is self referred

7. Assertive Anger

- a. Anger in regard to self/rights affirmation of entitlement, boundary setting
- b. Moderate-high arousal
- c. Agentic, entitled position
- d. Clear and specific

8. Hurt/Grief

- a. Recognizing one's hurt, or sadness over loss
- b. High arousal
- c. Describing impact of wound, or saying goodbye
- d. Clear and specific

9. Relief

a. Feeling better/accomplished

b. Resting place between difficult thoughts and feelings

10. Acceptance and Agency

- a. Letting go/assertiveness
- b. Lower arousal, focused
- c. New appreciation of oneself and circumstances/new alternate perspective

11. Mixed/Uncodable

- a. Presence of emotional state, with too little information for a specific code
- b. Potential codes listed

12. End Code

a. Absence of emotional state

Appendix D

Classification of Affective Meaning States (CAMS) Rating Rules

General Rules

- Each minute will be examines separately for each segment as previously selected.
- For each minute, one and only one emotional code will be selected
- Additionally, any statements that meet the criteria for a Need or Negative
 Evaluation will be coded in addition to the emotional code selected for the minute
 in which the statement was expressed
- Therapist utterances will not be taken into account in determining the emotional code for a given minute, with the exception of an emphatic endorsement of the therapist's assertion by the client
- The previous emotional code will be maintained through the following minute unless there is a clear shift in emotion

Specific Coding Rules for Each Category

Uncodable

- Use this code when client describes feelings in past tense in detail without arousal
- Do not use this code when client describes feelings in past tense with emotional arousal
- Use this code when client describes feelings in present tense without arousal

- Do not use this code when clients describe feelings in present tense with emotional arousal
- Use this code or Global Distress (depending on arousal) when client is engaged in two chair work as the imagined other, unless another code is very strongly indicated (i.e. it is clear that they are engaging in Self Soothing, for example)

Global Distress

- o Use this code when the following is unclear
 - The subject of distress
 - The type of distress (i.e. it is clear that the client is distressed, but it is unclear which feeling they are experiencing)
- O Use this code when several emotions are expressed within a single minute
- Use this code when the client is over-aroused (e.g. yelling, sobbing and unable to speak)
- Use this code when the client is describing or appears to be experiencing dissociation

• Fear/Shame

- Do not use this code when anxiety is external (e.g. specific phobia,
 globalized anxiety). Code this type of anxiety as Global Distress.
- Use this code when the client expresses shame (excluding when acting as
 the other in two chair work) even if it is quoting someone else (e.g. "mom
 says I'm a worthless piece of shit") when the utterance is expressed with
 emotional arousal

Use this code in cases of self-directed anger

Rejecting Anger

- O Do not use this code when the anger is expressed with self-blame
- Do not use this code when the client is acting as the imagined other and is expressing anger

Assertive Anger

o Code when anger is expressed in regard to the client's own needs

Hurt Grief

 Code when the client is clear about the nature of the loss that s/he is grieving

Self Soothing

- o Code when the older self is soothing the younger self
- Only code when the expression appears to have adaptive value (e.g. do not code when the expression of self soothing appears to be emotional avoidance or an attempt to shut down)
- o Code when the imagined other soothes the client
- o Do not use this code for an emotional improvement in the imagined other

Relief

Only code when the expression is as a result of having done some work,
 e.g. not relief that the session is over

• Acceptance & Agency

 Code when there is an acknowledgement of the client's ability to fulfill his/her own needs

Need

Only code when an expression is explicit, existential, and self-oriented

Negative Evaluation

- o Code when the client expresses negative self evaluation explicitly
- The expression must be in present tense (unless absolutely clear that they currently feel it, and the client only grammatically expressed it in the past tense)
- The expression must be an "I" statement or similar (i.e. expressing that the family thinks the client is unlovable is not coded)

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