

TESTING A PSYCHOTHERAPY CHANGE PROCESS IN A SAMPLE OF
DEPRESSED CLIENTS WITH UNDERLYING MALADAPTIVE SHAME

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A dissertation submitted to the Faculty of Graduate Studies in partial fulfillment of the
requirements for the degree of Doctor of Philosophy

Graduate Program in Psychology

York University

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November 2019

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Abstract

This psychotherapy process research study tested the predictive validity of a model of emotional processing in a sample of 23 psychotherapy clients who met criteria for a DSM-IV diagnosis of major depressive disorder and whose presentation in early sessions suggested what was termed a *core maladaptive shame scheme*. The model of client process examined contains five essential experiential states: i) expression of self-criticism and/or self-contempt, or narration of memories of abuse or maltreatment; ii) access to primary maladaptive shame; iii) articulation of psychological pain; iv) articulation of adaptive needs; and v) experience of primary adaptive emotions and experiential states. In the preliminary phase of the study, a truncated task analytic procedure was used to develop a psychotherapy process research measure, the *Classification of Experiential States Related to Maladaptive Shame* (CEMS) (Miller & Greenberg, 2013). In the second phase of the study, the measure was utilized to assign categorical and quantitative codes to each utterance in chosen segments of videotaped psychotherapy sessions of 23 psychotherapies, conducted as part of the York I & II Depression Studies. Data from the coding produced an average of 202 separate categorical codes per session, representing clients' evolving experiential states across the therapy sessions. Difference scores indicating change in depressive symptoms pre- to post-therapy as measured by the Beck Depression Inventory were used as the main therapy outcome variable. A bootstrapping analysis showed that the emergence of adaptive emotion was preceded by clients' experience of self-contempt and maladaptive shame, in that sequence, at a frequency higher than would be expected by chance alone. Multivariate regression analyses indicated that clients' experience of three key experiential states, maladaptive shame,

adaptive need, and primary adaptive emotion, was significantly predictive of pre- to post-therapy change scores, as was their experience of the model experiential states across the session in the order proscribed by the model. Finally, clients' experience in the session of the primary adaptive emotions of pride, self-compassion, anger, and pride/anger (self-determination) were found to have the strongest correlation with therapy outcome. Limitations and implications for future research are discussed.

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CHAPTER ONE: INTRODUCTION

Changing emotion with emotion

In 1969, G. L. Paul posed what has been described as the ‘ultimate clinical question’ that should guide psychotherapy research: “What treatment, by whom, is most effective for this individual with that specific problem, under which set of circumstances, and how does it come about?” (Paul, 1969, 2000). This formulation echoed similar calls (for example by Kiesler (1966)) for methodologies in psychotherapy research that reflected the complexity of the phenomenon under study.

Greenberg (1991) addressed this crucial question of ‘how does it come about?’ by proposing to the field that a fundamental question should be to identify change mechanisms or processes, i.e., “what leads to change” (Greenberg, 1991b, p. 3.) Many common factors of therapy have been linked to positive changes across theoretical approaches (Goldfried, 2019; Wampold, 2001). Each theoretical school of psychotherapy also proposes both specific techniques and factors that it posits to contribute to good therapy outcome, but the empirical status of these techniques is not always well-established (Weinberger & Rasco, 2007). The emotion-focused therapy program of research (Greenberg, 1991a) has arguably led the investigation of the relation of processes unfolding over time relate to therapy outcome (see, for example: Carryer & Greenberg, 2010; Choi, Pos, & Magnusson, 2016; Goldman, Greenberg, & Pos, 2005; Greenberg, Auszra, & Herrmann, 2007; Greenberg & Malcolm, 2002; Missirlian, Toukmanian, Warwar, & Greenberg, 2005; Pascual-Leone & Greenberg, 2007; Pos, Greenberg, Goldman, & Korman, 2003; Pos, Greenberg, & Warwar, 2009), and has developed innovative methodologies for doing so (Greenberg, 1991b, 2007; Greenberg &

Watson, 2006b; Pascual-Leone & Greenberg, 2009; Pos & Choi, 2019; Safran, Greenberg, & Rice, 1988). This field of study that has come to be referred to as *psychotherapy process research* (Goldfried, 2019; Greenberg & Watson, 2006b). Process research has also been taken up by researchers investigating a range of proposed change processes, and using similar and other methodologies (see, for example, process research on emotion and narrative in psychotherapy (e.g., Angus et al., 2017; Angus & Greenberg, 2011; Angus & Kagan, 2013; Angus et al., 2012; Boritz, Angus, Monette, & Hollis-Walker, 2008b) and motivational interviewing (e.g., Aviram, Westra, Constantino, & Antony, 2016; Martin, Moyers, Houck, Christopher, & Miller, 2005; Moyers & Martin, 2006; Moyers, Martin, Houck, Christopher, & Tonigan, 2009).

From the emotion-focused perspective, Greenberg (2002) has proposed *changing emotion with emotion* as a key trans-theoretical change mechanism that contributes to psychological change across multiple psychotherapy approaches. Changing emotion with emotion refers to a process in which clients are theorized to first access, acknowledge, articulate, and deeply experience primary maladaptive emotion, and subsequently to then access primary adaptive emotions. The accessing this sequence of emotions in the context of therapy is posited to result in changes in the salience and meaning of previously predominant secondary and maladaptive emotions (Greenberg, 2002). This change mechanism highlights the role of emotional experience in transforming negative or difficult emotions, as opposed to reason, insight, or related constructs. Greenberg argues that, alone, reason and/or insight are not sufficient to transform the powerful negative emotions that clients may struggle with.

For some clients, the transition from primary maladaptive to primary adaptive emotion may emerge spontaneous upon deeply accessing primary maladaptive emotions, especially those they had previously blocked. For other clients, the therapist may draw from a number of possible techniques to facilitate this shift. Finally, the initial point of this process is usually secondary emotion, which characterizes most clients' emotional experience on entering therapy. (This emotion typology will be explained in detail below).

The current study will examine the relation of *changing emotion with emotion* to therapy outcome in a sample of clients who met criteria for a DSM-IV diagnosis of depression. These clients were selected specifically because they were judged to have a clinical profile consistent with a *core maladaptive shame scheme* (explained below), and this study will thus investigate this change mechanism in relation to working with maladaptive shame specifically.

Greenberg and Safran's emotion categories

The articulation of this psychotherapy change mechanism utilizes Greenberg and Safran's (1987) categorization of distinct types of emotional experience. They propose that each emotion can manifest in primary adaptive, primary maladaptive, secondary, or instrumental forms, depending on the context in which they arise (Greenberg & Safran, 1987). Emotions are considered to be primary adaptive emotions when they are immediate, adaptive reactions to a current stimulus that offer information that assists a person's well-being and survival. Contrary to this, primary maladaptive emotions are emotional reactions to a current situation stemming in part from a person's past lived experience. Not adaptive to the current situation, they do not necessarily promote the

person's well-being or survival (Greenberg & Paivio, 1997b). Secondary emotions arise in reaction to more immediate primary emotions or in reaction to complex affective/meaning states (for example, secondary anger in reaction to feeling pain or hurt in an interpersonal situation). The category of secondary emotions also includes those feelings and emotions that are symptomatic of clients' distress and lack of well-being: for example, feeling hopeless, helpless, lethargic (i.e., totally lacking in interest/excitement), etc. Finally, instrumental emotions are either consciously or unconsciously aroused in order to influence others, for example, feigned tears during an argument in order to evoke sympathy.

In the clinical setting, secondary emotion often has the quality of being *undifferentiated*, i.e., being a mix of different unpleasant emotions without the client being able to articulate them. Further, both maladaptive and secondary emotions are often habitual emotional experiences for clients that do not promote adaptive actions. In terms of the qualities of primary adaptive emotions, these are often characterized by their attribute of novelty. As an example, a client who is usually meek and unable to assert her own needs may for the first time access adaptive pride/anger in reaction to a situation of maltreatment.

Greenberg and Paivio (199b) emphasized that these emotions are not indicative of a real/fake dichotomy, but rather are all aspects of human experience. A key contribution of this categorization system is that when emotion arises in psychotherapy it should be worked with differentially, depending on its categorization. Emotion-focused therapy (EFT) was developed based on this differentiated understanding of emotion types and

advances a theory of how to work differential with each type of emotion in psychotherapy (Elliott, Watson, Goldman, & Greenberg, 2004; Greenberg, 2002).

Past research on changing emotion with emotion

In an initial study to empirically investigate changing emotion with emotion as a psychotherapy change mechanism, Pascual-Leone and Greenberg (2007, 2009) examined the videotaped sessions of 34 experiential psychotherapies. Using the task analytic methodology (Greenberg, 2007; Pascual-Leone & Greenberg, 2009), they developed a model of clients' emotional states observed to unfold in the therapies of clients who successfully resolved an initial state of *global distress* in session (defined as a state of high emotional distress and low meaning-making). They also developed a psychotherapy process measure to allow coders to apply qualitative categories to systematically observe client process, titled the *Classification of Affective-Meaning States* (CAMS) (Pascual-Leone & Greenberg, 2005). The study also found that clients who progressed from fear and shame into more advanced experiential states (such as need, assertive anger, grief, and self-soothing) were more likely to have good session outcome, and that clients tended to enter into the model states in a specified sequence. Further analysis of these data (Pascual-Leone, 2009) found that good-outcome sessions demonstrated a “two steps forward, one step back” pattern of emotional processing, and that those clients who increased their range of emotions within session had better in-session resolution. Although the emotion states studied were not a priori defined as secondary, primary maladaptive, and primary adaptive, Pascual-Leone and Greenberg mapped their model onto these categories. As such, this study provided initial evidence for changing emotion with emotion as a change mechanism in experiential therapies.

Pascual-Leone and Greenberg's CAMS model and measure have subsequently been utilized to study a number of other samples and therapies (Pascual-Leone, 2018). In examining emotional processing across therapies of depressed clients who were highly self-critical, Choi et al. (2016) found that clients who had improved self-esteem at therapy end increased their expression of needs and experience of primary adaptive emotion across the therapy, and had a decreasing experience of secondary and primary maladaptive emotion. Using a statistical program for analysis of longitudinal data (THEME) (Magnusson, 2000) to examine patterns of emotions by therapy group, Choi et al. also found that good resolvers demonstrated a sequence of emotional processing showing access to hurt/grief (core pain) and increases in primary adaptive anger. Poor resolvers, while experiencing maladaptive emotions and needs, just as good resolvers did, were differentiated by the fact that they did not subsequently access primary adaptive emotion (rather they continued to return to experience of distress and secondary anger). (See below regarding Choi's continuation of this project). Kramer, Pascual-Leone, Despland, and de Roten (2015) replicated much of Pascual-Leone's method to examine the CAMS model in a non-experiential therapy, short-term psychodynamic psychotherapy. Examining a group of people diagnosed with adjustment disorders, they found that access to adaptive hurt/grief specifically predicted good therapy outcome, but the sequences of emotion as laid out by the CAMS were not found in a significant proportion of cases.

Using a distinct measure, the *Emotion Category Coding System*, designed to explicitly capture the secondary, maladaptive, and adaptive framework, Herrmann and Greenberg (2016) found that the progression from primary maladaptive to primary

adaptive emotion significantly predicted therapy outcome as measured by decreased depressive symptoms, and that the proportion of total primary adaptive emotion was the best independent predictor of therapy outcome in a sample of clients who underwent EFT.

The first aim of the current study is thus to build on the above foundation of empirical support for the change mechanism of changing emotion with emotion and to test it with a number of specifications within a single study. The first is to examine a model that adheres to the secondary, maladaptive, and primary adaptive framework, delineating specific emotions within this framework (as opposed to the overarching categories). The second is to examine the impact of this mechanism on therapy outcome as defined by symptom improvement. This will be undertaken with the goal of exploring the question: Does changing emotion with emotion continue to stand as a change mechanism that impacts therapy outcome when examined with these specifications?

For whom?

G. L. Paul's classic question also specifies the importance of addressing treatment to "this individual with that specific problem." For much psychotherapy research literature, "that specific problem," has been defined as a DSM diagnosis. The emotion-focused approach, emerging as it did from the client-centered and experiential tradition (Rogers, 1942, 1951), was reluctant to categorize clients in a way that would allow for saying "for whom?" in terms of diagnostic or even other psychological trait variables. Partly, Rogers (1942, 1951, 1961) was opposed to the tendency in the psychoanalysis of the mid-20th century (the dominant clinical framework at the time during which Rogers did his major writings) to apply classifications of any type to people who came to

therapy. Instead, Rogers emphasized meeting each person as a unique human being in the clinical encounter, and to focus on his or her moment-to-moment experiential process, rather than on overarching categorizations of their psychological traits, status, or difficulties (Rogers, 1951).

At the current point in time, research in the overlapping fields of psychology, psychiatry, and neuroscience, are to differing degrees stepping back from the DSM nomenclature as the most useful differentiating factor between clients. Following this, within psychotherapy research, scientists who work from a cognitive-behavioural perspective have begun developing ‘transdiagnostic’ therapies (Roy-Byrne, 2017; Sauer-Zavala et al., 2017). At the level of basic neuroscience, the American National Institute for Mental Health has abandoned DSM diagnoses as framework for funded research, as the DSM categories often did not correspond to specific biological markers in the way that was hoped (Insel, 2013).

Core maladaptive emotion schemes

If diagnosis is not necessarily the ‘specific problem’ that should guide clinicians’ work, what other differentiating factors between clients might prove more valuable to direct therapy choice or process? Greenberg and Safran (1987) propose the concept of *emotion schemes*. They write that all people have emotion schemes (sometimes also referred to as *core emotion schemes*) that are “a set of organizing principles, constructed from the individual’s innate response repertoire and past experience, that interact with the current situation and generate current experience” (Greenberg & Paivio, 1997b, p. 3). While emotion schemes are defined as being individual and idiosyncratic, stemming in part from a person’s developmental history, clients in a clinical setting often have certain

primary maladaptive emotions that predominate in their schemes. Thus a client can be described by both an idiosyncratic core emotion scheme, i.e., a description of the development of this scheme and its meanings to the client, and by a categorical core emotion scheme, which is defined by one or two predominate maladaptive emotions, commonly maladaptive shame or maladaptive fear. The more complex and idiosyncratic schemes have also subsequently been referred to as *self-organizations*, as it can be conceptualized that individual self-organizations are based on categorical core emotion schemes. The novelty of this conceptualization is that it focuses on maladaptive emotion, and difficulty processing it, as the core dysfunction in emotional disorders.

With the exception of Choi's (2016, 2018) work (see below), and McNally, Timulak, and Greenberg's (2014) single-case study examining a client's in-session process in relation to her idiosyncratic core emotion scheme, there has not been extensive research to date empirically testing clinical observations regarding how in EFT with clients based on a specific type of core maladaptive emotion scheme. Are there particular in-session processes that predict good outcome in clients with a specific core maladaptive emotion scheme? Do clients whose emotional processing in session conforms to emotion-focused theory of how to work with these schemes have better therapy outcome than those who do not? The second aim of the current study is to investigate EFT theory via using a sample of clients selected because of a particular categorical core maladaptive scheme, maladaptive shame. The aim was to test if: a) their therapies manifest particular sequences of emotions within the secondary, maladaptive, and primary adaptive framework, and b) if such sequences predict therapy outcome, as defined by symptomatic improvement.

Maladaptive shame in psychopathology.

Why examine the process of changing emotion with emotion in a sample of clients with a core maladaptive shame scheme? A key rationale is that high maladaptive shame, and a concurrent sense of the self or an aspect of the self as flawed or unworthy, has been found to be predominant in multiple psychological difficulties, including depression (see below), social and other types of anxiety disorders (Kaufman, 1996; Moscovitch, 2009; Shahar, Doron, & Szepsenwol, 2015), eating disorders (Goss & Allan, 2009; Kelly, Carter, Zuroff, & Borairi, 2013; Sanftner, Hill Barlow, Marschall, & Tangney, 1995; Troop, Allan, Serpell, & Treasure, 2008), borderline, narcissistic, and antisocial personality disorders (Kramer, Pascual-Leone, Rohde, & Sachse, 2018; Morrison & Gilbert, 2001; Ritter et al., 2014; Rusch et al., 2007; Schoenleber & Berenbaum, 2010), and is proposed as a frequent underlying experience and triggering state to aggression and violent behaviour (Velotti, Elison, & Garofalo, 2014). Shame is also posited to underlie some culture-specific disorders, such as *Taijin Kyofusho* in Japan, which involves a fear of being shamed in public (Greenberg & Iwakabe, 2011). Finally, shame, and difficulty regulating it, has been identified in the developmental or recent histories of people who complete suicide (Rasmussen, Haavind, Dieserud, & Dyregrov, 2014), although this question has not been the subject of extensive research and is not a consistent finding (Wiklander et al., 2012). As such, understanding how to productively transform maladaptive shame in psychotherapy is potentially relevant to many areas.

Maladaptive shame in depression. In particular, clinicians and theoreticians have proposed that shame is a prominent feature of depressive symptomology (e.g. Greenberg & Watson, 2006a; Orth, Berking, & Burkhardt, 2006; Webb, Heisler, Call,

Chickering, & Colburn, 2007), even though the term ‘shame’ is not explicitly mentioned in the DSM criteria for major depressive disorder (American Psychiatric Association, 2013). “Feelings of worthlessness” are mentioned, which it could be argued as symptomatic of maladaptive shame. Guilt is explicitly mentioned in the DSM-V criteria, and it could be posited that its inclusion to the exclusion of the term shame, may be due in part to the confusion between the two emotions as discussed below. Indeed, a meta-analysis of the relation of shame and depressive symptoms that examined 108 studies involving over 20,000 participants found that shame, as well as a variant of guilt termed *pathological guilt*, were both predictive of depressive symptomology, whereas *contextual-legitimate* guilt, described as ‘shame-free’ guilt, was essentially uncorrelated with depressive symptoms (Kim, Thibodeau, & Jorgensen, 2011).

Part of understanding the place of maladaptive shame in depressive processes may lie in defining different subtypes of depression. Blatt and Bers (1993) distinguished between two profiles of depressive experience, which they defined as *introjective* (self-critical) and *anaclitic* (dependent) subtypes of depression. Greenberg and Paivio (1997) built on this distinction, describing two types of self-organization in depression: either a *weak-me* or a *bad-me* self-organization. A depressed person with a weak-me self-organization is posited to have a high level of concern for issues of abandonment and loneliness and feels insecure regarding his or her ability to find and/or maintain social support. He or she is preoccupied with these issues and has a sense of the self as being weak and vulnerable. Alternatively, a depressed person with a bad-me self-organization is posited to have concerns about status, identity, or worth, and may be highly self-critical. He or she has a sense of the self as being flawed, unworthy, defective, etc. These

two self-organizations are not mutually exclusive, and some clients may have aspects of both profiles (Greenberg & Watson, 2006a). (It could be argued that the DSM-V diagnosis of major depressive disorder, without specifiers, corresponds to the introjective types of depression, with its criteria of ‘guilt’, and the DSM-V specifier of *with atypical features* corresponds to the anaclitic subtype of depression, with its criteria of “long-standing pattern of interpersonal rejection sensitivity” (American Psychiatric Association, 2013).)

Greenberg and Watson (2016a) further proposed that different core maladaptive emotions schemes are the root dysfunction in each subtype of depressive experience. Maladaptive shame is proposed to underlie the *bad-me* self-organization, and maladaptive fear and sadness in the *weak-me* type. The current psychotherapy research study examines the psychotherapies of depressed clients whose presentation in early sessions suggested a core maladaptive shame scheme and the introjective subtype of depression.

Beyond the framework of DSM diagnoses, but with an explicit focus on emotional processing, Greenberg and Paivio (1997a) suggest that shame and fear are the two emotions that most frequently present in psychotherapy as problematic, distressing, and requiring transformation.

Current study

The current study thus took as its starting point the intersection between two questions regarding how to work effectively with emotion in psychotherapy. The first question: can a model of changing emotion with emotion, using specific emotions within the secondary, maladaptive, primary adaptive framework, predict therapy outcome as

defined by symptom change? The second question: can selecting clients based on their core maladaptive emotion scheme, and testing whether these clients exhibit an iteration of changing emotion with emotion that relates specifically to that core scheme, predict in-session therapy process and therapy outcome? Given the place of primary maladaptive shame in multiple types of psychopathology, and especially its role in depression, the current study will investigate these questions by looking at the therapies of a sample of clients who met criteria for a DSM-IV diagnosis of depression, and whose presentation in early sessions was suggestive of a core maladaptive shame scheme.

Relation of current study to past research

The current study builds on Hermann and Greenberg's (2011) study, as it tests the changing emotion with emotion mechanism by examining clients' progression from secondary, to maladaptive, to adaptive emotion, and its relation to therapy outcome in therapies for depression. However, the current study will examine patterns of specific emotions within these categories, thus more finely testing the changing emotion with emotion theory. The current study also builds on Pascual-Leone and Greenberg's study of sequences of emotion states in psychotherapy (2007, 2009), by building on those studies' methodologies. However, the current study expands on that project by examining emotion states within the secondary/maladaptive/adaptive framework defined a priori, by examining impact on therapy outcome (as opposed to session outcome), and by starting with clients identified as manifesting a core maladaptive shame scheme (as opposed to those with an in-session marker of global distress).

As the current study will examine client process occurring within the context of a *chairwork intervention* (Elliott et al., 2004), there is some overlap in terms of client

process between the model it will test and the models of client process in chairwork as elucidated in previous theory and research (Elliott et al., 2004; Greenberg, 2002; Greenberg & Malcolm, 2002). However, there are some key differences: the current study will include multiple types of chairwork, including interventions for self-critical splits, self-interruptive splits, and unfinished business (and in some cases more than one type within a single session); and it looks at categories of emotion that were not necessarily explicitly examined in these studies.

The most closely related project to the current study is Choi's work on emotional change in the therapies of self-critical clients (2018; Choi et al., 2016), a project that unfolded concurrently to the current study. His is the only other project within the EFT program of process/outcome research to select a group of clients based on a specific trait, high self-criticism. That focus overlaps with the current study's, as self-criticism is a common process in clients with high maladaptive shame (Gilbert & Miles, 2000). (Both self-criticism and high maladaptive shame are posited as common traits of clients who could be classified under the *bad-me* subtype of depression.) Choi's (2016) findings demonstrated that different patterns of schematic emotions predicted good and poor outcome with regards to improvement of self-esteem. The ability to access primary adaptive emotion after accessing maladaptive emotions and needs was a key differentiating feature between groups. His later project looked at subtypes of self-critical depressed clients that he divided into subgroups of clients defined as being either *socially inadequate* or experiencing *core worthlessness* (Choi, 2018). He found that there were differences in working phase emotional processing between the subtypes: socially inadequate self-critical clients expressed more positive views of other people, and core

worthlessness clients accessed more fear, shame, and negative self-evaluations (all conceptualized as primary maladaptive emotions). Subtype did not significantly predict therapy 18-month follow-up scores, but there were different in-session emotional processes that predicted non-depression at follow-up by group, with adaptive hurt/grief and self-soothing in therapy being more predictive of good outcome in the socially inadequate group, and maladaptive emotion and need being more predictive of good outcome in the core worthlessness group. Primary adaptive emotion was predictive of good outcome at follow-up for both subtypes of depressed clients.

While both the inclusion criteria and the overarching methodology (relating emotional processes in therapy to outcome) of these two projects overlap, the projects also differ in several aspects. Choi's work looked at multiple sessions across the therapy, in order to validate subtypes of self-critical depressed clients. He examined emotional processing in these depressed subtypes that predicted both termination outcome and 18-month post-therapy outcome. The current study began with a case-selection criterion of a core maladaptive shame scheme, and uses a measure developed purposely for this project (Miller & Greenberg, 2013; see Chapter Two). This purposely-developed measure differentiates between self-criticism, self-contempt, primary maladaptive shame, and shame anxiety, as discrete experiential states. Choi's work used the CAMS measure, which does not differentiate types of maladaptive emotion, and also conflates some of these other states. While the concurrent nature of these two projects did not allow either to explicitly address questions raised by the findings of the other, together they hopefully provide a nuanced and empirically-grounded picture of emotional processing in therapies with clients with the related traits of high maladaptive shame and self-criticism.

Review of related literature

Emotion-Focused Therapy (EFT)

The current study will examine psychotherapies in which the therapists worked from an emotion-focused therapy approach (Elliott et al., 2004; Greenberg, 2002). EFT is a psychotherapy approach that utilizes both relational factors and structured interventions to foster psychological change and amelioration of symptoms and distress (Greenberg, 2002). Outcome research has investigated the effectiveness of EFT in treating mild to moderate depression (Ellison, Greenberg, Goldman, & Angus, 2009; Goldman, Greenberg, & Angus, 2006; Greenberg & Watson, 1998b; Watson, Gordon, Stermac, Kalogerakos, & Steckley, 2003; Watson & Pos, 2017), social anxiety disorder (Shahar, Bar-Kalifa, & Alon, 2017), generalized anxiety disorder (Timulak et al., 2017), and for addressing complex trauma (Paivio & Nieuwenhuis, 2001) and other clinical problems (Greenberg & Malcolm, 2002; Greenberg, Warwar, & Malcolm, 2008; Steinmann, Gat, Nir-Gottlieb, Shahar, & Diamond, 2017). The effectiveness of EFT as a group modality has also been investigated, for eating disorders (Wnuk, Greenberg, & Dolhanty, 2015) and for addressing self-criticism in young adults (Thompson & Girz, 2019).

In addition to using an RCT methodology to examine the omnibus outcome effects of EFT, there is a substantial body of research that has utilized the process/outcome methodology to examine the relation of specific in-session processes to therapy outcome in EFT and other experiential therapies (Greenberg & Watson, 2006b; Pos & Choi, 2019). Early research using the process-outcome methodology examined the effects of constructs such as experiencing, emotional arousal, and perceptual processing. In examining clients who received either EFT or client-centered therapy, Pos, Greenberg,

Goldman, and Korman (2003) found that emotional processing late in the therapy, as defined by *Experiencing Scale* ratings during the emotion episodes (Klein, Mathieu, Gendlin, & Kiesler, 1969), was the strongest independent predictor of therapy outcome in terms of symptom improvement and self-esteem, and that clients did deepen their emotional processing from early to late sessions. Further, with an expanded sample, Pos et al. (2009) found that working phase emotional processing was the best direct predictor of therapy outcome. This study also found that the alliance contributed to clients' engagement in emotional processing within phases of therapy, and that the first session alliance was a direct predictor of outcome, even in a model that contained the later alliance measures. Using the concept of *perceptual processing*, a construct capturing meaning-making in psychotherapy, Missirlian et al. (2005) found that emotional arousal and perceptual processing at mid-therapy predicted reductions in depression and other symptoms better than did either of these variables alone.

In a comprehensive program of research, Angus has integrated a narrative perspective into the study of emotional processing in experiential psychotherapy (Angus, 2012; Angus & Greenberg, 2011). A study investigating change in clients' autobiographical memories over the course of therapy found that moving from more generalized to specific memories did not alone predict therapy outcome (Boritz, Angus, Monette, & Hollis-Walker, 2008a), but that increasing narration of more specific memories that were also emotionally aroused did characterize good outcome therapies but not poor outcome ones (Boritz, Angus, Monette, Hollis-Walker, & Warwar, 2011). From these and other findings, Greenberg and Angus developed a *narrative-informed* model of EFT for depression, that outlines a categorical system for types of stories that clients tell in

therapy, and their related modes of emotional processing (Angus, 2012; Angus & Greenberg, 2011). Based on this model, Angus and colleagues have developed the Narrative-Emotion Process Coding System (NEPCS) (Angus et al., 2017; Angus et al., 2012), which has been used to study therapy for complex trauma (Carpenter, Angus, Paivio, & Bryntwick, 2016) and experiential and cognitive therapies for depression (Boritz, Barnhart, Angus, & Constantino, 2017; Boritz, Bryntwick, Angus, Greenberg, & Constantino, 2014).

Other research within the EFT program increasingly examined emotional arousal and emotion subtypes as conceptualized in EFT theory (Greenberg & Paivio, 1997b; Greenberg & Safran, 1987). In a sample of psychotherapies from the same studies of EFT and client-centered treatment for depression, Carryer and Greenberg (2010) found that there was an optimal level of emotional arousal that predicted 30% of outcome on the Beck Depression Inventory (BDI) (Beck, Steer, & Brown, 1996). Further, using the concept of *emotional productivity*, which delineates criteria for clinically useful emotional processing in psychotherapy, Greenberg et al. (2007) examined four better outcome and four poorer outcome clients. They found that the better outcome therapies contained significantly more productive emotional processing than the poorer outcome ones. Based on the foundation of these findings, the evidence base for a focus on changing emotion with emotion as a key change mechanism was strengthened.

Shame

Shame, as defined by Greenberg and Paivio, is an emotion characterized by the self “feeling exposed and found lacking in dignity or worth” (1997b, p. 229). In the English language, people use many words to indicate feeling shame, including:

embarrassed, humiliated, mortified, shy, improper, sheepish, demeaned, flustered, self-conscious, foolish, silly, sheepish, bashful. Kaufman (1996) describes multiple iterations of shame: about the body (its appearance, functions, etc); about feeling need (for affection, relationship, etc); about sexual desires or orientation; about one's dreams, ambitions, or ideas; or about one's abilities or competence. Potter-Efron (2011) outlines five "deficiency statements" that clients use to describe their shame experiences: "a) "I am not good," b) "I am not good enough," c) "I do not belong," d) "I am unlovable," and e) "I should not be." Wille (2014) expands on this last type, describing shame at its most extreme as manifesting in a 'shame of existing,' in which a person feels they do not deserve to exist, which he describes as a "merciless and total rejection of the subject's self" (p. 695).

As touched on by Kaufman, shame may arise when a person feels interest or excitement and that feeling is not matched, mirrored, and/or accepted by others in the environment, as this may leave the person feeling exposed with their excitement and embarrassed of it (Probyn, 2005). Mindell (1994) describes this aspect of shame as "our response to the absence of expected responsiveness from a meaningful other person" (p. 33).

Action tendency and body language. The action tendency in shame is to attempt to hide the self from the gaze of others, i.e., to disappear from view (Greenberg & Paivio, 1997b; Mindell, 1994). There are several behavioural and physiological manifestations associated with shame: averting the eyes or gaze, collapsing the posture, and blushing (Greenberg & Paivio, 1997a; Kaufman, 1996).

Shame anxiety. Shame often co-occurs with anxiety. One way this can occur is when anxiety manifests as a fear of negative evaluation (Greenberg & Paivio, 1997a; Mindell, 1994). Mindell (1994) conceptualizes this shame anxiety as ‘shame-as-signal’: it alerts the person to the possibility of imminently being shamed or humiliated, and mobilizes the person to use action tendencies such as withdrawal, hiding, or inhibiting his or her behaviour. Physiological anxiety manifestations thus may also accompany the experience of shame.

Pain as an aspect of the experience of shame. Many authors also emphasize the painful aspect of experiencing this emotion. Mindell (1994) describes shame as “such an intense and fragmenting experience that it is difficult to stand away from it or observe it as it is happening” (p. 33).

A self-conscious emotion. Shame, as well as guilt, are also frequently conceptualized as *self-conscious emotions*, in that in order to experience shame, a person must possess the capacity for an awareness of and representation of a ‘self’ and an awareness or imagining of the opinions of others (Greenberg & Paivio, 1997a; Tangney, 2002). Tangney (2002) classifies shame along with pride, guilt, and embarrassment as emotions that require a self-evaluative capacity in order to be activated.

Shame in emotion-focused theory. Like other emotions, Greenberg and Paivio (1997a) posit that shame can manifest in primary adaptive, primary maladaptive, or secondary forms.

Primary adaptive shame is that which is activated in response to a situation in which a person has violated his or her personal standards or values, or those of their social group. This adaptive manifestation of shame is pro-social, as it motivates people to

behave in ways that increase cohesion within their social group and decrease the likelihood they will be ostracized (Mindell, 1994; Sznycer et al., 2018). Loader (1998) describes the adaptive function of shame as promoting “a realistic self-appraisal of our capacities and our limitations” (p.44). When occurring in proportion to circumstances, it is a healthy and necessary emotion for individual functioning within a person’s social context. Primary adaptive shame as an emotion is argued to have served an evolutionary purpose by strengthening humans’ ability to work and live in groups (Sznycer et al., 2018). Indeed, people who experience very little shame may frequently offend or violate the rights of others, and a complete lack of consciously experienced shame is associated with psychopathy (Loader, 1998). In the English language the adjective ‘shameless’ has a negative connotation, defined as being “imprudent, brazen” ("The Canadian Oxford Dictionary," 1998, p. 1329).

Alternatively, primary maladaptive shame is a state that arises not simply as a response to the current situation but also due to a long-standing sense of the self as being inherently flawed or unworthy, often based in the experience of having felt shame at multiple times in one’s history (Greenberg & Paivio, 1997b; Mindell, 1994). When such a sense of the self interacts with a current situation to produce problematic and unhelpful feelings of shame, it does not provide information that is helpful to the person’s survival or well-being in the moment (Greenberg & Paivio, 1997b). This primary maladaptive shame can manifest in the moment via feelings of shame, embarrassment, humiliation, mortification, or shyness, to name a few permutations. Mindell (1994) describes this phenomenon thus:

When we have experienced the shock of having who we are at a particular moment ignored, or turned away from, i.e., shamed, or put down enough times or with sufficient intensity, rather than experiencing ourselves as acceptable and pleasing to the other at those particular moments, we learn to associate the possibility of humiliation at moments which resemble those earlier moments. (p. 35).

From an EFT perspective, a person who frequently, easily, and/or chronically reacts to current situations with an activation of primary maladaptive shame may be said to have a *core maladaptive shame scheme*. As a trait, a person with a core maladaptive shame scheme often has a sense of him- or her-self as inherently flawed, unworthy, incompetent, impotent, or otherwise lacking. Maladaptive shame is posited to be the central emotion experience corresponding to such self-concept (Greenberg & Iwakabe, 2011). A primary maladaptive shame scheme is a similar concept to what has been referred to as *internalized shame* (Kaufman, 1996). For a person who has internalized past shaming behaviours and opinions by others, intense shame may be evoked in response to many situations without the original others being present. These situations might only illicit passing embarrassment in other individuals (Greenberg & Paivio, 1997a).

Developmental roots of a core maladaptive shame scheme. A core maladaptive shame scheme may be seen in clients who have suffered physical, emotional, or sexual abuse as children (Greenberg & Paivio, 1997b; Webb et al., 2007), or who were repeatedly treated with contempt, dismissal, or humiliation by important early figures, such as by parents or peer group (Kaufman, 1996). Past studies have found a correlation

between self-reported early experiences of physical and sexual abuse and frequent feelings of shame as adults (Hoglund & Nicholas, 1995; Webb et al., 2007). Even without a context of overt abuse, subtler communications from the parents or, disciplinary techniques that utilize shame to control children, may leave a child with a deep sense of shame. For example, a study of 280 young adults found that adult-reported childhood experiences of psychological abuse, defined as containing the qualities of rejection, neglect, and isolation of the child, correlated positively with adult experience of shame and of depressive symptoms (Webb et al., 2007). A separate study linked adult feelings of shame to lower scores on a measure of cohesion, expressiveness, intellectual-cultural orientation and higher conflict scores in the family of origin, without specifically examining psychological abuse or shaming behaviours (Pulakos, 1996). Loader (1998) proposes that while shame can be used lovingly to promote a realistic self-appraisal in the child and strengthen their capacity to navigate the social world, it can also be used perniciously.

Whether through overt abuse or more subtle dynamics, the above types of experiences can leave a child with an inherent sense of being ‘bad,’ ‘unworthy,’ a ‘burden’, etc, that persists into adult life. Loader (1998) describes this process thus:

The abused child, irrespective of the form of the parental mistreatment, is left to conclude that the pain it feels at the hands of the parent is his fault, deserved because of the *way he is*... The child’s overriding need to believe that his parents care about him drives him to conclude that there is something fundamentally wrong with him – and thus to experience a pervasive, and often life-long, sense of shame. (p. 52-52, italics in original)

Guilt. A discussion of shame must explicate the related construct of guilt. Guilt is similar to shame but is not identical, and the two constructs are often confused or used interchangeably, even in psychological theory and research (see, e.g., Kim et al., 2011). A differentiated perspective on the two emotions, first proposed by Lewis in her landmark book *Shame and guilt in neurosis* (1971) and subsequently expanded by others (e.g., Greenberg & Paivio, 1997a; Tangney, 2002), posits that guilt involves a negative evaluation by the self regarding having engaged in a specific action or actions, whereas shame involves a negative evaluation by the self regarding the person's entire self, worth, or dignity, or the perception of a negative evaluation by others about these same. Furthermore, the distinct foci of shame and guilt correspond to distinct action tendencies: guilt activates attempts at repair or atonement, whereas shame activates an action tendency to hide or to attempt to disappear (Greenberg & Paivio, 1997a; Kaufman, 1996).

We would propose that a further distinction: that guilt more often arises in situations in which a person has *acted* in a way that he or she now regrets, whereas shame can arise from having been the *object* of another person's actions. In other words, a person most often feels guilt regarding a situation in which he or she has had agency, whereas the experiences of being the object of another's actions can leave a person feeling powerless, denigrated, or without dignity (see also Kaufman, 1996). For example, survivors of sexual abuse, assault, or other forms of interpersonal violence often experience shame (Wolfgang, 1998).

Non-experiential approaches to addressing maladaptive shame in psychotherapy.

Given its part in multiple psychopathologies, a number of interventions have been developed to specifically address problematic shame. Gilbert and collaborators have

developed a program called *Compassionate Mind Training*, with the express purpose of addressing high shame and self-criticism (Beaumont, Galpin, & Jenkins, 2012; Gilbert & Procter, 2006; Matos et al., 2017). This approach combines aspects of cognitive-behavioural therapy, dialectical-behavioural therapy, and mindfulness practice to cultivate clients' capacity to be self-compassionate, as a general stance that will diminish the influence of their shame and self-criticism. Gilbert and Procter (2006) state: "We refer to our approach as compassionate *mind* training because we are not targeting specific core beliefs or schema *per se*, but (like mindfulness), seek to alter a person's whole orientation to self and relationships" (italics in original) (p. 359). From a related perspective, Proeve, Anton, and Kenny (2018) used a single-group design to study 32 participants who received mindfulness-based cognitive therapy, finding that the therapy had positive impacts on shame-proneness, but not on depression, guilt-proneness, or *external shame* (defined as a perception that others view one poorly). Rizvi and Linehan (2005) developed an iteration of the *opposite-action* intervention in dialectical-behaviour therapy (DBT) (Linehan, 2015) to specifically target shame, and studied its feasibility in a pilot study with five participants in a DBT skills group. In sum, these therapies and interventions have an explicit focus on addressing maladaptive shame, and have been the subject of empirical research. Other therapy approaches may have theories as to how to work with shame within the framework of their general theories, and similarly, many therapists would have addressed this difficult emotion in their work, but these have not necessarily been the focus of past empirical research.

Defining terminology

In order to examine the process of change in clients' moment-to-moment states the phenomenon to be examined must be defined, that is to say, how will the concept of *state* be used in the context of this psychotherapy process study? Clients' emotions will be examined, although emotion is too narrow a term, as some of the states examined involve emotion as well as cognition, including complex types of meaning-making. One possible solution is Pascual-Leone's (2007) use of the term 'affective-meaning state' in his work with the CAMS, a term he describes as being equivalent to the term 'emotion,' but which also encompasses the fact that clients are in the moment both experiencing emotions and making meaning of their emotions and whole experience. In this paper the term *experiential state* will be used to describe the client's state moment-by-moment. Greenberg (2007) states: "A client's experiential state is the current self-organization, manifest in the currently reported memories, perceptions, perspectives, views, understandings, feelings, emotions, needs, wishes, and goals. Descriptions of experiential states may also include the observable, cognitive, and emotional stance or orientation that the client takes toward experience that is being dealt with in the moment." (p. 22).

Conclusion to Chapter One

The current psychotherapy process research study investigates the relation of a model of emotional processing to therapy outcome in a sample of depressed psychotherapy clients who exhibited a core maladaptive shame scheme, and as such, tests the effectiveness of this model for working productively with maladaptive shame in psychotherapy with depressed clients.

CHAPTER TWO: PRELIMINARY PHASE OF STUDY

The purpose of the preliminary phase of the study was to refine the model to be tested, and to develop a measure with which to operationalize the components of the model. Although the preliminary phase of the study drew on some of the methodology of a task analysis (Greenberg, 2007; Pascual-Leone & Greenberg, 2009; Safran et al., 1988), the creation of this model was not developed via a full discovery stage of a task analysis as per Greenberg's (2007) method. The discovery stage of a task analysis is an open-ended, exploratory, theory-building process. The starting point to the preliminary phase of this study more accurately corresponded to step 6.b. in Greenberg's method, "Reiterate the empirical analysis and model refinement" (Greenberg, 2007, p. 16). The initial model of working with maladaptive shame in psychotherapy was outlined based on EFT theory, the research and theoretical literature, and on the extensive clinical experience of the principal investigator's supervisor. This model included the four components: i) articulating self-contempt, ii) accessing primary maladaptive shame, iii) accessing need, and iv) accessing primary adaptive emotion; hypothesized to occur in this order. However, to reiterate, the model was based on the literature and on the supervisor's clinical experience, not on a task analytic study. Additionally, unlike a task analysis that begins with a 'blank slate' with regards to defining criteria for the components, in this study there were established criteria from past research for a number of components (e.g., primary adaptive emotion, a concept which had been defined and investigated in the work of both Herrmann (2016) and Pascual-Leone (2005)).

A preliminary version of the client side of the measure was first constructed, to define criteria for each of the components in this model. The criteria for the components

of self-criticism/self-contempt and maladaptive shame were based on past theoretical writings and research on these emotions and on the supervisor's clinical experience (Greenberg & Iwakabe, 2011; Greenberg & Paivio, 1997a, 1997b; Kaufman, 1996; M. Lewis, 1992; Mindell, 1994; Probyn, 2005; Whelton & Greenberg, 2005). The criteria for adaptive need and the primary adaptive emotions were adapted from the CAMS, with additional specification for a specific type of self-soothing, self-compassion, based on theoretical writing on this topic (e.g., Gilbert, 2010; Neff, 2011).

With this model defined and with the preliminary measure established, a pilot stage of the study was then undertaken. The purpose of this pilot stage was to test the feasibility of using the measure on actual psychotherapy tapes, to refine the criteria for each component of client process, and to ensure that there were no additional processes that were being excluded. To begin, the principal investigator audited the extant measure components by watching approximately 3-4 cases from the York Depression Studies (Goldman et al., 2006; Greenberg & Watson, 1998b). This was done with two purposes: first, to examine whether there were distinctions needing further refinement in order to utilize the measure, and second, to refine the model based on observation of therapy cases. From a synthesis of the initial model and the observation of cases, an elaborated model of client process and the final version of the coding measure for rating the model components were developed.

Therapist actions

At the time of the preliminary stage of the study, an exploration of therapists' moment-to-moment actions was also undertaken. This was in order to statistically analyze micro-sequences of therapist actions and client process. A preliminary model and

measure of therapist actions was thus also developed. Due to restrictions of feasibility, this aspect of the study was ultimately postponed for a subsequent project, in which a full task analysis of therapist actions would be conducted. A subsequent project would allow for the development of an elucidated model of therapist actions when working with maladaptive shame, and to code therapists' moment-to-moment utterances and then analyze the relation of therapist actions to client process.

Model of Client Process

A visual representation of the model of client experiential states is shown in Figure 1. This full version of the model of client process includes states that were hypothesized to be essential to the changing emotion with emotion mechanism in this context (outlined in red / darker line in Figure 1), as well as states that may commonly arise but which we did not believe to be necessary (outlined in orange / lighter line). The term *components* will be used to describe discrete experiential states that are included in the model under study. Components that were hypothesized to be related to good therapy outcome are referred to as *essential* components, while components that were not hypothesized to be necessary to good therapy outcome are referred to as *non-essential* components.

The essential components were deemed so because they were hypothesized to relate directly to therapy outcome, or because they were hypothesized to facilitate clients to access experiential states that were hypothesized to relate directly to therapy outcome. As for the first two states in the model, they exist in a both/or relation, in that some clients may experience one or the other, or both states during the session.

In the following section, the relation of the five components to Greenberg and Safran's (1987) emotion categories is outlined. Further detail about criteria for each component is provided in the subsequent section.

Model of both essential and non-essential components

Below are listed the essential and non-essential components. The essential components are in bold font.

- 1) **Express self-criticism**, and **activate and express self-contempt**.
and/or
- 2) **Access and narrate memories of significant trauma**, abuse, neglect, or other interpersonal experiences that may have had a role in the development of the client's core maladaptive shame scheme.
- 3) **Access, experience, acknowledge, and/or articulate primary maladaptive shame**.
- 4) Experience and/or articulate shame anxiety
- 5) **Access and express psychological pain** that is germane to the experience of shame or self-criticism, or arises directly from it.
- 6) Experience secondary emotions other than shame anxiety (e.g., global distress, hopelessness, helplessness, other forms of anxiety)
- 7) Articulate intellectual understandings of the impact of shame or of self-criticism/self-contempt.
- 8) **Access and articulate adaptive needs**.

9) **Access primary adaptive emotions and self-organizations.** These include emotions such as pride and adaptive anger and also more complex experiential states such as self-compassion.

How the essential components relate to Greenberg and Safran's emotion categories.

Self-contempt. Expressing self-contempt and/or narrating memories of interpersonal maltreatment are conceptualized as the two 'routes' into maladaptive shame, i.e., they are the states whose activation facilitates clients to access and articulate maladaptive shame. Of these two, self-contempt is conceptualized as being a secondary emotion, as it is a state that contains emotional arousal (of contempt) (Whelton & Greenberg, 2005). It is posited that the purpose of self-contempt functionally may be to 'protect' or distance the person from experiencing the more vulnerable and painful emotion of shame. Thus self-contempt has the 'in reaction to' aspect that defines secondary emotion (Greenberg & Paivio, 1997b). Indeed, in early writing, Greenberg and Paivio (1997b) defined self-contempt as a type of secondary anger, stating, "Another common type of secondary anger takes the form of hostile self-criticism, which damages self-esteem... This form of secondary anger directed at the self can be recognized in therapy by self-contempt and self-denigration for perceived transgressions, shortcomings, flaws, and unacceptable behaviour, or emotional experience" (p. 139).

Narration of memories. Narration of memories, by the criteria of the measure, may involve the arousal of other emotions not included elsewhere in the model, but does not necessarily involve emotional arousal. In this context, the therapeutic

purpose of narrating memories is to activate emotions. If the client's subsequent utterances meet criteria for another model code, that code predominated. For example, a client stating: "When the children would laugh at me in class I would feel so stupid," would have been coded as maladaptive shame, even though it was in the context of an autobiographical memory. This code relies on the insights from past research on specificity of autobiographical memories in therapy (Boritz et al., 2011), in that the levels of the component (as defined by the measure) indicate increasing specificity and emotional arousal (as well as experiencing), but the measure does not further differentiate narrative type as per Angus & Greenberg (2011). As this component does not necessarily involve activated emotion, it is not hypothesized to fall under any category in Greenberg and Safran's (1987) framework.

Maladaptive shame and adaptive need. Maladaptive shame is the maladaptive emotion being examined in this study of changing emotion with emotion.

Articulating an adaptive need is included in the model of essential components as it is proposed to be a therapeutic conduit that may facilitate the client to move from maladaptive to adaptive emotion accessing this does not occur spontaneously (Greenberg & Goldman, 2019).

Primary adaptive emotions. Those states coded primary adaptive emotion are, evidently, the primary adaptive emotions under study.

Two fundamental components.

Of the five essential model components, the two most fundamental are hypothesized to be:

- 1) Access, experience, acknowledge, and/or articulate primary maladaptive shame, and
- 2) Access primary adaptive emotions and self-organizations.

Description of components, with examples of client speech as observed in Phase II of the study.

The components of the model are described below. The description elucidates: criteria for content of speech, body language and action tendency; subtypes of the component; differentiating the model component from related concepts inside and outside the model; and examples of actual client quotes from the second phase of the study, in order to ground the descriptions in concrete material.

The measure used to operationalize the model of client emotional processing outlined criteria for a) what emotion or experiential state the client was experiencing, and also b) at what intensity, or with what fidelity to the prototype of the component, the person was experiencing the state in question (described in the measure as *level*).

The distinction between state and level corresponds to Greenberg's differentiation of experiential states and the manner or style in which a person is experiencing the state, in his (2007) guide to conducting a task analysis. In general, the dimension of intensity/fidelity, or level, is based on the client's moment-to-moment level of emotional arousal (Warwar & Greenberg, 1999) and experiencing level (Klein et al., 1969). See below for specific criteria for differentiating levels of each component.

Component One: Self-criticism and self-contempt. The first component is articulating and expressing self-criticism and self-contempt towards (or regarding) the client's own self. Working with self-criticism is a key area of focus in EFT (Choi, 2018;

Choi et al., 2016; Thompson & Girz, 2019; Whelton & Greenberg, 2005). Research within and outside the EFT approach has examined the role of self-criticism in depression (Greenberg & Watson, 2006a). Self-criticism will most likely be expressed in the “critic” or “other” chair, but may also be expressed while in the “experiencing” chair. The content of the client’s speech may express criticism or contempt regarding the person’s attributes, abilities, being, self, worth, and/or dignity.

Self-criticism and self-contempt lie on a continuum, in which self-contempt may be thought of as a more heightened version of self-criticism. While self-criticism is evaluative, it does not necessarily involve emotional arousal. As emotional arousal becomes more evident and heightened, it can be conceptualized that the client is experiencing and expressing self-contempt. In other words, the content of statements in self-contempt may be similar to that of self-criticism, but there will be emotional arousal in self-contempt of emotions fitting with contempt (Whelton & Greenberg, 2005).

Kaufman (1996) proposes that contempt can be conceptualized as a fusion of anger with *dis-smell* (smelling something foul) or disgust (tasting something foul in the mouth).

Self-criticism (as content) and self-contempt (as an emotion) can be thought of as the cognitive and emotional aspects of a self-contemptuous process. Self-contempt also is characterized by distinct body language, vocal quality, and facial expression (Whelton & Greenberg, 2005).

Self-criticism and self-contempt: content of speech. In terms of content of speech, self-criticism and self-contempt may include: disgust, revulsion, rejection, humiliation, loathing, putting down in a harsh or vicious manner, scorn, ridicule,

mocking, erasure (i.e., stating or implying that the person, his/her opinions, or existence has no worth or value), denigration, and/or diminishment expressed towards the self.

Self-criticism and self-contempt: body language and action tendency. Body language may include sneering, looking from above or pulling a face as if tasting or smelling something foul (Kaufman, 1996). Other body language may include shuddering as if trying to shake off something unpleasant, or hand gestures that suggest dismissal, rejection, shaming, etc. The general stance in self-criticism and self-contempt is one of (negative) evaluation and when heightened, attack.

Subtypes of self-criticism and self-contempt. Clients may enact what could be termed an *anxiety critic*, that is to say, a critic who provokes or heightens the client's anxiety with regards to events that may occur in the future (e.g., "Your car is going to crash tomorrow."). More pertinent to the current project, clients may also enact what could be termed a *shame anxiety critic*, that is, a critic who provokes or heightens the client's shame anxiety, i.e., provokes the client's anxiety regarding the possibility of being shamed or being shameful in the future. For example, clients may make statements such as: "people will laugh at you," or "you'll make a fool of yourself." These two subtypes of critics were differentially coded.

Differentiating self-criticism/self-contempt from maladaptive shame. It is important to note that in the moment, expressions of self-criticism and self-contempt often contain underlying shame. Even if they aren't currently able to access it, a person most likely feels some degree of shame regarding the 'defect' he or she is criticizing. In this way, these two states are like the two sides of the same coin. Nevertheless, they are distinct clinical phenomena, need to be worked with differently in psychotherapy, and

thus are differentiated in the model and measure. The client's position in the chairs (i.e., if the client is in the critic or experiencing chair), vocal quality, and the client's stance towards the material discussed, as well as the exact content of speech, are all factors that assist to differentiate shame from self-criticism/self-contempt.

Content expressed from the "other" chair, i.e., when the client is using *you* language, is best conceptualized as self-criticism/contempt, if the chairwork has been well set up by the therapist. Prototypically, what is activated in the other chair should be a critical and contemptuous *attack* position. In this position, the person is thinking *about* the self (i.e., expressing judgment on the self), not feeling (judged) *as* the self. The person may feel underlying shame while articulating self-criticism or self-contempt, but prototypically speaks in *you* language, in a vocal tone that suggests evaluation and/or attack. These factors are conceptualized as markers of self-criticism or self-contempt.

When in the experiencing chair (i.e., when the client is using "I" language), again, if the therapist has set up the chairwork well, the client should ideally access shame. In the experiencing chair, as the client explores his or her *experience*, shame emerges (e.g., "sometimes I just feel like such a failure"). Client statements that begin with "I feel" or "I felt" are indications of shame as opposed to self-criticism.

As an example: "you are an idiot" (spoken towards the self chair from the critic chair, with an aggressive, declarative vocal quality) would be conceptualized as self-criticism. "I feel like an idiot," (spoken in the self-chair, with slumping body position, downcast eyes, and a quiet, fatigued vocal quality) would be conceptualized as shame.

The above considerations notwithstanding, as clients progress in their expression of self-contempt, the underlying feelings of shame and pain often begin to emerge. If the

therapist is working skillfully, this shift towards accessing the underlying, vulnerable, feelings of shame will prompt a switch back to the experiencing chair. However, it is possible that there will be utterances in which both processes (shame and self-contempt) may intermingle, and this will be even truer if the therapist is not skillfully facilitating the client's differentiation of these two processes. Indeed, EFT theory posits that part of the objective of the therapist in working with self-criticism and self-contempt is to precisely assist the client to differentiate self-criticism and self-contempt from the underlying shame and experience them differently.

Examples of self-criticism and self-contempt. One client said to herself from the critic chair, with a vicious tone of voice: "Your personality is garbage." She then went on to say in the same vicious tone, "Nobody likes you because of the way you are." This was coded as self-contempt.

Component Two: Narrating memories of abuse or maltreatment. A second type of experiential state that that was posited to lead into accessing shame was clients' accessing and narrating memories of past abuse or maltreatment. As referred to above, experiences of abuse, neglect, or trauma (especially ongoing trauma by important attachment figures), as well as experiences of rejection or ridicule by peers, frequently lead to people developing feelings of shame and of being worthless, flawed, etc. In the context of psychotherapy, some clients may first narrate and explore such experiences, and subsequently begin to access and articulate the impact of these experiences on their sense of self. Conversely, working with self-criticism or shame may prompt some clients to explore the historical and interpersonal roots of their experience of maladaptive shame and/or self-criticism.

Criteria: content of speech. The prototypical example of this component is that in session, the person describes memories of abuse, maltreatment, or neglect (this is what happened), or describes his or her experience of the abuse, maltreatment, or neglect (this is what it felt like). The description of the abuse may indicate that the person at the time felt fear, or the person may also describe having felt trapped, alone, unloved, vulnerable, terrified, dread, confused, etc. In the moment in session, the person may re-experience some of these emotions.

While describing his or her experience of abuse or maltreatment, the person may describe other people's actions, his or her own reactions or feelings, and what the impact was of these events in the past or present. Except for the exceptions noted below, all of this type of content was included under this component.

For this component, there was no requirement in the measure as to what emotion the person is currently experiencing in the moment nor describing having felt in the past. The criterion is that the person describes an experience of abuse or maltreatment or other interpersonal events that coders may judge to have an abusive aspect.

Criteria: body language, action tendency, and vocal quality. Narrating memories of abuse may involve a range of emotional experiences, and thus may incorporate a range of body language and vocal qualities.

Example of narrating abuse or maltreatment: In a client who was discussing his father's violent outbursts, the therapist led by saying, "yeah - tell him what it was like for you when he lost his control," to which the client, after a long pause, replied, " - - it made me give up, made me; it turned me off. It made me shut down, lose interest, didn't care anymore - - didn't want to look forward to that, just..." and he trailed off. The client

accessed an autobiographical memory of experiencing his father's abuse, and accessed his reactions to it and experience of it.

Component Three: Maladaptive shame. This component captures clients' access, experience, acknowledgment, and/or articulation primary maladaptive shame or secondary shame. Shame may be experienced in the moment in the session due to events in-session, be activated in the moment in response to memories of events out of session, or the person may describe having felt shame in other situations, all of which are captured by this component.

Maladaptive shame: Content of speech. As per the Introduction, there are number of kinds of shame, and shame can have various permutations. Shame is arguably akin to anxiety in that it may have idiosyncratic individual iterations. Of clinical importance, in the second stage of the study, clients were rarely observed to actually use the word "shame" or its variations in their speech.

Client speech may fit into one of these general categories:

1. Maladaptive shame about the self as defective, unworthy, impotent, deficient, a failure, etc.
2. Maladaptive shame that arises when one reveals his/her emotions to another or shows excitement or interest and these expressions are not seen or responded to.
3. Maladaptive shame regarding various types of exposure.

Maladaptive shame: Body language, action tendency, and vocal quality. Body language and facial cues that may indicate shame include averted eye gaze, avoidance of eye contact, head hanging down, and most particularly, blushing. The action tendency in shame is to hide away from others, to want to disappear or to cease to exist. (It is noted,

however, as a differential, that the action tendency in hopelessness is also to hide, and thus a wish to hide may indicate either shame or hopelessness).

Types of shame in EFT theory. This component captures a type of shame that would be classified in EFT theory as primary maladaptive shame. Primary adaptive shame, which is shame felt as part of experiencing guilt at having committed genuine wrongdoing or having violated one's reasonable personal standards or values, is not represented by this component. Instrumental shame is a false display of embarrassment used to influence or manipulate others or situations, and is also not represented here.

Secondary shame is shame that arises in response to a difficult primary emotion. For example: a person may be embarrassed about crying and expressing sadness in session; of anger, assertive actions, or sexual desire; or even about feeling ashamed and unworthy. Secondary shame was coded as level one shame (see measure for further detail).

Note on clients' use of the word 'guilt'. As per the general discussion above, when clients used the word *guilt*, coders were allowed to consider if his or her experiential state would fit the criteria for shame. *Guilt* is arguably a less painful word to use to describe one's experience, and thus coders were allowed to consider the possibility that clients would use it instead of *shame* or related words to describe their inner state.

If a client used the word *guilt* to describe their experience, the following differentials were considered:

- a. Generally, one feels shame regarding one's whole self or person, guilt regarding specific actions or thoughts.

- b. Shame often arises from something that was done *to* the person, whereas guilt arises because actions taken *by* the person.
- c. Action tendency: in shame, it is to hide; in guilt, it is to make amends.

Examples of client process coded as maladaptive shame. One of the few clients to use the word shame in their speech said, with regards to an experience of sexual abuse as a child: “I was ashamed of myself.” Another male client stated: “You know I feel very small, no confidence, I feel like uh nothing, like a big zero.” Another client, discussing the impact of years of a father’s abuse, said, “I felt so guilty to be alive.” Even though the client used the word ‘guilty,’ this statement, said with great poignancy and while weeping, was coded maladaptive shame. This could be argued to be an example of Willie’s ‘shame of existing’ (Willie, 2004). All of the above examples were coded maladaptive shame, level three.

Examples of statements that contain underlying shame. Many client utterances were coded as maladaptive shame, level one (defined in the measure as *underlying shame*). For example, one client stated: “I feel like it’s another failure,” and another: “I feel like a liar.” A third client, speaking to his mother from the experiencing chair, said: “You’re not really, really interested in what, what it is that I’m talking about.” This utterance was coded maladaptive shame, level one, as the client is experiencing rejection that implies shame, as in: I am not even important enough for you (my mother) to be interested in what I am saying to you. Indeed, a minute later, the client said to the imagined mother: “(I wanted you to) take an interest in what I had to, there was some reason – to understand that I was worthwhile to listen to.”

Component Four: Shame anxiety. Clients may have anxiety or fear regarding feeling shame, being shamed, being perceived by others as shameful (or worthless, weak, inadequate, etc), or being or acting shameful. Anxiety is the most activated emotion in the moment, and the focus of the anxiety is feeling shame.

Shame anxiety: Content of speech. Prototypically, shame anxiety statements will begin with, “I’m afraid that _____,” or “I’m worried that _____,” or “I’m anxious that_____.” The client may speak of anxiety about being exposed, embarrassed, seen to be inadequate, etc.

Differentiating shame anxiety from other types of anxiety. Anxiety regarding issues other than feeling shame, being shamed, etc, are not coded shame anxiety but rather other secondary emotions, which is described below. For example, anxiety about physical danger to the self would be not have been coded as shame anxiety.

Examples of shame anxiety: One client stated: “I’m afraid to be a failure again.” Another said, when discussing his anxiety about attending a social event, “... um - you know I hope no one talks to me ha, because then they'll find out that you know that I don't belong in here.” Both clients are expressing anxiety about feeling ashamed, the second client in relation to social rejection.

Component Five: Pain as part of the experience of shame or self-contempt. Pain has been written about extensively in the EFT literature, and is argued to be a key emotion in psychotherapy (see, for example, Greenberg & Bolger, 2001; Greenberg & Paivio, 1997b). Many clients access a deep pain as part of the experience of, or directly in reaction to, accessing shame or articulating self-contempt. This pain may be maladaptive or adaptive, or be in between, but is usually productive (Greenberg et al., 2007). In order

to meet criteria for this component, the client's pain must have been related conceptually to, or arisen in reaction to, accessing shame or articulating self-criticism or self-contempt.

Pain: Content of speech. Clients may use words such as *hurt, sadness, pain*, etc., to describe this experience of pain. Clients may use metaphors of physical pain to refer to emotional pain. Intense pain may be described as anguish or agony.

Example of pain in the context of self-contempt and maladaptive shame:

Therapist: (in reference to self-contempt) "What happens when you hear that?" C: "It makes me hurt."

Component Six: Other secondary or maladaptive emotions. The client experiences secondary or maladaptive emotions in session, other than shame or shame anxiety. Common examples of secondary emotion are: global distress, hopelessness, helplessness, resignation, rejecting anger, and complaint (a fusion of hurt and anger). Common examples of other maladaptive emotions are: fear or sadness.

This component also captured clients' expression of symptomatic distress, e.g., describing feeling *depressed* or describing experiencing symptoms often associated with depression, such as feeling, fatigued, insomniac, wanting to stay in bed all day, etc.

This code was also used to describe the self 'collapsing' in a two-chair intervention for self-criticism. For example, in the experiencing chair, in reaction to the critic, the self may say: "I agree with him," or "he's right," or "there's no point in arguing with that." This process represents an activation of hopelessness and helplessness.

Component Seven: Articulate intellectual understandings of the impact of shame or of self criticism/self-contempt. This component captures the client's intellectual acknowledgement, exploration, or realization of the impact of the shame, the

self-criticism, and the concurrent self-concept and experience of the self on an intellectual level that does not involve activated emotion. The impact clients articulate may be behavioural (e.g., “when I criticize myself I stay home all day), somatic (e.g., “my self-criticism makes me so tense that I get headaches”), or cognitive (“I see now a pattern where I feel bad about myself and then I tell myself nothing will change”). Utterances coded with this code might be described as insight. They will start with words such as: “I see now that _____” or “I realize now that _____.”

Component Eight: Adaptive need. The overall criteria for the component of adaptive need are as described in the CAMS for Existential Need (Pascual-Leone & Greenberg, 2005). “Need statements are not demands but rather self-observations... of what the organism requires to function in a healthy way” (Pascual-Leone & Greenberg, 2005, p. 47). Prototypically, need statements begin with words such as: “I needed _____,” “I was a child, I deserved _____,” etc. Existential Need as described in the CAMS would be a Level three Adaptive Need in this system. Statements that express a need, but that do not convey the same sense of deserving the need (i.e., are more tentative, less resolute, less sure) are rated as lower levels of adaptive need.

Examples of adaptive need.

C: I deserve to be accepted, I deserve to be listened to.

C: [expressing to the mother what the client needed as a child] To hug me when I was hurting, to understand when I was crying out for help.

C: [to mother) I wanted you to hear me, I wanted you to listen to me.

Component Nine: Primary adaptive emotions. This component includes primary adaptive emotions as well as more complex states that involve both primary

adaptive emotions and more complex experiential states, such as self-compassion.

Primary adaptive emotions are emotions that arise in direct, immediate response to situations a person encounters (thus primary) and which contain information useful to the person's survival and well-being (thus they are adaptive) (Greenberg & Paivio, 1997b).

Examples include fear when encountering a threat, or sadness at bereavement. In the clinical setting, they are often characterized by their novelty or freshness for a client. For example, a client who has chronically blocked acknowledging or experiencing any hurt or sadness may begin to openly weep in session after discussing painful aspects of her experience.

Primary adaptive emotions may be expressed from the “self” chair, critic, or “other” chair. An example of a client accessing pride in the “other” chair would be a client, enacting a parent, who says: “I am proud of you.” This would be conceptualized as adaptive emotion – pride, as the client is accessing and activating pride, expressed through the voice of the imagined parent.

Delineated below are primary adaptive emotions hypothesized to be most fundamental to working with maladaptive shame in therapy, and following this, adaptive emotions that were hypothesized to be less fundamental.

Primary adaptive emotions hypothesized to be most fundamental to working with maladaptive shame.

Pride. This state may include the emotion of pride and also more affective-meaning states such as self-respect and self-confidence. Pride may be expressed from the critic chair, often after a shift. For example, the critic may say, “Now I see someone I can respect.”

Self-compassion. Self-compassion involves a client expressing compassion, understanding, and/or forgiveness towards the self. Conceptually, self-compassion was conceptualized as a specific type of self-soothing. It may be expressed from the experiencing chair or from the other chair, e.g., the critic softening and saying, “I can see that you’re trying your best.”

Anger. Adaptive anger is a complex emotion to code in client process, as the secondary and maladaptive forms of anger are likely to be frequently observed. The EFT literature also contains the related constructs of rejecting anger and complaint that overlap with primary adaptive anger in their presentation but are not functionally equivalent. Primary maladaptive anger is chronic anger that is easily activated and excessive to situation. Secondary anger is secondary to an experience of other emotions. In the context of working with maladaptive shame, one pattern seen is that clients feel ashamed, and then react with secondary anger in order to assert agency.

In speech, adaptive anger is expressed in language such as “I am angry at you for ____.” The words, “I resent ____” can be adaptive anger as long as it is not expressed as a whining complaint. Adaptive anger should prototypically express, “You treated me badly, it was wrong, and I am angry about it.”

When rating the component of anger, the rated level appraises not only emotional arousal, but also the degree to which the anger is purely adaptive, that is to say, its fidelity to the prototype of the component. The measure stipulates that Level One is the appropriate code for anger that contains aspects of rejecting anger, complaint, or secondary anger, mixed with primary adaptive anger. Level three is for clear primary

adaptive anger with no hurt or rejection mixed in, which fully activated and spoken with a firm vocal quality.

Pride/anger. This code corresponds to that of Pride (self-assertion) / Anger (self-assertion) on the Emotional Arousal Scale (Warwar & Greenberg, 1999). It may contain expressions of determination or agency or involve setting a boundary or asserting one's agency.

Primary adaptive guilt. Primary adaptive guilt is guilt that is proportional to the perceived transgression and that motivates the person to take action to make amends to another or repair damage done. Primary adaptive guilt may be seen in the context of working with maladaptive shame, as some clients may move from maladaptive shame into primary adaptive guilt. For example, some clients may denigrate themselves in relation to past actions, without actually taking responsibility or making amends for those actions. A move to adaptive guilt, i.e., recognizing responsibility for wrongdoing and taking actions to repair damage, is adaptive.

Adaptive emotions not hypothesized to be fundamental to working with maladaptive shame.

Sadness/grief. Primary adaptive sadness and grief often involves letting go of unmet needs, with genuine acceptance (although with sadness) that they will not be met. As with pain (see below), sadness/grief often has the quality of being about or in relation to another affect or experience. For example, the person may experience grief about their unmet needs.

Pain. Adaptive pain borders on adaptive sadness/grief. Adaptive pain contains high arousal, high meaningfulness, and high experiencing. Adaptive pain has the quality

of the client *moving through* or processing the affective pain, as opposed to becoming stuck in it. Pain is adaptive when it is a novel experience, such as allowing oneself to feel pain regarding past abuse, in a client had always blocked the pain. As discussed above, if pain occurred directly after experiencing shame or self-contempt, or if the client related the experience of pain to shame or self-contempt, it was coded as pain arising from shame or self-contempt. Pain arising from shame may be adaptive in many cases, and there the boundary defining these two states is not necessarily strong. Because of its intrinsic importance to working with maladaptive shame, for the purposes of the present study, pain arising from maladaptive shame was defined as a discrete component in the model.

Other primary adaptive emotions. The measure allows for the coding of other primary adaptive emotions such as relief and joy/happiness, as per the criteria delineated in the CAMS (Pascual-Leone & Greenberg, 2005).

Coding Measure

The further purpose of the preliminary phase of the study was to develop a psychotherapy process research measure to use in the second stage of the project. This measure was used to apply categorical and quantitative values to defined sections of observed client speech and behaviour. The *Classification of Experiential States Related to Maladaptive Shame* (CEMS) (Miller & Greenberg, 2013) was therefore developed in order to code client process in session, and thus to generate the data by which to quantify the processes under examination and to statistically test the hypotheses of the second stage of the study.

This coding system incorporates elements of the Emotional Arousal Scale (Warwar & Greenberg, 1999), the Experiencing Scale (Klein et al., 1969), and the Classification of Affective-Meaning States (Pascual-Leone & Greenberg, 2005). Criteria for some components (e.g., adaptive need and the primary adaptive emotions) were well-described by these existing scales and thus the measure refers to these scales' descriptions. Other components, such as shame, shame anxiety, and pain as part of experiencing shame, required elaboration from previous scales, as did creating clear criteria for differentiating maladaptive shame from self-criticism/self-contempt. These enhanced descriptions, criteria, and differentiations were developed based on the literature (Greenberg & Iwakabe, 2011; Greenberg & Paivio, 1997a, 1997b; Greenberg & Watson, 2006a; Kaufman, 1996; M. Lewis, 1992) clinical expertise, and on the observation of psychotherapy tapes in the preliminary phase of this study.

The measure contains detailed criteria for each component of client process outlined in the model. For each component, there are detailed criteria describing *what* emotion or experiential state is captured by that component, and also criteria to rate the *degree*, to which the client is experiencing the emotion or state. In the measure this aspect of degree is referred to as the *level*.

Additionally, while some components were well described in previous scales in their 'gold' iterations, this measure additionally considered the dimension of degree of experiencing and arousal of a particular emotion or experiential state. Thus criteria for differentiating the degree of these emotions and states were newly developed for this process measure. The scale for rating degree was non-linear, in that ratings increase in

emotional productivity, but the highest rating represents excessive emotional arousal that is not in fact highly productive.

Finally, the measure allows that some components contain further, more specified subtypes. For example, as discussed, the overarching component of *primary adaptive emotion* contains further subtypes of particular emotions and affective/meaning states, such as, pride, adaptive anger, self-compassion, joy/happiness, etc.

Unit for coding

As per the method used in the Motivational Interviewing Sequential Code for Observing Process Exchanges Coders Manual (MI-SCOPE) (Martin et al., 2005), the unit of coding in the CEMS is the utterance. As defined by the MI-SCOPE, an utterance is “a complete thought, or a thought unit,” where “two or more utterances are often run together without interruption” (Martin et al., 2005). In the present coding system, a *talk-turn* corresponds to the concept of a volley in the MI-SCOPE, i.e., it is an “uninterrupted segment of speech,” (Martin et al., 2005) and may contain one or more utterances.

A modification to the method of the MI-SCOPE is that this system allows for utterances to contain no words if there is evidence of emotional processing (for example, a long pause during which the client weeps). This modification was especially important for coding psychotherapy process that puts an emphasis on observable emotional experience in addition to client speech.

The decision to code by utterance was made in order to study moment-to-moment unfolding of client process, to study detailed sequences of client emotions and states, and to study the relationship of specific therapist actions to the emergence of specific client emotions.

Codes for utterances that do not fit model components. As well as the nine codes in the model of emotional processing of maladaptive shame, there were also three codes in the measure for use for utterances that did not meet criteria for any of the model codes. These will be referred to as non-model-specific codes. Each of these codes was given a three-letter label, listed below.

1. CGS: *'Good' client process, outside the model*. This code was used for utterances that did not meet criteria for any model-specific code and had an experiencing level of four or above, and/or an emotional arousal level of three or above.
2. CEX: *External process*. This code was used for utterances that did not meet criteria for any model-specific code and had an experiencing level of below four (i.e., external focus), and/or an emotional arousal level below three.
3. CUC: *Uncodable*. This code was used for utterances that were not clear enough to assess the level of the client's emotional processing, his or her experiencing level, and/or the meaning of his or her words, and thus can not be assigned any of the above codes. This may be due to the client's speech being unclear or due to issues with the tape or transcript.

Discussion of Preliminary Phase of Study

A model of client emotional processing such as this is not intended to be reductionist, nor to ignore the unique and meaningful personal iteration of each client's human story and experience. Rather, its utility lies in explicating a map that, if demonstrated through research have a validated relation with good therapy outcome, may provide a type of

guide that assists therapists to locate the client's process in relation to a larger structure and suggest an empirically-based pathway towards transforming maladaptive emotion and accessing and activating primary adaptive emotion. It provides a categorization system that may assist therapists to understand different types of client emotional processes (i.e. a synthesis of speech and non-verbal behaviour indicating the activation of specific emotions), and can provide empirically-supported guidance as to what types of emotional processing and meaning states would be most useful to facilitate at a given point in the moment-to-moment unfolding of a therapy session.

“What do I do now?” is the fundamental question of the therapist's work at each moment in session. A model such as this provides a system of categorization for understanding the nature of a client's process at a particular moment and suggestions for which emerging emotions and meanings are fruitful to facilitate.

It must be emphasized that, even as this model of working productively with specific emotions may be a trans-theoretical change mechanism that occurs during the course of psychotherapies in which the therapist is understanding his or her work from the perspective of different theoretical approaches, this study examines the unfolding of this model in the context of clients working with therapists who were grounded and skilled in client-centered and EFT theory and practice. The therapists (albeit with varying skillfulness) would have made efforts in the early sessions to create a therapeutic environment that conformed to Rogers' conditions (1957), i.e., an environment that was highly empathic, where therapists were attuned to clients' inner experience and individual life experience, and that utilized a general framework that was non-directive with regards to the content matter of sessions (Elliott, Watson, Goldman, & Greenberg, 2004). This is

especially important to note on the topic of working with maladaptive shame, as clients are inherently motivated to hide thoughts, feelings, or aspects of themselves or their history that they find painful. In this context, a foundation of empathy and unconditional positive regard may be even more crucial to providing a space in which clients might gain the confidence and level of comfort to share material they may find shaming and painful.

Additionally, therapist attunement to clients' experience, and especially to unformulated, difficult to articulate, and even disavowed aspects of themselves or their experience, would have further facilitated the articulation and experiencing of painful emotions and experiences. The focus in EFT (as in client-centered therapy) on facilitating clients' capacity to develop the language for describing emotions, acceptance of emotional experience, and the importance of allowing and exploring emotions, would have also been part of laying a foundation for the emotional processing examined in the individual sessions studied.

Methodologically, it should also be noted that the therapy sessions included in this study were part of actual psychotherapies. This is a naturalistic study of emotional processing in the context of psychotherapies with real clients, not a study of artificially attempting to evoke emotions in an experimental manipulation in a laboratory setting. There was no proscriptive a priori agenda on the part of the investigators of the original studies (Goldman et al., 2006; Greenberg & Watson, 1998a) or the therapists to evoke the emotions in question, and there was little theoretical discussion of maladaptive shame in EFT in the time during which the original studies were conducted. Likewise, neither the

therapists nor clients would have had prior knowledge that the therapies would be examined post hoc to look at emotional processing of maladaptive shame.

CHAPTER THREE:

TESTING THE EFFECTS OF MODEL COMPONENTS

The first aim of the second phase of the study was to test the reliability of the measure, the *Classification of Experiential States Related to Maladaptive Shame* (CEMS) (Miller & Greenberg, 2013). The second aim was to test the following hypotheses, which investigate the model's validity by examining the relation of the model components to each other and to therapy outcome. A data analysis section follows, which outlines the specific statistical analyses that will be used to test each hypothesis.

Hypotheses

Hypotheses testing relation of components to each other

Hypotheses One: Sequential order of experiential states. Past research has indicated that accessing primary adaptive emotion in-session is a predictor of therapy outcome in experiential therapy for depression (Herrmann et al., 2016; Pascual-Leone & Greenberg, 2007). This hypothesis seeks to identify if there is a pathway that has a statistical relation to depressed clients accessing and deeply experiencing primary adaptive emotions. Pascual-Leone and Greenberg's (2007) study identified the steps leading to access of primary adaptive emotion in clients who started in a state of global distress. Building on EFT theory and the findings of the above studies, it was posited that specific experiential states would occur in a set sequential order preceding clients' accessing primary adaptive emotion.

For these hypotheses, clients were considered to have demonstrated a particular experiential state if they had an utterance rated at a Level three (or a Level three or four, for self-contempt) on the component. In other words, clients must have been rated as

fully experiencing adaptive emotion in order for the utterance to ‘count’ in the sequence. (A Level three rating on a component indicated an emotion that was deeply experienced at a high level of arousal, with high fidelity to the criteria of the component in question.)

It was hypothesized that:

H1A: The first emergence of the following experiential states is more likely to occur in the following sequence than would be expected by chance alone:

1. accessing primary maladaptive shame
2. accessing primary adaptive emotion.

In other words, it was hypothesized that the first utterance coded primary adaptive emotion at a Level three would be preceded by the first utterance coded maladaptive shame at a Level three, and that this sequence of emotion states would occur in more cases than would be expected if these states were randomly ordered. This hypothesis tests frequency of the sequence of (although not the effect) of the two-step model of *changing emotion with emotion*: is primary adaptive emotion significantly more likely to be preceded by primary maladaptive emotion than would be expected by chance?

H1B: The first emergence of the following experiential states is more likely to occur in the following sequence than would be expected by chance alone:

1. expressing self-contempt,
2. accessing primary maladaptive shame,
3. accessing primary adaptive emotion.

This hypothesis tested if the first utterance coded primary adaptive emotion at a Level three would be preceded by 1) expressing self-contempt and then 2) accessing maladaptive shame, in more cases than would be expected by chance, were these states randomly ordered. Note that only self-contempt was included in this hypothesis, even though clients may have also accessed narration of abuse memories before accessing maladaptive shame. This was because self-contempt was conceptualized in this context to be a form of secondary emotion. This hypothesis thus tests the frequency of the sequence of (but not the effect of) the three-step *changing emotion with emotion* model: i.e., the transition from secondary, to primary maladaptive, to primary adaptive emotion.

H1C: The first emergence of the following components is more likely to occur in the following sequence than would be expected by chance alone:

1. expressing self-contempt
2. accessing primary maladaptive shame
3. articulating an adaptive need
4. accessing primary adaptive emotion.

For this hypothesis, the component of adaptive need was added, which is theorized to act as a ‘trigger’ to clients’ capacity to access adaptive emotion.

H1D: Finally, it was hypothesized that the first emergence of the following components is more likely to occur in the following sequence than would be expected by chance alone:

1. expressing self-contempt
2. accessing primary maladaptive shame

3. accessing pain
4. articulating adaptive need
5. accessing primary adaptive emotion.

With this hypothesis, the sequence of the essential components of the model (minus narrating abuse memories) was tested.

Hypotheses Two: Two routes to accessing maladaptive shame: heightening self-contempt and accessing memories of abuse or maltreatment.

H2A: The impact of heightening self-contempt on clients accessing maladaptive shame. The intention of this hypothesis was to test whether activating self-contempt leads clients to access shame. Various approaches to psychotherapy work differently with self-criticism. For example, working from a cognitive therapy framework, it is proposed that the therapist encourage the client to ‘challenge’ self-criticism by generating evidence to support or refute the self-critical beliefs, and by reformulating assumptions (Fennell, 2005). EFT theory proposes that self-criticism needs to be heightened in order to activate the more vulnerable shame and thereby make this underlying maladaptive emotion accessible to transformation. Specifically, it was hypothesized that:

H2A: In clients who exhibit three or more utterances of self-contempt at Level three or Level four, the number of utterances coded as self-contempt at Level three or Level four across the session will significantly correlate with the number of utterances coded maladaptive shame (also at Level three).

H2B: Relation between narrating memories and accessing maladaptive shame.

Some clients may first narrate such memories and then access the maladaptive shame that arose from these experiences, while other clients may first access shame,

which then opens a door to exploring the historical antecedents which gave rise to this scheme. Thus, there was not a theorized sequential position for this component. It was however hypothesized that for clients who do narrate memories of abuse, the extent to which they are able to access such memories would correlate with the extent to which they are able to access and experience maladaptive shame. Specifically, it was hypothesized that:

H2B: In clients who exhibit three or more utterances of narrating abuse memories at Level three, the number of utterances coded as narrating memories of abuse will across the session will significantly correlate with the number of utterances coded maladaptive shame at Level three.

Hypotheses Three: The role of need in the emergence of primary adaptive emotion. These hypotheses will examine the specific role of articulating an adaptive need in the transition from maladaptive to adaptive emotion. Articulating an adaptive need is hypothesized in EFT theory to be one of the key activators of primary adaptive emotion because emotion is activated by automatic appraisal of situations in relation to need (i.e., by heightening the need a new emotion is more likely to be generated). Articulating a deserving sense of need has been shown to be a key step in some previous EFT process research (Greenberg & Malcolm, 2002; Pascual-Leone & Greenberg, 2007), although it has not been reliably predictive of accessing adaptive emotion in other research (Choi, 2016).

For these hypotheses, only utterances coded at level three on the appropriate component will be included.

H3A: Clients who are rated to have accessed need following accessing shame will be more likely to access adaptive emotion than would be expected by chance.

H3B: The degree to which clients access maladaptive shame will predict the degree to which they access adaptive emotion.

H3C: The degree to which clients access maladaptive shame will predict the degree to which they access adaptive emotion, moderated by degree of accessing need. Moreover, it was hypothesized that accessing primary adaptive emotion will be more strongly predicted by the degree of accessing maladaptive shame at higher levels of accessing need.

Hypotheses relating model components to therapy outcome.

Hypotheses Four: Relation of components to categorical therapy outcome.

These hypotheses provide an easily comprehensible overview of the clinical implications of clients accessing maladaptive shame and primary adaptive emotion in the course of the examined psychotherapies. (See Data Analysis section below for a description of how client outcome was classified).

In this sample of depressed clients with a core maladaptive shame scheme, it was hypothesized that:

H4A: Clients who access maladaptive shame and also access adaptive emotion at a Level three in at least three utterances of each component over the course of the session will be more likely to have good therapy outcome as measured on the Beck Depression Inventory (BDI) at therapy termination than those clients who do not.

H4B: Clients who access shame alone in at least three utterances over the course of the session will also be more likely to have good therapy outcome as measured on the BDI at therapy termination than those clients who do not.

Hypotheses Five: Impact of greater access of individual components on therapy outcome. These hypotheses examine the impact of clients' engagement in individual model experiential states on therapy outcome. Therapy outcome was measured via a change score between pre- to post-therapy scores on the Beck Depression Inventory. For these hypotheses, both clients' total number of utterances coded at that component at a Level three (e.g., the total number of utterances for the client that were rated as Maladaptive shame, Level three) and therapy outcome were examined as linear variables. In these variable, speaking about the degree to which clients access a state refers to the number of times they experience that state over the course of the session coded. It was hypothesized that:

H5A: The degree to which clients access maladaptive shame will correlate significantly with therapy change scores. Specifically, clients who access maladaptive shame over a greater number of utterances at a Level three will have larger BDI change scores.

H5B: The degree to which clients articulate an adaptive need will correlate significantly with therapy change scores. Specifically, clients who access adaptive need over a greater number of utterances at a level three will have larger BDI change scores.

H5C: The degree to which clients access primary adaptive emotions and states will correlate significantly with therapy change scores. Specifically, clients who

access primary adaptive emotion over a greater number of utterances at a level three will have higher BDI larger scores.

H5D: The degree to which clients access the specific primary adaptive emotions of pride, self-compassion, pride/anger (self-determination), and/or adaptive anger at a Level three will significantly correlate with BDI change scores, and will correlate more strongly than do the other subtypes primary adaptive emotions (e.g., adaptive grief/sadness, adaptive pain, etc).

Hypothesis Six: Combined impact of two fundamental components on therapy outcome. With this hypothesis, the united impact of clients' accessing the two most fundamental of experiential states in the model on therapy outcome was examined. This analysis thus further tests the impact of the two-step changing emotion with emotion mechanism on therapy outcome. Do clients who access maladaptive shame and also adaptive emotion in more utterances across a key session of their therapies have better therapy outcome?

H6: It is hypothesized that the degree to which clients access maladaptive shame and the degree to which they access primary adaptive emotions will predict therapy outcome.

Hypothesis Seven: Combined impact of three components on therapy outcome. With this hypothesis, the united impact of clients' accessing three key model experiential states on therapy outcome was tested. It was hypothesized that:

H7: The degree to which clients perform the three fundamental experiential states in the model:

1. Primary maladaptive shame,

2. Adaptive need
3. Primary adaptive emotions,

will significantly predict therapy outcome, and will account for a greater proportion of the variance in outcome than any of the single model components.

Positive slope hypotheses: Relating sequential progression of components to therapy outcome.

The two final hypotheses examine the sequential progression of the components across the session and their relationship with therapy outcome. For these hypotheses, the total sequence of client experiential states was converted into two ordinal scales, as per Pascual-Leone's (2009) procedure:

The components were be converted into both a five-point scale:

1. Self-criticism/self-contempt and/or accessing abuse memories
2. Shame
3. Pain
4. Adaptive need
5. Primary adaptive emotions,

with other model codes excluded from the analysis.

For a second test, the components were also translated into a more differentiated 7-point scale:

1. Self-criticism/self-contempt and/or accessing abuse memories
2. Shame and shame anxiety
3. Pain
4. Adaptive need

5. The critic or other softens (SC0)
6. Primary adaptive emotions – occurring first - adaptive anger, pride/anger (self-determination).
7. Primary adaptive emotions – occurring second – pride, self-compassion, adaptive guilt, love, joy/happiness, relief, sadness/grief, adaptive pain.

For both analyses, the components CUC (uncodable) and CGS ('good' process, outside of model) were excluded. CEX ('external' process) was given a value of -1, and KPM (other maladaptive and secondary emotions) was given a value of 0, as secondary emotions are the least productive of type of emotional process in the model. From the above scales, the model of emotional processing is conceptualized as a progressive ordinal scale representing the progress of the client in session through these steps.

Hypotheses Eight: Relation of progression through model components to therapy outcome. This hypotheses addresses whether therapy outcome is significantly related to a regression line that indicates an increasing progression through the model components as represented by the translation of the model components to a five or seven point ordinal scale.

It is hypothesized that:

H8A: The regression coefficients (slope) of emotional processing across the session (i.e., the axis of time) will be positively correlated with symptom change on the BDI, using the five-point ordinal representation of the model components.

H8B: The regression coefficients (slope) of emotional processing across the session (i.e., the axis of time) will be positively correlated with symptom change on the BDI, using the seven-point ordinal representation of the model components.

Hypotheses Nine: Relation of progression through model components at increasing levels of intensity to therapy outcome. The data in this study, in addition to having an ordinal quality as proposed by Pascual-Leone's procedure, also include a valuation of level, or intensity, at which the client performs each component. This aspect of intensity can be thought of as adding a third dimension to the data, in that clients are hypothesized to prototypically proceed both in a linear direction through the model components and with increasing intensity. Given this additional source of information about client process across the therapy session, it was hypothesized that:

H9A: The regression coefficients (slope) of emotional processing, using both the five-point ordinal representation of the model components and the dimension of level, will be positively correlated with therapy outcome as measured by the BDI, and will be more strongly correlated than the components alone.

H9B: The regression coefficients (slope) of emotional processing, using both the seven-point ordinal representation of the model components and the dimension of level, will be positively correlated with therapy outcome as measured by the BDI, and will be more strongly correlated than the components alone.

Method

Sample

The videotaped psychotherapy sessions of 23 psychotherapies originally conducted as part of the York I & II Depression Studies were utilized as the raw data for

coding for this study (Goldman et al., 2006; Greenberg & Watson, 1998a). Only cases from the EFT condition of original studies were selected, in order to study working with maladaptive shame in EFT specifically. (See below for detailed information on how cases were selected.)

Participants. The 23 clients whose therapies were selected for the present study included 12 women and 11 men. Information regarding age was only available for 20 clients: the average age was 39 years old, with a range from 22 to 63. Of the 19 clients for which there was information regarding marital status, four were single, six were married, eight were separated or divorced, and one was widowed. With regards to education level, of the 19 clients for which there was information: four clients had completed some high school, six had completed high school, three had some undergraduate or college studies, three had completed college, and three had completed an undergraduate degree. Information on ethnicity, religion, or other demographic variables was not systematically collected in the original studies.

All clients met the criteria for a formal diagnosis of major depressive disorder, based on the Structured Clinical Interview (SCID) for the *DSM-IV* (Spitzer, Williams, Gibbon, & First, 1995), as an inclusion criteria for the original study (Goldman et al., 2006; Greenberg & Watson, 1998b). An additional current diagnosis of psychosis, bipolar I disorder, substance dependence, eating disorder, two or more schizotypal features, paranoid, borderline, or antisocial personality disorder, and/or current acute suicidality, constituted exclusion criteria. Additional exclusion criteria for the original study included recent bereavement or current physically abusive relationship. The average pre-therapy Global Assessment of Functioning Score (GAF) on the SCID for the

19 clients in the current sample for which there was information was 62 ($SD = 5.25$), with a range from 53-74. Information for axis II diagnosis was only available for 10 clients from the current sample: three met criteria for a DSM-IV diagnosis of avoidant personality disorder. There was information on co-morbid generalized anxiety disorder (GAD) for 11 clients from the current sample: three of the eleven clients met criteria for a GAD diagnosis.

Participants' average pre-treatment score on the BDI was 27 ($SD = 7.80$), with a range from 15 to 40. The average post-treatment BDI score was 9 ($SD = 7.65$), with a range from zero to 26.

Procedure

Case Selection. Cases were chosen from a total of 55 EFT cases in the York I & II Depression Studies for which there were potentially available videotapes, audiotapes, and/or transcripts. In order to examine the process of emotional transformation of maladaptive shame, the case selection procedure identified and selected those cases in which clients had strong indications of a core maladaptive shame scheme. Case selection was undertaken by examining early and early-middle sessions of the therapy for statements and behaviours indicative of such a scheme, using the following method.

A research assistant screened videotapes, audiotapes, or transcripts of two early sessions from available cases. When there was a lack of clarity, a third early or early-middle session may have also be screened. The research assistant identified statements that were indicative of the client having a core maladaptive shame scheme, as per the operationalized criteria outlined in Appendix A, using screening sheets as per Appendix B. These criteria were developed based on theoretical writing on shame from within the

EFT paradigm (Greenberg & Iwakabe, 2011; Greenberg & Paivio, 1997a, 1997b; Greenberg & Watson, 2006a) and the broader theoretical literature on shame (e.g., Kaufman, 1996; M. Lewis, 1992; Probyn, 2005).

Following the screening by the research assistants, the principal investigator reviewed screened cases with them to make a determination as to if the case would be included in the study. A core maladaptive shame scheme was determined to be present based on degree to which a) criterion shame statements, or behaviours, were predominant in the sessions screened, and b) there was not a predominance of statements that indicated an alternate core maladaptive emotion scheme. After screening by both a research assistant and the principal investigator, the case was reviewed by the principal supervisor's supervisor. The final decision to include or exclude a case was thus made through a consensus process based on the convergent agreement of the research assistant, the principal investigator, and the supervisor, with the emphasis being on cases in which maladaptive shame was judged to be the predominant, core, maladaptive emotion scheme of the client in question, using the criteria as outlined in Appendix A.

Cases were not chosen based on a single session in which the client reports brief, fleeting feelings of shame or embarrassment with regard to a single event, especially if it was not in a manner excessive to the situation described. Rather, a core maladaptive emotion scheme is one that is predominant across many situations, that is maladaptive, and not a proportionate reaction to specific events. There had to be multiple criterion statements evident in order for a case to be selected.

Session Selection. One session from each client's psychotherapy was chosen for coding. (Although two sessions could be coded if the latter components of the model

extended into a subsequent session – this occurred in the case of only one client.) Only sessions in which a chairwork task was used were examined for possible selection, as it was presumed these would be the sessions in which the fundamental model components were most likely to occur. (Intense self-contempt, for example, is most likely to occur in the context of a chairwork intervention). As the fundamental question under investigation was the relation between client performance of certain emotions in sequence (i.e., the model), the overarching purpose of the session selection procedure was to determine the session with the most evidence of this model. That is to say, in order to investigate the question does x (the model) relate to y (therapy outcome), our intent was to choose the session with the most evidence of x in order to be most accurately capable of investigating this question. The sessions were selected in order to have the strongest chance to test the relationship of the model components to therapy outcome, and this was most likely to be achieved by choosing sessions in which the model components were most likely to be present.

To begin, sessions that included the use of either an empty-chair or two-chair chairwork task were first identified. Where available, this was done using data from Pedersen's dissertation study, in which the level of resolution in chairwork tasks was rated for EFT cases in the York I & II Depression Studies (Pedersen, 2003). In her study, two raters and an expert rater evaluated the chairwork task in sessions on the Degrees of Resolution Scales (DRS) (Hirscheimer & Greenberg, 1996). The DRS ranks how far a client has progressed in the steps of the specific chairwork task undertaken.

The investigator examined sessions with chairwork for the presence of two of the components of the model under examination: maladaptive shame and primary adaptive

emotion, as defined in the current study. The aim was to identify the session with the greatest number of examples of these two components. This procedure began with the sessions with the highest DRS score as per the Pedersen data, as the DRS scores could be viewed as a reflection of the productivity of chairwork intervention. The investigator made a rough coding of client processes, noting these two components as well as the component of self-criticism, using transcripts (or videos, if transcripts were not available). Sessions that had three or more examples of maladaptive shame that at a Level three as per the coding system were “shortlisted,” and the session in which the shame codes were followed by the greatest number of examples of adaptive emotion was selected for actual coding.

In some cases, there was no adaptive emotion in any of the shortlisted sessions (i.e., in any of the sessions with at least three talk turns rated as maladaptive shame). In this circumstance, the session that contained the most explicit indications of maladaptive shame, however much or little this may have been, was the session chosen for coding.

In the case of any client who had no talk turns clearly indicative of maladaptive shame, the session with the greatest number of talk turns coded as self-criticism or self-contempt was selected.

Defining start and end point for coding, and parsing the session into talk turns. After a session was selected for inclusion in the study, the start and end points of the chairwork section of the session were demarcated.

The start point was defined as the point at which the therapist began to propose (or “set up”) the chairwork intervention, and the endpoint for coding was the end of the chairwork, as noted by the therapist in-session. In some cases, if the chairwork seemed to

“fade out” (as oppose to end at a defined point by the therapist), the research assistant assigned an end point approximately five minutes after the last point in which the client was still making clear ‘contact’ with the other chair, as per the instructions in the measure.

Once the start and end points were defined, the chairwork section of the session was parsed into talk turns and utterances by a research assistant, as per the instructions in the measure.

Coding of therapy tapes. Coders were two senior graduate students in clinical psychology, and one research assistant who was post-bachelor’s degree and had coded for multiple previous process research studies in the lab. All three coders had read widely on EFT. Two individuals had acted as coders on earlier process research studies of EFT, and two coders had multiple years of clinical experience and supervision in EFT. Coders received approximately 15 hours of didactic training in the specific use of the *Classification of Experiential States Related to Maladaptive Shame* (CEMS) (Miller & Greenberg, 2013) (Appendix C). All coders coded two psychotherapy sessions not included in the present study in order to establish competence and initial reliability using the measure, and all received periodic feedback on their coding over the course of the study in order to calibrate their fidelity to the observations of an expert rater.

Coders coded transcripts while watching the videotape of the session (or listening to audiotape, if video was not available). They assigned a single code to each utterance on the transcript (and where appropriate, assigned a rating of level to the code), using the codes from the CEMS. This coding was done by hand on the transcript, and was subsequently entered into a dataset by a research assistant.

Coders were blind to the hypotheses of the study and to the outcome of the therapies they coded. When sessions were double-coded, coders were also blind to the other coder's coding.

Variables

Independent variable. The data from the coding of psychotherapy sessions formed the independent variables for this study.

Final dataset of codes. For any double-coded session, if there was a discrepancy between the two coder's codes, the following procedure was used. If the discrepancy involved a model-specific code to be used in the primary hypotheses (i.e., self-criticism/self-contempt, shame, need, and adaptive emotion) at a Level two or above and any other code, then the discrepancy was taken to an expert coder as a 'tie-breaker,' and the expert coder's coding was used in analyses. This use of an expert coder ensured that the final data representing coding of observations of complex emotional processing in real clinical situations had the highest validity possible. For all other discrepancies (e.g., between two non-model specific codes, or between model-specific codes rated at Level one), one coder's coding was chosen by coin toss to "prevail" for that session, and the prevailing coder's coding was utilized.

For utterances on which the coders were concordant as to the component but differed as to the level, the average of the coders' rating of level was used. For example, if coder A coded an utterance as adaptive emotion at Level two, and rater B rated the same utterance as adaptive emotion at Level three, the final data set indicated adaptive emotion Level 2.5. For any hypothesis that required that a code meet the criteria of being equal to three, it was necessary that both coders have rated the utterance at Level three in

order for the code to meet this criterion. Without this agreement the code was not considered to meet the criteria for a Level 3 example of the component. This provided the most conservative method for determining if an utterance represented the most emotionally aroused and deeply experienced x of a component.

From the above procedure, the final coding to be used in the statistical analyses was calculated. Findings regarding the reliability of the measure are in the Results section.

Count scores. For many of the hypotheses, the total counts for each component at a Level three were calculated (or a Level three or four, for self-contempt) for each client. These scores are used as independent variables in a number of analyses; for consistency, they will be referred to as clients' *count scores*.

Dependent variable. For most analyses, change in pre- to post-therapy scores on the Beck Depression Inventory for each case were used as the dependent variable of treatment outcome. The BDI is a 21-item self-report inventory which was widely used to measure depressive symptomology, and could be used to classify clients by severity of depressive phenomenon (Beck, Steer, & Garbin, 1988). (Although some researchers will transform change scores to account for regression to the mean, this is not universally accepted as necessary, and some statisticians in fact argue that it can add noise into the analyses. Untransformed BDI change scores were utilized for this project.)

For hypotheses 4A and 4B, which examine the clients by categorical groups based on therapy outcome, the clients were divided into groups based on Jacobson and Truax's (1991) method. This method of classifying client outcome accounts for both the reliability of the measure and for an established differentiation of normal and clinical

populations. To calculate the reliable change index (RCI), which creates a cut-off based beyond which clients' change scores are statistically unlikely to represent measurement error, the test-retest reliability of .65 was used (Ogles, Sawyer, & Lambert, 1995). This procedure generated an RCI of 12.91 for this sample. The cut-off score as per the manual's guidelines (Beck, 1987) was used to distinguish normal from clinical scores.

Using these two criteria, as per Jacobson and Truax's procedure, a client was classified as *recovered* if he or she both had a change score on the BDI greater than the RCI cut-off and also moved from the clinical to normal range from pre- to post-therapy, *improved* if he or she had had a change score greater than the RCI cut-off but was still in the clinical range at post-treatment, and *unchanged* if he or she had a change score less than the RCI cut-off, whether the post-therapy score was in the clinical range or not. Two categorical outcome groups were then created: good and poor outcome. The former consisted of all clients classified as recovered, the latter group consisted of those clients classified as improved or unchanged. Clients classified as recovered were classed as *good-outcome* for these analyses, while those classified as improved or unchanged were classed as *poor-outcome*,

These analyses yielded a split of 12 good-outcome clients and 13 poor-outcome clients. An independent-samples Mann-Whitney U test revealed no significant difference between the groups' pre-therapy BDI scores. In the below hypotheses and results, when therapy outcome is referred to by category (i.e. good vs. poor outcome), the text is referring to the therapy outcomes as categorized by this procedure.

Data analysis by hypothesis.

Due to the high number of hypotheses as well as the different methods used to test them, the data analysis strategy for each hypothesis is described below.

Hypotheses testing relation of components to each other.

Hypotheses One: Sequential order of experiential states. A modified iteration of the method developed by Pascual-Leone and Greenberg (2007) was used to test the significance of the sequential order of experiential states.. The sequence of codes for each client was examined, and the first instance of a given component at a Level three (or Level three or four, for self-contempt) was noted. Thus for each client a sequence of codes depicting the order in which clients first entered into a given state at a Level three was generated. (For example: one client's sequence might have been: shame, adaptive emotion, need. The client was not coded to have experienced any other model components at a Level three, and thus their sequence would be only three components long). The codes were not necessarily adjacent, meaning that a client might have been coded to experience self-contempt at a Level three, and then shame at a Level one or two, and then experience shame at a Level three for the first time in the session.

This stringent test of the sequential pattern of codes started with the last code in the sequence in each hypothesis, which was always adaptive emotion. The analysis examined if the first emergence of adaptive emotion had been preceded by a Level three code of the component that was previous in the hypothesis. If it was, the preceding code was examined, and onwards. A client was considered to have performed the hypothesized model in sequence only if the first emergence of each code occurred in the hypothesized order. From this procedure, the number of clients in the sample that had experienced the components in the order specified for each hypothesis was tallied.

The proportion of codes in the dataset as a whole was then calculated. Using a procedure similar to bootstrapping, the statistical program *R* (R Development Core Team, 2010) was utilized to randomly generate 100,000 datasets, each containing 12 sessions (the number of sessions in the actual dataset that contained at least one utterance coded primary adaptive emotion at a Level three) of 202 codes (the average number of codes per session). The ratio of codes in each of the 100,000 simulated datasets was based on the proportion of codes in the actual dataset. For example, maladaptive shame was coded in 02.29% of the codes in the actual data set, and thus it occurred in that proportion in each of the simulated datasets. These 100,000 randomly generated datasets were examined to test the probability of finding the observed patterns of client performance of the model components were these randomly distributed sequentially. Using the simulated datasets, allowed for an empirical exploration of the question: what is the probability, in 100,000 samples of 12 cases of 202 codes, of finding the same number of cases that occurred in the current sample in which clients enter into these states in the hypothesized order?

Hypotheses Two: Two routes into accessing maladaptive shame: Heightening self-contempt and narrating emotional-aroused memories of abuse or maltreatment.

For hypothesis 2A, clients' count scores for Level three or four self-contempt were correlated with their count scores for Level three maladaptive shame. For hypothesis 2B, clients' count scores for Level three narration of abuse memories were correlated with their count scores for Level three maladaptive shame.

Hypothesis Three: The role of need in the emergence of primary adaptive emotion.

Hypothesis H3A, examined the likelihood of accessing adaptive emotion if the client had previously accessed need. This was investigated using the binomial test of probability (Cohen, 2001). The proportion of cases in which the client either a) accessed shame and need, but not adaptive emotion, or b) accessed shame, need, and adaptive emotion, was calculated. A binomial sign test calculator (graphpad.com) was utilized to perform the test and to assess whether accessing adaptive emotion after accessing shame and need occurred more frequently than would be expected by chance, were accessing adaptive emotion after these other two states a randomly occurring event.

It should be noted that this was not a comparison of cases in which clients accessed shame and then adaptive emotion to cases in which they accessed need as an intermediate step. While EFT theory posits that facilitating clients to access need is a tool that the therapist can use to facilitate accessing adaptive emotion, this is within the general recognition that some clients will move directly from maladaptive emotion to primary adaptive emotion, either spontaneously, or by switching chairs and thus taking on an alternative self-organization. Thus the aim of this analysis was not to compare clients who articulated an adaptive need as an intermediate step to those who did not. Instead, the aim of this analysis was to examine what subsequently occurred if clients *did* articulate a need. Was articulating a need likely to lead to accessing adaptive emotion? In order to test this, this analysis examined if articulating an adaptive need was more likely to be followed by accessing primary adaptive emotion than would be expected by chance.

Hypothesis H3B and H3C examined the degree of clients' accessing shame, need, and adaptive emotion across the session, and the role of need in predicting the degree of accessing adaptive emotion. These hypotheses were tested using a regression

approach. For each client, count scores at Level three for each component were calculated. A multiple regression analysis was utilized to first examine if clients' shame count scores predicted their adaptive emotions count scores, and then whether this prediction was moderated by their need count score.

Hypotheses relating model components to therapy outcome.

Hypotheses Four: Relation of components to categorical therapy outcome. In order to examine the clinical impact of clients' accessing the model experiential states in the most clinically-relevant and straightforward manner, the client count scores of Level three shame and adaptive emotion were calculated. These scores were re-calculated into a dichotomous variable, indicating if the client had experienced three or more utterances rated at a Level three of each of shame and adaptive emotion, or not. As described above, clients' pre- to post-therapy BDI scores were used to assign them into one of two groups: good or poor outcome, as per Jacobson and Truax's procedure (1991).

A Fisher's exact probability test (Fisher, 1954) analyzes count variables in small sample sizes. This test utilized to examine if clients deep access of the two components of shame and/or adaptive emotion (defined as three utterances rated at a Level 3) had a statistically significant association with therapy outcome by group, as per the hypotheses.

Hypotheses Five to Seven. These hypotheses were examined using multiple regression. As above, clients' total number of utterances rated at Level three for each component were calculated and used as predictor variables. Change scores on the BDI were used as the dependent variable.

Positive slope hypotheses: Relating sequential progression of components to therapy outcome.

Hypotheses Eight: Relation of progression through model components to therapy outcome.

The data analysis for these hypotheses builds on Pascual-Leone's 2009 method. A scatterplot was generated for each client, with talk turn (i.e., time) along the x-axis and the ordinal scale of emotional processing on the y-axis, thus creating a representation of each client's progression (or lack thereof) through the model across the session. From these 23 scatterplots, 23 regression lines and their slopes were calculated; that is to say, a numeric representation of the extent to which their emotion processing progressed from the lower end of the scale of emotional processing to the higher end over the course of the session. Finally, each client's slope was correlated to his or her BDI change score, to test if these were positive correlated. A positive correlation in this analysis would indicate that clients who had greater progression through the model components had higher BDI change scores, while clients whose slopes were flat tended to have smaller BDI change scores (or negative ones). (Note that in this final step, this analysis deviated from Pascual-Leone's 2009 method: in that paper he divided the clients into good and poor outcome groups, and compared the average slope of each group. In this project, each case's slope was correlated to its change score).

Hypotheses Nine: Relation of progression through model components at increasing levels of intensity to therapy outcome.

In these analyses the dimension of level was included. For each client utterance, the numerical value representing the component was multiplied the level assigned to that code. This created an extended scale that begins with a value of one, representing self-criticism at a Level one, or 1x1. The five-state scale reached a maximum of 15,

representing primary adaptive emotion at a Level three, or 5x3. The seven-state scale reached a maximum of 21, representing later-occurring primary adaptive emotions at a Level three, or 7x3. As was undertaken for hypotheses Eight, a scatterplot for each client was generated, with talk turn (i.e., time) along the x-axis and the extended ordinal scale of emotional processing on the y-axis, thus creating a representation of each client's progression (or lack thereof) through the model across the session. From these 23 scatterplots, 23 regression lines and their slopes were calculated. For both hypotheses, each case's slope was correlated to its BDI change score, to test if slopes positively correlated with BDI change scores. For these analyses, a steeper slope again indicated that a client had a upward progression through the model components.

Results

Overview of coding.

The data for this study were generated by observing videotapes of psychotherapy sessions, using the *Classification of Experiential States Related to Maladaptive Shame* – (CEMS) (Miller & Greenberg, 2013) to produce categorical codes and ordinal ratings for clients' moment-by-moment experiential states. This coding procedure produced client-side codes for 4,636 client utterances across the 23 sessions of psychotherapy. There was an average of 202 client utterances per session. The median session number was 12 (ranging from session 5 to session 19).

Variability within client coding. All model-specific and non-model-specific codes were represented in the coding of client process. For the model-specific codes that allowed a rating of level, ratings varied from zero to three (or four, for self-contempt). There were no codes in this sample rated at a Level four (or five, for self-contempt),

which represented unregulated, extremely aroused experiences of emotion. This was not an unexpected finding, as it was anticipated that in this sample of depressed clients this type of emotional experience would rarely be observed.

Utterances that were rated at a Level three (or Level three or four, for self-contempt) represented only 22.58% of the utterances coded. Level three or four self-contempt was rated in 9.56% of the total codes in dataset, narration of abuse memories in 2.35%, maladaptive shame in 2.29%, pain in .75% of codes, adaptive need in 1.83% of codes, and adaptive emotion in 5.80% of the total codes.

Reliability of measure

Of the total of 4,636 utterances coded for the purposes of this study, 2,201 (47.45%) were independently coded by two coders, each of whom was blind to the other coder's coding (as well as to therapy outcome, as for all cases coded). These 2,201 utterances were drawn from 11 sessions that were selected to be double-coded for reliability purposes.

The inter-rater reliability on the measure was high (Cohen's $K = .78$). Fleiss' (1981) guidelines describe levels of agreement over .75 as excellent beyond chance. Of the 418 utterances for which discordant codes were assigned, 327/418 (79.9%) were between two codes outside the model, between a code outside the model and a model-specific code rated at a Level one or two, or between two model-specific codes rated at a Level one or two. The implications of this finding are discussed in the Discussion section.

Hypotheses testing relation of components to each other.

Hypotheses One: Sequential order of experiential states.

Of the 23 clients whose sessions were examined as part of this study, 12/23 were rated to have experienced adaptive emotion at a Level three in at least one utterance during the sessions examined. The below analyses examine the sequences of experiential states that occurred prior to clients accessing primary adaptive emotion, in the 12 clients who did so.

Hypothesis H1A: The sequential order of two model experiential states. Of the 12 clients who experienced primary adaptive emotion in at least one utterance, 10 first experienced maladaptive shame. In other words, 10/12 experienced these two experiential states in the hypothesized sequence.

In order to analyze the likelihood of 10/12 sessions conforming to this sequence by chance alone, 100,000 simulated datasets of 12 sessions of 202 codes (the average number of codes per session in the study) were generated. Each simulated dataset contained the same proportion of model codes as were found in the actual data, and the codes were randomly sequenced within each simulated session.

This analysis revealed that, if the codes were randomly sequenced, having 10/12 clients experience maladaptive shame prior to adaptive emotion randomly occurred in 7/100,000 samples, which corresponds to a statistical likelihood of $p < .0001$. This finding supports the hypothesis that, in this sample of depressed clients with a core maladaptive emotion scheme, the emergence of adaptive emotion in-session was significantly more likely to occur after accessing and articulating maladaptive shame than would be expected by chance alone.

It should be noted that this analysis strictly examined the sequence of experiential states within the sessions, in order to ask the questions: Is there a defined sequence of experiential states that leads to clients accessing primary adaptive emotion? More specifically, is adaptive emotion statistically likely to be preceded by maladaptive emotion, as suggested by the two-step model of changing emotion with emotion? In order to understand the implications of this finding, it can be noted that, descriptively, of the 10 clients who followed this sequence, nine were classified as having good therapy outcome and one was classified as poor outcome (albeit in the *improved* group). Of the 13 clients who did not follow this sequence, 10 were classified poor outcome and three as good. A Fisher's exact test found a statistically significant relationship between clients having experienced these two states in sequence and therapy outcome, $p < .01$, one-tailed.

Hypothesis H1B: The sequential order of three model experiential states. In the 12 clients who deeply accessed adaptive emotion in at least one utterance in the session coded, 8/12 entered into the three emotion states of:

1. self-contempt,
2. maladaptive shame, and
3. adaptive emotion,

rated at a Level three or above. Of these eight clients, seven entered into these states in the hypothesized order.

An analysis of 100,000 sets of 12 simulated sessions revealed that if the codes were randomly sequenced, having 7/12 clients enter these states in the hypothesized order would occur in only 69/100,000 samples, which corresponds to a statistical likelihood of $p < .001$. This finding supports the hypothesis that in this sample of depressed clients

with a core maladaptive emotion scheme, the emergence of adaptive emotion in-session was significantly more likely to preceded by first expressing self-contempt and then accessing maladaptive shame, in that order, than would be expected by chance alone. Although this hypothesis did not test the effects on outcome of clients' experience of this sequence, descriptively, a Fisher's exact test again found a statistically significant relation between clients' experience of this sequence of three experiential states and therapy outcome, $p < .05$, one-tailed.

H1C: Testing the sequential order of four key experiential states. In the 12 clients who deeply accessed adaptive emotion in at least one utterance in the session coded, 6/12 experienced the four emotion states of:

1. self-contempt,
2. maladaptive shame,
3. adaptive need
4. and adaptive emotion,

rated at a Level three or above. However, only 1/12 clients entered the states in this hypothesized sequence. An analysis of 100,000 sets of 12 simulated sessions revealed that if the codes were randomly sequenced this pattern of emergence would be found in 25,926/100,000 samples, which was not more likely than would be expected by chance alone (with chance set as alpha $p < .05$).

Given the overall proposal in this project that clients' progression through these experiential states would occur both with steps both forward (i.e., into the next model state), and with progressively higher emotional intensity (i.e., at a higher level), an exploratory analysis was run, to see if clients who did not enter into adaptive need at a

Level three in the hypothesized sequence might have entered into need at a Level two in the hypothesized sequence. That is to ask: was articulating an adaptive need, as rated at a Level two according to this coding measure, sufficient to have clients subsequently access adaptive emotion for the first time? This exploration corresponded to the distinction in EFT theory between a *facilitative need* (one that facilitates the client to access a deeper need or adaptive emotion) and a *heartfelt need* (Greenberg & Goldman, 2019). Although this distinction had not been proposed at the time that the CEMS was written, it could be argued that the description of an adaptive need at Level two corresponds to the facilitative need (described in the measure as a need that is not a fully embodied expression of need), while the description of an adaptive need at a Level three corresponds to the heartfelt need (a need articulated with a deep sense of deserving as a human being to have the need met).

This extra exploratory analysis was performed in order to explore the role of both types of need in clients' process in this study. Descriptively, in 5/12 cases the first utterance of adaptive emotion was preceded by articulating an adaptive need, rated at either a Level two *or* three, which was in turn was preceded by maladaptive shame, and previous to that, self-criticism. Accounting for the higher proportion of adaptive need codes at a Level two or a Level three in the dataset overall, the probability of finding this pattern in 100,000 sets of 12 simulated sessions was calculated. This analysis revealed that if the codes were randomly sequenced this pattern of emergence would be found in 7/100,000 samples, which corresponds to a statistical likelihood of $p < .001$.

Thus, the experiential states:

1. self-contempt,

2. maladaptive shame,
3. adaptive need (rated at either a Level two or a Level three)

occurred before accessing adaptive emotion in significantly more cases than would be expected by chance alone, although this was an exploratory finding.

H1D: Testing the sequential order of five key experiential states. Of the 12 clients who accessed adaptive emotion, 4/12 clients entered into the five emotion states of:

1. self-contempt (or narration of abuse memories),
2. maladaptive shame,
3. pain,
4. adaptive need, and
5. adaptive emotion,

rated at a Level three or above, in at least one utterance during the session examined. Of these, only 1/12 clients entered into these states in the hypothesized order. Although clinically this sequence was not frequent, statistically, an analysis of 100,000 sets of 12 simulated sessions revealed that if the codes were randomly sequenced this pattern of emergence would be found in 2,864/100,000 samples, which corresponds to a statistical likelihood of $p < .05$. Statistically, this finding supports the hypothesis that in this sample of depressed clients with a core maladaptive emotion scheme, the emergence of adaptive emotion in-session was more likely to preceded by accessing and expressing strongly experienced self-criticism or self-contempt (or narrating emotionally-aroused memories of experiences of abuse), then accessing and articulating maladaptive shame, articulating an adaptive need, and finally accessing deeply felt pain related to the shame and/or self-

contempt, than would be expected by chance alone. That said, descriptively this sequence was rare, in part likely again due to infrequency occurrence of Level three adaptive need as explored above.

Hypotheses Two: Two routes to accessing maladaptive shame: Heightening self-contempt and narrating emotional-aroused memories of abuse or maltreatment.

H2A: Impact of heightening self-contempt on clients' accesses to maladaptive shame. In the 20 clients who were rated to have expressed self-contempt in at least three utterances during the coded session, there was not a significant correlation between the number of utterances on which they were coded to express self-contempt and the number of utterances in which they were coded to deeply access maladaptive shame, $r(18) = .014$, $p = \text{n.s.}$

H2B: Relation between narrating memories and accessing maladaptive shame.

In the 10 clients who were rated to have accessed abuse memories in at least three utterances during the session, there was a significant correlation between the number of utterances on which they accessed such memories, and the number of utterances in which they deeply accessed and experienced maladaptive shame, $r(8) = .573$, $p < .05$.

Hypothesis Three: The role of need in the emergence of primary adaptive emotion.

Hypothesis H3A tested if clients who accessed adaptive need following accessing primary maladaptive shame were more likely to subsequently access adaptive emotion than would be expected by chance alone. In this sample, there was only one client who first accessed shame, then adaptive need, then adaptive emotion, and only one client who accessed the first two states and then did not access adaptive emotion. Within this tiny

sub-sample, the binomial sign test was not significant, and conclusions regarding the likelihood of accessing adaptive emotion after accessing need could not be empirically drawn.

With regards to hypotheses H3B and C, the results show that the degree to which clients accessed maladaptive shame significantly correlated with the degree to which they accessed adaptive emotion, $r(21) = .514, p < 0.01$. However, this relation was not significantly moderated by the degree to which clients accessed adaptive need, $\Delta R^2 = .024, F(1,19) = 1.15, p = \text{n.s.}$

Hypotheses relating model components to therapy outcome.

Hypotheses Four: Relation of components to categorical therapy outcome.

Table 1 shows the relation of clients' experience of model emotion states to therapy outcome by category. For this hypothesis, clients were categorized as having deeply experienced maladaptive shame and/or adaptive emotion if they were rated to have experienced these states in at least three utterances at a Level three. Three utterances was chosen as the threshold based on clinical judgment of the investigator's supervisor. Clients' therapy outcome on the BDI was categorized as per the procedure discussed above.

Eight clients deeply experienced both maladaptive shame and adaptive emotion at a Level three in at least three utterances over the course of the session, and all eight of these cases were classified as having good therapy outcome. Conversely, there were no clients who did not experience these two emotions and who met criteria for good outcome at therapy end. A Fisher's exact test (1954) revealed that the distinct outcome for clients based on their emotion processing in session was statistically significant:

clients who accessed both maladaptive shame and adaptive emotion were significantly more likely to have good therapy outcome than those clients who did not access these two states ($p < 0.001$, one-tailed, Fisher's exact test).

Although the concept of sequence was not included in this hypothesis, it can be noted that of the eight clients who experienced at least three utterances of maladaptive shame and three of adaptive emotion, all experienced maladaptive shame before experiencing adaptive emotion.

There were seven cases in which clients were rated to have deeply experienced shame, but not adaptive emotion. Of these, four had good outcome and three had poor outcome. Clinically, this suggests that deeply experiencing shame, even if adaptive emotion is not accessed, can lead to good therapy outcome but is not necessarily sufficient. Statistically, clients who accessed maladaptive shame but not adaptive emotion during the session coded were significantly more likely to have good therapy outcome than those clients who did not deeply access either of these emotions, ($p < 0.05$, one-tailed, Fisher's exact test).

Hypotheses Five. Impact of individual components on therapy outcome.

Bivariate correlation was used to test the relationship of three individual model experiential states: maladaptive shame, adaptive need, and adaptive emotion (all types), on therapy outcome, as defined by change in pre- to post-therapy BDI scores.

As hypothesized in H5A, H5B, and H5C, all three of these states had a significant positive correlation with therapy outcome. Clients who accessed each these experiential on more utterances (coded at a Level 3) in the session coded had higher pre- to post-therapy change scores on the BDI. Accessing maladaptive shame had a .430 correlation

with therapy change score ($p < .05$), adaptive need a .438 correlation ($p < .05$), and adaptive emotion a correlation of .661 ($p < .001$).

H5D: Impact of specific adaptive emotions on therapy outcome. It was hypothesized that accessing the specific primary adaptive emotions of pride, self-compassion, anger, and/or pride-anger (self-determination), would significantly correlate with therapy outcome. As illustrated in Table 2, accessing, articulating, and deeply experiencing these four subtypes of adaptive emotion did each have a significant correlation with therapy outcome.

Additionally, the hypothesis that these four subtypes of adaptive emotion would be more strongly correlated with therapy outcome than would the remaining subtypes of primary adaptive emotion (e.g., adaptive sadness/grief, adaptive pain, joy, etc.) was also supported by the data. Pride, self-compassion, anger, and pride-anger were each statistically correlated with therapy outcome, whereas the other subtypes of adaptive emotion were not. To perform this analysis, clients' total counts of utterances for pride, self-compassion, anger, and/or pride-anger were calculated, as well as their total counts of the other subtypes of adaptive emotion. The correlation between each of these two categories of primary adaptive emotion to BDI change scores was then calculated. A test of dependent correlations (Meng, Rosenthal, & Rubin, 1992), which is used when comparing two correlations to the same dependent variable, revealed that the correlation of the total scores for pride, self-compassion, anger, and pride/anger to therapy outcome ($r = .713$) was significantly stronger than the correlation of the other subtypes of adaptive emotion to therapy outcome ($r = .170$), $t(20) = 2.81$, $p < 0.01$.

Descriptively, it is interesting to note that clients who experienced one of the specific subtypes of adaptive emotion also experience others. For example, of seven clients who accessed pride at a Level three in at least one utterance, five also accessed self-compassion. Vice versa, there was only one client who accessed self-compassion and not pride. Anger and pride/anger (self-determination) also frequently co-occurred. In other words, these particular subtypes of adaptive emotion, which were hypothesized to play a specific role in transforming maladaptive shame and in therapy outcome, tended to occur together. Clients who were able to access one frequently accessed others, while other clients accessed none of these four.

Finally, with regards to specific adaptive emotions and their role in transforming primary maladaptive shame, it can be noted that only one client in this study accessed adaptive guilt. Adaptive guilt was an important part of this client's therapy process, but in this small sample it was not a frequently observed emotion state.

Hypothesis Six: Combined impact of two fundamental components on therapy outcome. A multiple regression analysis tested if clients' count scores on the two most fundamental client experiential states in the model, maladaptive shame and primary adaptive emotion, significantly predicted clients' therapy outcome as measured by change in clients' pre- to post-therapy scores on the BDI.

A visual inspection of the scatterplots representing the relation of primary adaptive emotion to therapy outcome revealed that clients tended to either have a score of zero on the variable under question or to have values higher than three. As one of the assumptions of a regression analysis is that each predictor variable has a roughly linear relation with the dependent variable, in order to ensure the robustness of these analyses,

this predictor was treated as a dichotomous variable. Cases scores were transformed into a dichotomous variable with values of either zero or one. If clients had zero to two utterances of primary adaptive emotion (rated at a Level Three), they were assigned a score of 'zero,' and if they had three or more utterances of adaptive emotion (rated at a Level Three), they were assigned a score of one. Descriptively, there were 14 cases that had zero to two utterances rated at a level three, and nine cases that had three or more utterances rated at a Level three. (Maladaptive shame was still treated as a linear variable, and clients' scores for maladaptive shame were not transformed).

A regression analysis that used clients' count scores for maladaptive shame, and the dichotomous variable for clients' count scores for primary adaptive emotion, found that these two variables together explained 30% of the variance in change scores on the BDI ($R^2_{\text{adj}} = .300$, $F(2,20)=5.71$, $p<.05$).

There was one outlier in this analysis, but undertaking the regression analysis with this outlier deleted did not significantly alter the result.

Hypothesis Seven: Combined impact of three model components on therapy outcome. A multiple regression analysis was tested if clients' count scores on the model components of:

1. shame,
2. adaptive need,
3. and adaptive emotion,

would significantly predict a client's therapy outcome as measured by change in clients' pre- to post-therapy scores on the Beck Depression Inventory (BDI).

As above, a visual inspection of the scatterplots representing the relation of both the variables of adaptive need and of adaptive emotion to therapy outcome revealed that these two variables could not be conservatively described as having a linear relation with therapy outcome. Thus these two predictors were both treated as dichotomous variables, as per the previous analysis. Descriptively, for the dichotomized variable of adaptive need, there were 14 clients who had zero to two utterances rated as a Level three adaptive need, and nine clients had three or more.

The regression analysis indicated that the three predictors of maladaptive shame, adaptive need, and primary adaptive emotion, as coded in a single therapy session, explained 36% of the variance in change scores on the BDI from pre- to post-therapy ($R^2_{\text{adj}} = .364$, $F(3,19) = 5.19$, $p < .01$).

Descriptively, as would be expected, the three-predictor model explained more of the variance in therapy outcome than did any of the individual components. Examining the variance explained by each component, via squaring their correlations with BDI change scores, indicates that each explained descriptively less of the variance than did the model alone, as would be logical given that all were positively correlated to outcome (calculated using zero-order correlations of dichotomous predictors where appropriate, and zero-order correlations of the linear variable, for the variable of maladaptive shame). (Note that *betas* were not reported for this analysis as these predictors were too highly inter-correlated to meet the assumptions necessary to report the betas).

Hypotheses relating sequential progression of components to therapy outcome (positive slope hypotheses).

For these hypotheses, the model was transformed into two versions of an ordinal scale – a five-state version and a seven-state version. For each scale, each categorical code was assigned a numerical value on the scale. Clients' progression through the scale over the course of the session was mapped by a scatterplot, with the ordinal scale on the y-axis and time (represented by utterance number) on the x-axis. Figures 2 and 3 provide two examples of these scatterplots. Figure 2 illustrates the slope of a client who had one of the steepest slopes of progression through the five-state model. Figure 3 illustrates the slope of the one of the clients with the flattest slopes of progression through the five-state model. Of note for the following hypotheses, the former client had a BDI change score of 16 (that is to say, his or her BDI score dropped 16 points from the beginning to the end of the therapy). The latter client had a BDI change of 2. In these two client examples, a steep slope was associated with a larger BDI change score, and a flat slope was associated with a much smaller BDI change score. The below hypotheses test whether there was a significant correlation between slope and BDI change score in the sample as a whole.

Hypotheses Eight: Relation of progression through the model components to therapy outcome. As hypothesized, the regression coefficients (slope) of progression through the five-state ordinal representation of the model of experiential states across the session (i.e., by utterance number) was positively correlated with the magnitude of change in clients' pre- to post-therapy BDI scores, $r(21) = .531, p < .01$.

Likewise, as hypothesized the regression coefficients (slope) of progression through the seven-state ordinal representation of the model of experiential states across the session (i.e., by utterance number) was positively correlated with the magnitude of change in clients' pre- to post-therapy BDI scores, $r(21) = .510, p < .01$.

These findings support the proposition that clients who had steeper progression through the model, as represented by each ordinal scale, over the course of the session analyzed, would also have greater pre- to post-therapy change scores as measured on the BDI.

Hypotheses Nine: Relation of progression through model components at increasing levels of intensity to therapy outcome. For these hypotheses, the variable of level was incorporated into the analyses, by creating an ordinal scale that accounted for both the component and its level, as described above. To resume, this was done by multiplying the ordinal value for each code by the level assigned to that code. For example, self-contempt (which had a value of one on both scales) at a level 2 would have had a value of 2 on this extended scale.

As hypothesized, the regression coefficients (slopes) of progression through the five-state ordinal representation of the model and at increasing intensity across the session was positively correlated with the magnitude of change in clients' pre- to post-therapy BDI scores, $r(21) = .480, p < .05$. Contrary to Hypothesis 9A, progression through the model at increasing levels of intensity was not more strongly correlated with BDI change scores than was progression through the model states on the five-state ordinal scale alone.

Likewise, as hypothesized, the regression coefficients (slope) of progression through the seven-state ordinal representation of the model of experiential states and at increasing intensity across the session was positively correlated with the magnitude of change in clients' pre- to post-therapy BDI scores, $r(21) = .469, p < .05$. As above, contrary to our hypothesis, progression through the seven-state model at increasing levels of intensity was not more strongly correlated with BDI change scores than was progression through the model states without considering the intensity at which clients experienced these states.

CHAPTER FOUR: DISCUSSION

The current study examined a model of emotional processing in psychotherapy, and tested the relation of this model with therapy outcome. The study took as its starting point the intersection between two broad questions regarding how to work effectively with emotion in psychotherapy. The first question: does the psychotherapy change mechanism of *changing emotion with emotion* predict therapy outcome as defined by symptom change when using specific emotions within the secondary, maladaptive, primary adaptive framework? The second question: can selecting clients based on a particular core maladaptive emotion scheme, and testing whether these clients exhibit a version of changing emotion with emotion that relates specifically to that core scheme, predict in-session therapy processes and therapy outcome? This chapter will first discuss the findings of the study as they pertain to selecting clients based on a particular core maladaptive emotion scheme, and to working with maladaptive shame specifically. The chapter will then explore the more general implications of the findings for changing emotion with emotion mechanism.

Utility of identifying clients' core maladaptive emotion scheme

One aim of the current study was to examine the specific process of emotional change in a sample of clients selected for a particular core maladaptive emotion scheme, in this case, core maladaptive shame. Clients were deemed to have a presentation consistent with a core maladaptive shame scheme based on watching the three early sessions of the therapy and making a gestalt clinical judgment regarding the prevalence and prominence of statements that were defined as indicative of this scheme. Clients'

subsequent in-session emotional processing and its relation to therapy outcome was then examined.

The most basic finding, as tested in Hypothesis Four, was that clients who deeply experienced the two fundamental emotion states of primary maladaptive shame followed by adaptive emotion (defined as a heightened experience of these emotions over at least three utterances) during one key session of their therapy were significantly more likely to have good therapy outcome than those who did not experience these two states. All clients who experienced both states in the single coded session went on to have good therapy outcome (defined by a clinically significant drop in scores on the Beck Depression Inventory (1987) as per Truax and Jacobson's (1981) procedure), and clients who experienced both states were significantly more likely to have good therapy outcome than those who did not.

Additionally, the converse was also found: in this sample of depressed clients who entered therapy with a clinical presentation consistent with high maladaptive shame, failing to access and deeply experience this difficult emotion during the key session examined was associated with poor therapy outcome. The clients included in the current study presented with a myriad of concerns upon entering therapy, including marital difficulties, divorce, bereavement, unemployment, and histories of physical, sexual, and emotional abuse, and all met criteria for a DSM-IV diagnosis of depression. Regardless, for these clients, working experiencing a series of experiential states consistent with the model predicted good therapy outcome, while not doing so was associated with poor outcome. Moreover, clients who more deeply and more frequently experienced the model's experiential states (illustrated in Figure 1) had the largest gains at therapy

termination (as defined by symptom improvement). This was indicated by the results of Hypothesis Six: clients' experience of the two fundamental states of maladaptive shame and primary adaptive emotion, in a single key therapy session, predicted 30% of variance in BDI change scores from pre- to post-therapy. Further, the three model states of: maladaptive shame, adaptive need, and primary adaptive emotion, together predicted 36% of the variance in BDI change scores. These findings support the potential clinical utility of identifying clients' core maladaptive emotion scheme early in the course of a therapy, and give incipient empirical support for how to work with clients who present with a core maladaptive shame scheme.

The two routes to accessing primary maladaptive shame

First, just as adaptive emotion was significantly likely to be preceded by the client having accessed maladaptive shame, as tested in Hypothesis One, maladaptive shame was significantly likely to be preceded by the client having articulated emotionally heightened expressions of self-contempt. This upheld our hypothesis that heightened expressions of self-contempt were one of the 'two routes' that facilitate clients accessing maladaptive shame in session. This is clinically significant, as a clinician may sense that a client struggles with underlying maladaptive shame, but may be unsure as to how to begin in order to facilitate the clients' ultimate capacity to access it. This is especially true as maladaptive shame can be a difficult and painful emotion for clients to approach. Self-contempt, which is a heightened form of the self-criticism with which some clients present, was one route to accessing maladaptive shame (and subsequently adaptive emotion). This finding comes with a caveat: expressing self-contempt in a greater number of utterances was not found to correlate with greater accessing of shame (as tested in

Hypothesis Two). This finding suggests that the amount of self-contempt is not incrementally better, but being able to express it at least once does facilitate accessing the more vulnerable and painful emotion of maladaptive shame (as accessing maladaptive shame was significantly likely to be preceded by expressing self-contempt at least once). After a certain point, more self-contempt across the session is not correlated with more utterances of maladaptive shame. This makes sense clinically, as once heightened self-contempt has facilitated a client accessing the more vulnerable underlying shame, there is little utility in continued expressions of self-contempt across the session. What factors facilitate this initial move from self-contempt to accessing maladaptive shame, as opposed to continuing to express self-contempt, remain to be investigated in future research.

It was found, as tested in Hypotheses 2B, that the extent to which clients were able to narrate deeply experienced and specific memories of abuse or mistreatment was correlated with their accessing maladaptive shame. Specifically, in those clients who had three or more utterances on which they met criteria for the code of “narrates abuse memories”, narrating such memories over more utterances predicted greater accessing of shame. This finding is consistent with past research on the clinical importance of narrating emotionally heightened and specific memories in psychotherapy (e.g., Boritz et al., 2011). In the current study, the direct relationship of narrating abuse memories with therapy outcome was not tested. Still, accessing such memories was correlated with accessing maladaptive shame, which was a key step towards good therapy outcome.

Are specific primary adaptive emotions more effective in transforming maladaptive shame?

As tested in Hypothesis 5B, four specific primary adaptive emotions and experiential states most strongly predicted therapy outcome in clients with a core maladaptive shame scheme: pride, self-compassion, pride/anger (self-determination), and adaptive anger. The number of utterances on which clients were rated to be deeply experiencing these four emotions, which can be conceptualized as indicative of assertion and self-care, predicted 51% (slightly over half) of the variance in therapy outcome, as measured by BDI change score. This suggests that these four particular adaptive emotions may be important emotion states for clients with core maladaptive shame to access and deeply experience in therapy for depression. Functionally, each of these emotions can be thought of as the opposite of the tendency to hide and to self-denigrate that is characteristic of maladaptive shame. Of note clinically, clients who experienced one of these adaptive emotions tended to also experience the others.

‘Changing emotion with emotion’ as a psychotherapy change mechanism

What can the findings of this study tell us about the role of emotional processing in productive psychotherapy, and in particular, the importance of clients moving through the theoretically hypothesized sequence from secondary, to primary maladaptive, to primary adaptive emotion? Another key aim of this study was to test the impact of the changing emotion with emotion change mechanism on therapy outcome. This study examined this question from a number of angles. First: are the emotion states of the secondary, primary maladaptive, and adaptive emotion more likely to happen in this sequence than would be expected by chance? Second: does clients’ experience of these states in sequence have a relation with therapy outcome?

As tested in Hypothesis 1A, in those clients who did access primary adaptive emotion, this state was significantly likely to be preceded by first accessing primary maladaptive emotion. This sequence is coherent with the two-step model of changing emotion with emotion (Greenberg, 2002). In this study, clients who accessed primary adaptive emotion were much more likely to have first accessed maladaptive emotion (maladaptive shame in the current study, specifically). Likewise, clients were much more likely to experience the sequence of emotions: 1) secondary emotion (specifically, self-contempt), and 2) primary maladaptive emotion (specifically, maladaptive shame), before accessing 3) primary adaptive emotion, than would be expected by chance. This three-state sequence corresponds to the three-step model of changing emotion with emotion. In the clinical setting, these two findings imply that facilitating clients to deeply access primary maladaptive emotion is the initial step that allows the possibility of subsequently accessing primary adaptive emotion, and that for many, secondary emotion may be a starting point for this process.

What is the importance of accessing primary adaptive emotion? Consistent with past research (e.g., Herrmann et al., 2016; Pascual-Leone & Greenberg, 2007), this study found that the extent to which clients deeply experienced primary adaptive emotion was the strongest predictor of therapy outcome (as tested in Hypothesis Five), having a correlation of .661 with BDI change score. The fact that primary adaptive emotion is consistently found to be the strongest predictor of therapy outcome highlights the importance of identifying which steps leads to clients being able to access it.

With regards to the effects of accessing maladaptive shame *and* adaptive emotion in sequence, it can be noted that although outcome was not included in the examination

of sequences of emotion in Hypothesis One, descriptively, nine of the ten (9/10) of the clients who demonstrated the two-step sequence of accessing maladaptive emotion and then primary adaptive emotion were classified as having good therapy outcome, as per Jacobson and Truax's (1991) procedure. Moreover, descriptively, there was a significant relationship between experiencing these two emotions in sequence and therapy outcome. Clients who experienced both, in sequence, were significantly more likely to be categorized as having good therapy outcome as compared to clients who did not. For a client who is mired in a depressive state, the path to activating and having the client authentically experience adaptive emotions such as pride and self-compassion is not obvious. These findings suggest that articulating and experiencing maladaptive shame may be an important initial step for such clients, if this is a core aspect of their self-organization. These findings also provide further support for the EFT proposition that accessing maladaptive emotion is key step that leads to accessing primary adaptive emotion.

Progression of experiential states across the session in relation to outcome

The analysis that brought the issues of sequences of emotion and of therapy outcome together was tested in Hypothesis Eight, which examined the overall progression of experiential states across the sessions in relation to therapy outcome. In order to do this, the model of emotional processing was first transformed into an ordinal scale. The categorical code applied to a client's state at a given moment (e.g., self-contempt) was converted into a numerical value on an ordinal scale (e.g., one for self-contempt). Scatterplots were generated for each client, with the ordinal scale mapped on the y-axis and utterance number mapped on the x-axis (see Figures 2 and 3 for examples).

These scatterplots provided a visual representation of the client's progress through the model components over time. A line of best fit for each scatterplot was then calculated, as well as a slope coefficient that provided a numerical depiction of the extent to which the client tended to progress upward in the ordinal scale as the time progressed in session.

This method allowed a consideration of both the question of sequence and outcome simultaneously, in that it examines both the progression of experiential states and therapy outcome in a single statistical test. Furthermore, one of the novelties of this method is that while it showed that clients who are working productively will, in general, progress into higher states as the session advances, the method also accommodated the fact that this progression might not be strictly linear (i.e., no client's slope adhered perfectly to the line of best fit, nor did the method require that it would). Rather, although the general trend might have been upward, clients may from one moment to the next progress into a higher model state, then stay in particular state over multiple talk turns, and then may even 'return' to a lower state before progressing upwards again. Pascual-Leone refers to this pattern as 'two steps forward, one step back' (2009).

These analyses as tested in Hypothesis Eight found that progressing from the lower model states to the higher model states was significantly related to higher BDI change scores. Clients whose emotional processing was characterized by continued experience of early model states (e.g., self-contempt) across the therapy session were associated with smaller BDI change scores, whereas clients whose emotional processing was characterized by increasing experiences of later model states as the session advanced (e.g., primary adaptive emotion) were associated with larger BDI change scores.

This was true examining a version of the model containing five states:

1. Self-criticism/self-contempt and/or Accessing abuse memories
2. Maladaptive shame
3. Pain
4. Adaptive need
5. Primary adaptive emotions,

and also one with seven states:

1. Self-criticism/self-contempt and/or Accessing abuse memories
2. Maladaptive shame and shame anxiety
3. Pain
4. Adaptive need
5. The critic or other softens
6. Primary adaptive emotions – occurring first - adaptive anger, pride/anger
7. Primary adaptive emotions – occurring second – pride, self-compassion, adaptive guilt, love, joy/happiness, relief, sadness/grief, adaptive pain.

The hypotheses discussed above each addressed the psychotherapy change mechanism of *changing emotion with emotion* from a different angle. In all analyses, whether stressing the aspect of sequence, the relation of these emotion states to therapy outcome, or the overall pattern of emotional processing across the session, the findings were consistent with the theory that deeply accessing maladaptive emotion and then deeply accessing primary adaptive emotion is a process that is associated with good therapy outcome. That said, not every client who had good therapy outcome had emotional processing consistent with the theory. While clients whose emotional processing was consistent with the proposed model were highly likely in all analyses to

have good therapy outcome, there were evidently also other routes to achieve that end. Changing emotion may be an important and reliable change mechanism when it does occur, but neither it, nor any theorized change mechanism, can explain 100% of the variance in therapy outcome. This is arguably even truer when studying a highly complex human phenomenon such as psychotherapy, and when outcome is a variable impacted by a myriad of factors both internal and external to the intervention under study.

Further findings

Although the focus of the current study was not on the role of articulating an adaptive need, this is a therapist intervention that has been the focus of writing on the practice of EFT, and this study did explore its role. As well, further nuanced analyses of the progression of experiential states were tested. This section discusses findings on both these issues.

Does articulating an adaptive need facilitate clients access to primary adaptive emotion?

When a client has arrived at a point of deeply accessing maladaptive emotion, what can then activate primary adaptive emotion? How can a therapist, sitting with a client who is experiencing painful emotions, facilitate that client to then move to a place of primary adaptive emotion, that is, to the transformative change process of *changing emotion with emotion*?

EFT theory proposes that a tool that therapists have to facilitate a move from primary maladaptive to primary adaptive emotion is inviting clients to articulate a deserving sense of an adaptive need (also referred to as an existential need or a heartfelt need) (Greenberg & Goldman, 2019). That is to say, inviting the client to articulate what

he or she needs in the moment or needed or in the past, from others, from themselves, or from life, in relation to painful maladaptive emotion is helpful to the client. (See measure for examples).

The current study's main focus was not the role of adaptive need in changing emotion with emotion. Indeed, the findings regarding the role of clients' articulating an adaptive need were mixed, and the original hypotheses about its role were not supported by the data. As tested in Hypothesis 1C, the emergence of adaptive emotion was not significantly likely to be preceded by an adaptive need at a Level three. Likewise, as tested in Hypothesis 3C, the correlation between accessing maladaptive shame and primary adaptive emotion was not significantly moderated by the degree to which clients accessed adaptive need.

As tested in Hypothesis One, many clients were able to transition from accessing primary maladaptive shame to accessing primary adaptive emotion spontaneously, without articulating a deeply felt adaptive need. In some cases, clients made this transition without articulating any utterance coded as 'adaptive need.' In other cases, need was an intermediate process between maladaptive and adaptive emotion, but it was rated as a Level two on the current study's scale. Thus, in the cases examined for this study, articulating a deeply felt adaptive need was not always a necessary step in the transformation from maladaptive to adaptive emotion.

In an exploratory analysis, it was found that when adaptive need did occur as a bridge between maladaptive and adaptive emotion, it was at times sufficient for clients to articulate what was rated by the CEMS as a 'Level two' need, which could be defined as a *facilitative* need (see above). The sequence:

1. self-contempt,
2. maladaptive shame,
3. adaptive need (rated at either a Level two or a Level three)
4. primary adaptive emotion

occurred in 5/12 clients who accessed adaptive emotion at least once, whereas limiting the sequence to a Level three, or heartfelt need, occurred in only 1/12 clients. This finding may have been an artifact of the measure (i.e., the operationalized criteria for a Level three adaptive need may have been too stringent) or may have been indicative of the complex nature of the phenomenon under study.

Together, the findings from this study suggest that: one, spontaneous transition from maladaptive to adaptive emotion is possible, and two, that perhaps a need does not need to be fully articulated, or accessed with a deep sense of deserving, to be capable of triggering the emergence of adaptive emotion. These exploratory findings are interesting to consider in conjunction with Choi et al.'s (2016) finding that some long-term poor resolvers accessed maladaptive emotion and then need but were not able to access primary adaptive emotion. Given his and this study's findings, it seems that overall, with regards to the importance of expressing an adaptive need: a) that inviting the client to express an adaptive need remains as a tool for therapists to use, although it may not always be necessary, b) that when used, it may or may not be effective, and c) that a client's expression of a need does not have to be fully experienced in order to precede the emergence of adaptive emotion. Identifying the conditions and characteristics that predict adaptive need facilitating access to primary adaptive emotion remains a question for further investigation (see, for example: Ferreira's (2017) thesis).

Descriptively, it should be noted that although some clients first accessed a Level two need before accessing primary adaptive emotion, (or did not previously access adaptive need at all), 8/12 clients who accessed adaptive emotion did eventually access a need that was rated as a Level three, a finding suggesting a back-and-forth intermingling of these two experiential states rather than a strictly sequential one. Furthermore, the number of utterances in which a client articulated a Level three need was significantly correlated with therapy outcome (as tested in Hypothesis Five).

Progression of experiential states across the session at higher levels of emotional intensity

Hypotheses Nine explored whether clients' progression through the model states at higher level, which indicated more prototypical examples of the state at a higher level of emotional intensity, would have a stronger relationship with BDI change scores than would progression through the states as defined categorically (without including the dimension of level). The method used to explore this question was somewhat rudimentary, in that the categorical codes were multiplied by level, creating an ordinal scale that reached to 15 points (or to 21 points, when breaking the model into seven steps). The ordinal scales that incorporated the dimension of intensity were found to be significantly predictive of therapy outcome, but were not found to be more predictive of therapy change scores than were ordinal scales that did not include the dimension of intensity. It is not clear the extent to which this finding is indicative of the limitations of the methodology used to explore it, or it is a true finding. At the time of study inception some alternative methods were explored but were not ultimately deemed feasible.

Limitations

The original study from which the sessions were drawn.

A salient limitation of the study is that the original study from which the tapes were sampled was not designed with the aim of examining working with maladaptive shame. This presents issues in terms of the sample, and the therapy and therapists' actions.

Sample. The clients included in the original study were not selected due a requirement their presentation was consistent with a core maladaptive shame scheme. Given this, clients were identified from the original study whose presentation in the initial sessions was consistent with this scheme. As in any sample, there was some variation within the 23 clients selected. Some had presentations that clearly suggested a core maladaptive shame scheme, whereas other clients had presentations that were less definitive, or had clear high maladaptive shame but also had other core difficulties. In most samples that are chosen based on a specific criterion there will be variation with regards to the participants' fidelity to that criterion (for example, although participants in a study may be included based on a pre-therapy score above or below a particular threshold, their scores may vary beyond that threshold). That said, had the sample been drawn from a study of clients who were deemed a priori to have a high maladaptive shame scheme, the sample might have more reliably been exemplars of this trait.

Therapy process and therapists. A parallel issue is that the original therapists had no explicit training regarding working with maladaptive shame, nor were they provided with any theoretical framework proposing how to do so. From observing the tapes, one can see that on occasion therapists may have recognized maladaptive shame as

such in clients' process, and made efforts to focus on and deepen clients' experience of this emotion. However, many therapists either did not perceive shame in clients' processing when it may be argued that it was present, or if they did correctly perceive shame, did not work to deepen the clients' experience of this emotion or their capacity to articulate their experience of it. It is possible that if the therapists had been trained to work according the hypothesized model, and had done so, it would have provided conditions for a clearer test of the model's effects.

Methodological and procedural limitations.

Further limitations are methodological and procedural.

Creation of a new psychotherapy process measure. The development of a new psychotherapy research process measure is a substantial undertaking. While the *Classification of Experiential States Related to Maladaptive Shame* (CEMS) (Miller & Greenberg, 2013) did rely on existing measures for some of the latter components in the model, for these and all components it added the novelty of rating both *what* state the client was in, in addition to rating the *intensity* at which they were deemed to be experiencing that state. It was the first measure from within the EFT approach to code sessions by utterance, which resulted in final a dataset of 4,636 codes.

Reliability. As stated above, the measure showed high reliability. Of those utterances that were assigned discrepant codes, 79.9% (327/418) were between two codes outside the model, between a code outside the model and a model-specific code rated at a Level one or two, or between two model-specific codes rated at a Level one or two. This fact was likely influenced by two factors: coding by utterance and coding on a Likert-type scale.

Regarding coding by utterance, one of the disadvantages of this method is that coders are asked to assign a code to material unlikely to be central to the phenomenon under study (colloquially, not ‘gold’ moments). This is because all material, not only moments deemed important, are coded. For example, moments when the session lags, the client mumbled, the therapist had to repeat him- or herself, etc, would all be included. In some previous EFT process research, coders were asked to rate sections of the session selected due to their likelihood to contain important material (referred to as *emotion episodes*), thus focusing the coders’ attention on sections of the session that were likely to be truer examples of the phenomenon under study. The fact that many of the discordant codes were between model codes at a low level, or between non-model codes, suggests that utterances unlikely to be “gold” primarily contributed to discordant codes. That is to say, the fact that all coders chose a low-level code indicates that they agreed that it was not very important, but were not reliable on deciding if it was totally outside the phenomenon of interest (i.e., outside of the model components) or had perhaps a slight glimmer of one of components.

This leads to an inherent potential problem of using a Likert-type scale in research: the difference between “no indication of the phenomenon of interest” (as Level zero is described in the measure) and “slight indication” (as Level one is described) is a slight difference. If the measure had forced a choice that was more strongly binary (e.g., between no indication of the phenomenon of interest and a pure example of it) it might have been more reliable. That said, a binary scale would have captured less nuance.

Self-report measures. The outcome variable for many hypotheses relied on clients’ self-report on the Beck Depression Inventory (BDI). The difficulty with self-

report measures is that “such self-descriptions may rather measure the representation the individual has of his/her functioning, rather than the functioning itself” (Kramer, 2019, p. 2). In other words, change in a person’s answer to certain questions on a self-report measure may reflect greater (or lesser) *insight* into their current state, traits, symptoms, or experience, or just a general change in their *perception* of these aspects of their lives, then actual change in these. Using such a measure as to produce quantitative indicators of change thus introduces the possibility of noise in the data, as there is an interaction between actual change in functioning and/or personality (or lack thereof) and insight into these.

Coding of a single session. With one exception, this study examined one session of clients’ 16-20 session psychotherapies and examined the relation of emotional processes in that one session to therapy outcome. This was a very small amount of the therapy to predict therapy outcome, and the process in question had to have a large effect in order to have a statistically significant relation with therapy outcome at termination. It could be argued that the study was thus subject to a high risk of Type II error (missing a true effect). That many significant effects were found indicates that fortunately this risk did not materialize.

Another potential issue stems from the fact that session selection was limited to those in which there was the use of a chairwork intervention. It is possible that clients who did not experience the model components in the session selected did in fact do so in another, unexamined session (that was not coded because it did not contain a chairwork intervention). There was at least one case that the investigator is aware of in which the most relevant material was not in a session with a chairwork intervention. Were there

more cases in which this occurred, it would have been a source of further possible Type II error. Future research might examine more than one session in the therapy, as was done in Choi's 2016 project.

Clinical implications of current study

The current study provided emerging empirical support for a model of how to work productively with emotions when working with depressed clients whose presentation suggests a core maladaptive shame scheme. At its most basic, the model proposed that when working productively in therapy for depression, such clients would move from expressing self-contempt, to accessing and deeply experiencing maladaptive shame, to accessing primary adaptive emotion. The specific adaptive emotions of pride, self-compassion, pride/anger, and adaptive anger were found to be the strongest predictors of therapy outcome, as defined by improvements on the BDI, suggesting that they are key emotions for therapists to be attuned to and to attempt to facilitate. The findings also support the importance of narrating memories of abuse or maltreatment for clients who had such histories. That said, there was no hypothesis as to the sequential location of this process in the model. It is possible that some clients first access such memories, which opens the possibility of acknowledging the feelings of unworthiness he or she was left with as a result of such experiences. Other clients might acknowledge feelings of unworthiness, which opens the possibility of exploring how such feelings developed.

The role of emotional pain and articulating an adaptive need in this context was explored. The three experiential states of self-contempt, maladaptive shame, and primary adaptive emotion were found to be significantly like to emerge in concordance with the

model sequence. Clients who who deeply experienced both maladaptive shame and adaptive emotion were significantly more likely to have good therapy outcome than those who did not. The extent to which clients experienced three states of maladaptive shame, adaptive need, and primary adaptive emotion, predicted better therapy outcome (as defined by greater pre- to post-therapy change scores on the Beck Depression Inventory). All of these findings provide empirical support to the potential effectiveness of working with maladaptive shame in depressed clients according to this emotion-focused model of psychotherapy change.

Generalizability. These findings are potentially generalizable to clients similar to those included in this study: meeting criteria for a diagnosis of depression and a presentation in early sessions suggested a core maladaptive shame scheme. It should be noted that the clients included in the study had a GAF score of at least 51, meaning their symptoms were not in the severe range and they had not more than moderate difficulty in daily functioning. Additionally, people were excluded from the study if they had current suicidality, current crisis or bereavement, or currently involved in an abusive relationship, or if they met criteria for a number of other psychiatric disorders or for paranoid, borderline, or antisocial personality disorder. Thus this is not a study of working with maladaptive shame in clients whose functioning was in the severe range or who met criteria for the above social stressors or diagnoses.

More specific to emotional processing, there was no utterance in the current study that was coded at a Level four (or a Level five, for self-contempt), meaning that no client experienced emotion that was so aroused as to be judged to be at Level 7 on the Client Emotional Arousal Scale, which would indicate emotional arousal that completely

disrupts the person's speech and has a 'uncontrollable' quality (Warwar & Greenberg, 1999). Clients in the current study at many points experienced intense and often painful emotion, but it was no point so under-regulated that they were not able to make meaning of their experience. This may have been influenced by the exclusion criteria of the original study. The findings of this study are therefore not necessarily generalizable to clients who experience such intense emotional arousal that they become unable to make meaning of their experience (Pos & Paolone, 2019). Working productively with clients who struggle with externalizing behaviours or significant under-regulation of emotion, was not examined in this study.

With regards to the therapists and the therapy, this study examined the effects of a model of emotional processing on therapy outcome in the context of therapies conducted by therapists who had extensive training in Rogers' essential conditions (1957) and the clinical supervision would have emphasized these over the course of the therapy. Its findings are thus potentially generalizable to comparable contexts, i.e., to clients working with therapists who are skilled at working in an empathic and client-centered way, and skilled at working productively with emotion in psychotherapy. Although therapists' actions were not examined as part of the current study, their actions would have undoubtedly influenced clients' process in session, and this question remains an important one for future research.

Directions for future research.

A number of directions for possible future research stemming from this project. Using the data from the current study, a first step would be to analyze micro-sequences of client process, in order to examine their relation with a higher degree of nuance. A

second step would be to conduct a task analysis of therapist actions and to also examine micro-sequences of therapist actions and client process in session. This would allow an investigation of therapist actions that have a temporal relation with client process that were found in this study predict good therapy outcome.

Beyond the parameters of the current study, two directions for future research would further test this model of working productively with emotion in psychotherapy. One would be to design a study in which both depression and a maladaptive core shame scheme are a priori inclusion criteria for clients, and the therapists are trained to work with according to the model. This would allow a replication, but with possibly with less variance in terms of client presentations and in session processes. A second direction would be to conduct a replica of the second stage of the study, examining tapes of therapies conducted from a non-experiential approach. Does the psychotherapy change mechanism of changing emotion with emotion predict therapy outcome in clients whose emotional processing conforms to the model across therapy modalities? For example, Kramer et al. (2015) have examined the CAMS model of resolving distress in a study of short-term psychodynamic therapy for adjustment disorder. A future programmatic research study would examine the current study's model of change in the context of other therapy approaches, thus allowing an investigation of the broader validity of this psychotherapy change process, and the extent to which emotion changing emotion is a fundamental process underlying psychological change in psychotherapy.

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Tables

Table 1: *Impact of client performance of model experiential states on therapy outcome categories*

	Therapy outcome category	
	Good	Poor
Number of clients who experienced three utterances of:		
Maladaptive shame and adaptive emotion*	8	0
Maladaptive shame, but no adaptive emotion**	4	3
Neither maladaptive shame or adaptive emotion	0	7
* $p < 0.001$, one-tailed, Fisher's exact test (as compared to clients who experienced neither state).		
** $p < 0.05$, one-tailed, Fisher's exact test (as compared to clients who experienced neither state).		

Table 2: *Correlation between clients' experience of specific primary adaptive emotions and therapy outcome*

Experiential state	BDI change score	significance
Pride	.585	<0.01
Self-compassion	.580	<0.01
Pride/anger (self-determination)	.570	<0.01
Adaptive anger	.462	<0.05
All other primary adaptive emotion	.170	n.s.

Note: Clients' scores for each experiential state were calculated via totalling the number of utterances on which they were rated to have experienced the component at a Level 3.

Table 3

Clients' sequential experience of model states

	Sequence of model states experienced				
	Primary adaptive emotion	Two-step model	Three-step model	Three-step model, and adaptive need *	Three-step model, and adaptive need **
Number of clients who experienced the state(s)	12	10	8	6	7
Number of clients who experienced the states in sequence		10	7	1	5

Note: Clients were considered to have experienced the given state if they were coded to have experienced it in at least one utterance, at a Level Three or above, with the following exceptions: *

* Examining adaptive need at Level three,

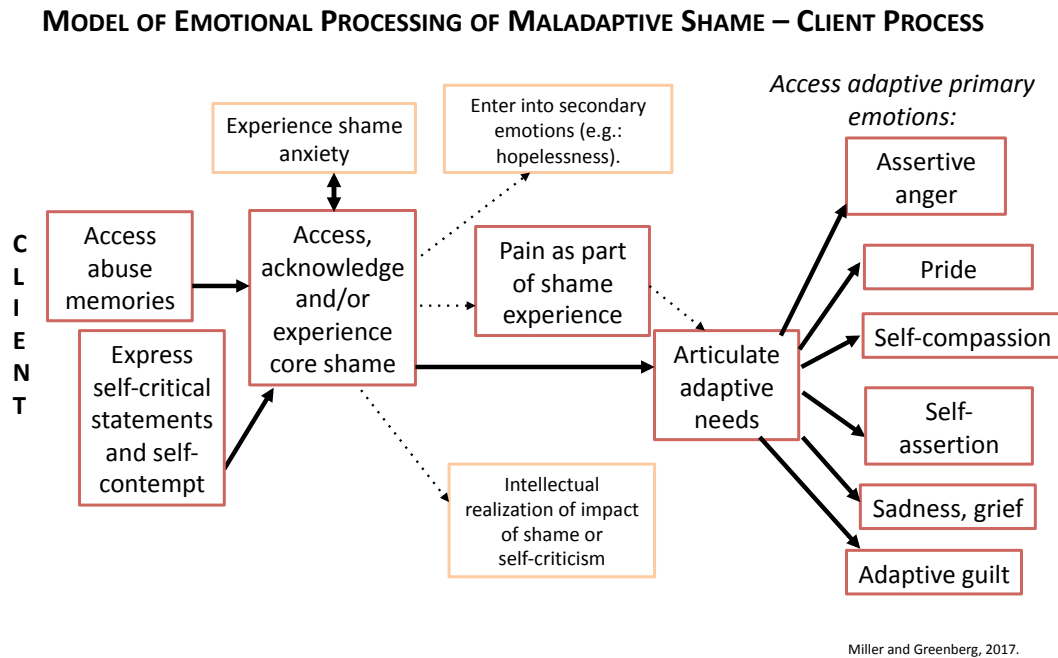
** Examining adaptive need at a Level two or three.

Two-step model: Maladaptive shame to primary adaptive emotion.

Three-step model: Maladaptive shame to adaptive need to primary adaptive emotion.

Figures

Figure 1: Model of emotional processing of maladaptive shame and related states.



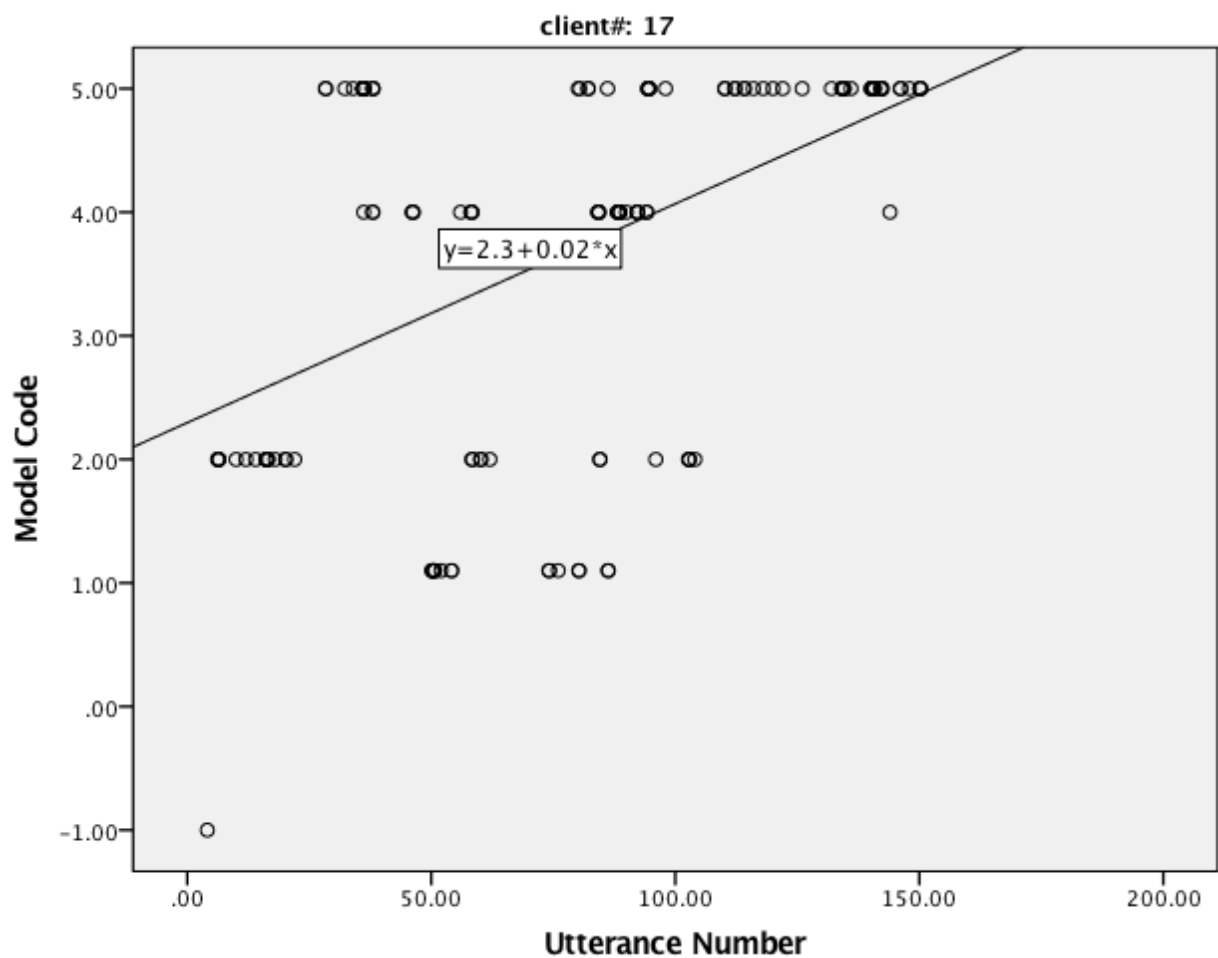


Figure 2. Scatterplot illustrating model code at each utterance for client #17. -1.00 = CEX (external process), 0.00 = other secondary or maladaptive emotions, 1.00 = self-criticism, self-contempt, or abuse memories, 2.00 = maladaptive shame, 3.00 = pain, 4.00 = adaptive need, 5.00 = primary adaptive emotion. Client #17 had a BDI change scores of 16 (i.e., the client's BDI scores dropped 16 points pre- to post- therapy).

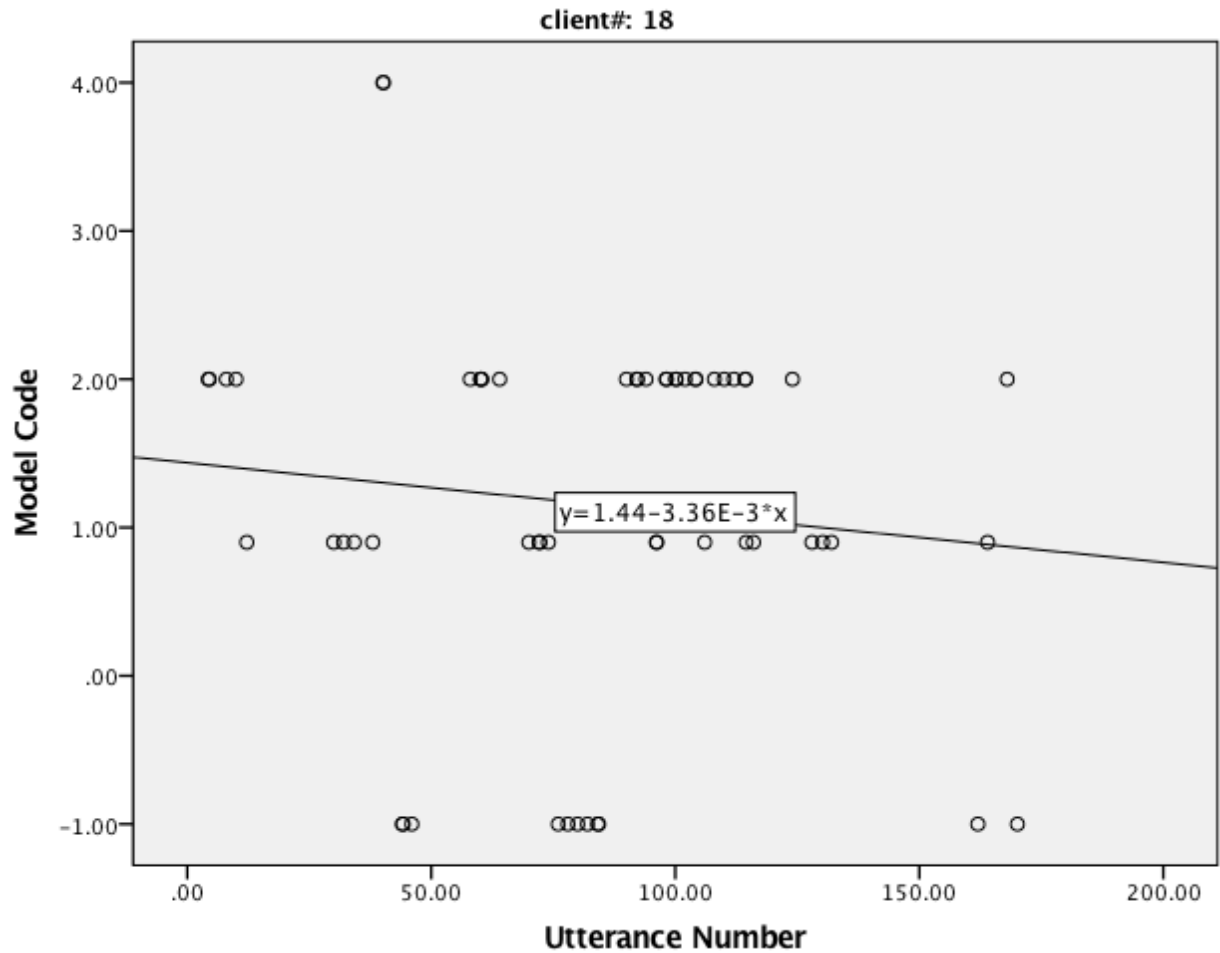


Figure 3. Scatterplot illustrating model code at each utterance for client #18. -1.00 = CEX (external process), 0.00 = other secondary or maladaptive emotions, 1.00 = self-criticism, self-contempt, or abuse memories, 2.00 = maladaptive shame, 3.00 = pain, 4.00 = adaptive need, 5.00 = primary adaptive emotion. Client #18 had a BDI change score of 2.

Appendices

Appendix A: *Case selection criteria.*

Case selection criteria include:

1. Self-critical statements by the client regarding his or her self: i.e., statements that reflect poor self-esteem, poor self-concept, negative view of self, or a perception that others view the person negatively. This includes statements that denigrate or insult the person and his/her dignity. Examples of such statements are: “I feel so inferior. I’m not as good as other people. I’m a failure. I feel bad inside. I’m ugly. I’m fat. I’m worthless. I’m unlovable. I feel guilty/shameful about things that I have done.”
2. Self-contempt expressed towards the self. The content of statements may be similar to those above, but there will be emotions of contempt, disgust, rejection, etc., expressed towards the self. Client, while in the critic chair in a two-chair task, or in the other chair in an empty chair task, makes a statement indicating contempt, or expresses shaming, humiliating, denigrating, or embarrassing intent towards the self. For example: “You are worthless / a failure / no good”
3. Statements, content, or behaviour expressed in session that indicate underlying or overt shame:
 - a. Client exhibits in session or reports experiencing outside of the session: shame, embarrassment, humiliation, guilt, or feeling shy, sheepish, flustered, self-conscious, foolish, or similar.

- b. Client reports embarrassment or shame that arises when he/she reveals his/her emotions to another or shows excitement.
 - c. Client reports shame regarding various types of exposure, or expresses fears or worries about this.
 - d. Client is a perfectionist and has harsh high standards for self that he/she feels he/she is not attaining, especially about issues that relate to identity or achievement.
 - e. The client reports having experienced past or current actions by others that could be construed as shaming or humiliating.
 - f. Client describes feeling powerless or impotent in situations outside of session.
4. Other types of behaviours in session:
- a. Client exhibits or reports exhibiting the action tendency of hiding the self from others.
 - b. Client exhibits shame behaviour in session (lowered eyes, etc.)
 - c. The client expresses secondary shame within the session regarding the expression of other emotions, or reports experiencing this outside of session.
5. The therapist conjectures or queries if the client feels ashamed/embarrassed/humiliated/inadequate/unworthy, etc. Shame can be difficult for clients to acknowledge, and the therapists in session, who were aware of clients' history and also familiar with their evolving presentation in the room, may pick up on underlying shame using their clinical judgment, even if clients do not overtly

communicate it.

6. The client reports experiences of abuse, maltreatment, or neglect.

Volunteer screeners were also asked to note statements that might indicate a weak-me depressive self-organization, using the following criteria:

1. Dependency/loneliness/abandonment/interpersonal rejection: As well as attempting to identify which cases likely have high core shame, we also want to get a sense whether the client has high dependency. Are there many themes of dependency/loneliness/abandonment/others not pulling through for him or her? Please also note these and code in the appropriate column.

Appendix B: Case screening sheet

SCREENING SHEET.

Client #

Session #

Therapist:

Screeners' name:

Date : _____

[illegible]

*On the line where you mark a CW task, before writing any statements, please note what kind of 2C work or who is in empty chair if EC.

****Who is in the chair “saying” the statement that follows?**

Appendix C: Classification of Experiential States Related to Maladaptive Shame.

CLASSIFICATION OF EXPERIENTIAL STATES RELATED TO MALADAPTIVE SHAME (CEMS)

PSYCHOTHERAPY RESEARCH CODING SYSTEM ©Miller and Greenberg, 2013.

This psychotherapy process research coding system was developed to investigate client process within recorded psychotherapy sessions. It incorporates elements of the Emotional Arousal Scale-III (Warwar & Greenberg, 1999), the Experiencing Scale (Klein, Mathieu, Gendlin, & Kiesler, 1969), the Vocal Quality Scale (Rice & Kerr, 1986), the Classification of Affective-Meaning States (CAMS) (Pascual-Leone & Greenberg, 2005), and the SCOPE-MI (Martin, Moyers, Houck, Christopher, & Miller, 2005).

General notes:

Section to code

The section to be coded will start when the therapist begins propose (or “set up”) a chairwork intervention. This is often done by identifying the two “sides” or two “voices” when setting up a two-chair intervention. The section will end at the end of the chairwork. In cases where it is not clear where the chairwork ends, the section will end five minutes after the last talkturn in which the client was still making contact with the other chair. In all cases there must be a minimum of 25 minutes of video coded, from the start point (this stipulation will be used to delineate an end point in sessions in which the client starts a chairwork intervention but does not manage to continue to engage in the task for more than a few minutes). Both the start and end points will be marked on the transcript by the person parsing before coding by coders.

Unit of Coding

The section of the transcript to be coded will be divided into talkturns and utterances before rating by the coders.

As per the method used in the SCOPE-MI (Martin et al., 2005), the unit of coding is the utterance. As defined in the SCOPE-MI, an utterance is “a complete thought, or a thought unit,” where, “two or more utterances are often run together without interruption.”

Example:

T: /How did that leave you feeling?/

C: /Down, I guess. / I mean, I didn't like it. /I felt sad and /I felt angry.

Utterances may be interrupted or overlapping, and will be divided into coherent utterances by the parsers. In EFT, therapists often make empathic utterances such as “hmm, hmm” or “yeah.” These actions are important with regards to therapeutic process. However, if they overlap a client's utterance, classifying them as a separate talkturn may split the client's utterance in a way that could make a client's utterance uncodable. As such, if the therapist

makes an unarticulated empathic utterance, it will be coded as a separate talkturn only if it does not split a client's utterance into two uncodable segments.

Example:

C: I mean certainly I should be able to (T: um-mm.) C: show something for my efforts.

Creating a separate talkturn for the therapist's utterance would fragment the client's talkturn in a way that would be difficult to code.

This coding system also makes the revision from the Martin et al. system, in allowing that a client talkturn or utterance may not include words. Any pause of more than a few seconds between utterances, in which the client may be experiencing emotional processing, can be parsed as an utterance if the transcript indicates a pause.

Example:

T: It really hurts...

C: (pause of 20 seconds) (weeping profoundly)

T: So much pain.

The client's "talkturn" would be parsed separately, even though it does not contain words, so that coders can code emotional processing that occurs during the time.

Process of coding

Coders will rate from the transcript and a digitized videotape of the session. Hearing and seeing the client and therapist on the video allows coders to perceive cues such as emotion, valence, tone, body language, etc. Where videotape is not available, audiotape of the session will be used.

Client-side coding

Components and levels

This coding system contains nine components describing distinct emotions or experiential states. For each component, there are three levels at which coders can rate the client as experiencing. In general, the component describes *what* emotion the client is experiencing, and the level describes *at what intensity* or *at what fidelity* the client is experiencing the emotion or state in question. This distinction corresponds to Greenberg's (2007) differentiation of experiential states and the manner or style in which a person is experiencing the state.

Verbal information (i.e., content) will predominate in deciding if a statement meets the criteria for one of the client-side components in the measure. Both verbal and nonverbal information will be utilized to determine the level. Nonverbal information includes emotional arousal, vocal quality, and body language. Depth of experiencing will also be used to determine the level of some components.

Coders are asked to make to a gestalt judgment of level, incorporating these various sources of information. Overall, coders must judge what emotion the client is experiencing in the moment and at what intensity; the content of the statement is a guide towards this decision but must be incorporated with nonverbal information. (For example, a person may say "I'm

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angry,” but his tone and body language (a shrug) implies that he is experiencing little anger in the moment. This might be coded as anger, level One.)

Coders may code a client as experiencing a component if he/she is either a) actively experiencing it in the moment in session, or b) describing having experienced component in a past situation (e.g., “I felt so small yesterday when my boss told me in front of my coworkers that my work was terrible” would be coded as shame).

This coding system thus relies on coders’ knowledge of the Arousal Scale-III, the Experiencing Scale, and the Vocal Quality Scale. It also relies on coders’ previous didactic training, previous clinical experience and supervised practice in Emotion-Focused Therapy (EFT) or another psychotherapy approach that involves identifying and differentiating emotions in psychotherapy, and familiarity with the literature on EFT.

With regards to differentiating Level 3 and 4 of client-side codes, in general, assume that Level 3 indicates an optimum, productive level of emotional processing while Level 4 indicates emotional processing that is dysregulated and no longer contains meaning-making. (The exception to this is the component self-contempt, which contains levels 0-5).

If the therapist conjectures as to the client’s feeling and the client agrees, code as per the appropriate component. E.g., T: I guess that leaves you feeling that you’re not as capable? C: Yeah. Client code: SH. Rating of level will have to be made based on client’s tone, body language, etc, and the strength of the therapist’s conjecture. In general, agreement is very unlikely to be rated at a level 3 as client is not him- or herself articulating the experience.

Therapist coding

In order to code therapist actions, coders must have a high degree of didactic training, previous clinical experience and supervised practice in Emotion-Focused Therapy (EFT), and must be especially familiar with past writing on EFT.

Therapist-side raters will be blind to the subsequent client talkturns, but will have information on how the client-side coders rated the previous client talkturn.

Final note:

“One of the difficulties in changing shame is the difficulty in accessing the emotion scheme generating it because of the powerful tendency to hide.” (Greenberg and Paivio, 1997, p. 235).

Because experiencing, acknowledging, and expressing the states described in this measure can be painful, and because they may activate anxiety and/or avoidance, it is not always simple to perceive these states in the observation of psychotherapy sessions. As such, coders using this measure to code client process in psychotherapy tapes must have a high degree of training and clinical experience. Coders should use their clinical judgment when observing clients’ process, and pay attention to body language, subtle non-verbal indicators, tone of voice, and the implications of clients’ statements.

CLIENT PROCESS CODES

SC

1. Self-criticism and contempt expressed towards the self.

Express self-criticism and contempt towards the self, with content that may indicate that may express criticism or contempt regarding the person's attributes, abilities, self, being, worth, and/or dignity.

May be from the other chair in chairwork, or from the experiencing chair. When expressed from the other chair in an empty-chair intervention, the client expresses contempt towards him/herself in the role of the other person.

Criteria:

Self-critical statements regarding the self that may indicate the following: poor self-esteem, poor self-concept, negative view of self, or perceptions that others view the person negatively.

If expressed from the other chair, the person will use "you" language, such as: You're a failure, you're ugly, etc. Self-critical statements are statements regarding the self's view of the self or his/her perceptions of others' view of the self. May also occur in the experiencing chair, and use "I" language, for example, "I screw up everything I do."

Self-contempt is contempt expressed towards the self. Kaufman (1996) proposes that contempt can be conceptualized as a fusion of anger with dissmell (smelling something foul) or disgust (tasting something foul in the mouth). In this coding system, anger may not always be present, but the negative evaluative aspect will be.

Self-criticism is evaluative but does not involve emotional arousal. As emotional arousal becomes more evident, it can be conceptualized the client is experiencing and expressing self-contempt. The content of statements in self-contempt may be similar to that of self-criticism, but there will be emotional arousal (Whelton & Greenberg, 2005). Self-criticism (as content) and self-contempt (as an emotion) can be thought of as the cognitive and emotional manifestations the same process.

Self-contempt may include

- a. Disgust, revulsion
- b. Rejection
- c. Loathing, hatred that contains negative evaluation and judgment (although see below)
- d. Putting down in a harsh or vicious manner.
- e. Shaming statements.
- f. Scorn
- g. Ridicule, mocking
- h. Erasure

expressed towards the self. This may be expressed from the critic chair in two-chair work, or may be expressed by the imagined other in empty-chair work.

As well, especially when expressed from the empty chair in UFB work, self-contempt may also be indicated by:

- a. Controlling behaviours (only if rater judges that the control has a humiliating or belittling aspect).
- b. Undermining / undercutting the person
- c. Dismissal, not being interested in or caring about the person. (Contains element of “you are not important enough for my attention.” Hate expressed from the other chair is not necessarily contempt, as the person *matters* enough to be worthy of the hate.)

Coders must use their clinical judgment to perceive self-contempt in such types of content.

Body language may include sneering, looking from above or pulling a face as if tasting or smelling something foul (“in disgust the face looks as if it is *spitting something out*, and in “dismissal” the face *pulls away*” (Kaufman, 1996)). Other body language may include shuddering as if trying to shake off something unpleasant, or hand gestures that suggest dismissal, rejection, shaming, etc.

Note that contempt expressed from the experiencing chair to the other chair, or by the client with regards to other people, is not coded here. So, for example, if the client, in the experiencing chair, is describing feeling contempt towards a parent, this would not be coded here.

Coach critic

In EFT there is a concept of a “coach critic,” who in the critic chair admonishes the person either a) for the symptoms of their depression, anxiety, etc, or b) to do better, be more productive, excel more, etc, in a way that suggests attempting to “coach” the self.

Code coach critic statements at L1, as is low-level criticism, and note “coach” in the comments column.

Examples of coach critic: C: You should really work harder, you should get up early so you can get to work on time, you are just wasting time at work, you could be more productive.

Anxiety critic and shame anxiety critic. **SC-AX** and **SC-SHX**

Clients may enact what could be termed an “anxiety critic”, that is to say, a critic who provokes or heightens the client’s anxiety with regards to events that may occur in the future (e.g., “Your plane is going to crash tomorrow.”).

If coders observe that the client is enacting an anxiety critic, code SC, and in the subcode column, please note AX for anxiety critic. With regards to level, level one or two is likely the most appropriate for an anxiety critic.

A client may also enact what could be termed a “shame anxiety critic,” that is, a critic who provokes or heightens the client’s shame anxiety, i.e., provokes the client’s anxiety regarding the possibility of being shamed or being shameful in the future. For example, “people will laugh at you,” “you’ll make a fool of yourself,” “you’ll look like an idiot.”

For a shame/anxiety critic: code SC, and in the subcode column, note SHX for a shame/anxiety critic. A shame/anxiety critic should be coded at level 3 or 4, as shaming anxiety is inherently self-contemptuous.

The critic “softens” or shift in the client’s view of the other.

Often in a two-chair or empty-chair intervention there will be a turning point in which the critic begins to soften, and may even express its own “standards” or reasons for the criticism. Likewise, in a UFB chairwork, the client may begin to show understanding towards the other, or the “other” may soften and express their reasons for having done the things he or she did. (E.g., “I was under a lot of stress, I couldn’t be a better father.”). For this type of process, code SC0.

Note: However, if the critic (or other person, in UFB) has softened and is expressing adaptive emotion towards him or herself then code AE over SC. (e.g., if critic says to experiencing self: “You tried the best you could,” it would be coded AE-CO. Likewise, a ‘parent’ stating: “I am proud of you,” would be coded AE-PR, or “I do love you,” AE-LV).

Levels:

Note that there are six levels of this component.

Zero: The critic or other softens, or the client’s view of the changes. This is the only code for which coders should note a zero code on the transcript. SC0 is to be used **only** after there were previous utterances of self-criticism.

One: Some indication of self-criticism in the talkturn, but is either weak or not very heartfelt. Also, a “coach critic” is L1 (see below for explanation). Arousal level < 3. Client uses a limited or externalizing voice.

Two: Clear indication of self-criticism in the talkturn. Arousal level < 3. Client uses a focused or contact voice.

Three: Self-contempt. Client expresses contempt towards the self in the talkturn. Arousal level 3. Client uses a focused, contact, or emotion voice. These statements are more aroused or more powerful in content than self-criticism (or contain contempt from other chair, but not criticism) but are not at the level of “pure gold” / fully aroused and activated self-contempt.

Four: Self-contempt. Content likely has an intense and/or powerful quality and may be hurtful in tone, intent, or meaning. The content may aim at the client’s core insecurities or shame. Arousal level 3-6. Client uses a focused, contact, or emotion voice.

Five: Highly aroused (almost dysregulated), vicious, expression of contempt towards self, that seems to overwhelm the person. Statement does not seem to contain meaning-making. Arousal level 7.

Examples:

Level Zero:

T: Change if you will. (to critic chair). So what happens on this side? C: This voice has gone quiet and doesn't have anything else to say.

C: (in critic chair) I don't feel so powerful.

C: (in critic chair) I was only doing this to protect you.

Level One:

C: (as critic). You need to be getting more done around the house, there are bills to pay, everything is disorganized.

Level Two:

C: You lost your job because you weren't good enough.

C: (as mother) your house is a mess.

Level Three:

C: You are too loud, everyone notices that you are talking about nothing. *Statement has shaming quality.*

C: you don't belong here, you're not part of the group. *In self-critical chairwork. Social exclusion ("you don't belong") is shaming. Arousal level of 4.*

Level Four:

C: [as father] You are a just woman, what does your opinion matter? *Said with contemptuous tone.*

C: [as critic] You're never going to be thin, you are fat and that is who you are

C: [as critic] You should have killed yourself, no-one would have cared.

C: [as critic] You have no personality, no-one wants to know you. *Spoken with vicious tone.*

Differentiation:

Self-criticism vs. Shame.

In the moment, expressions of self-criticism and self-contempt often contain underlying shame, as a person in all likelihood feels some degree of shame regarding the "defect" he or

she is criticizing. In this way they are like the two sides of the same coin. Nevertheless, they are distinct clinical phenomena.

Considerations in order to differentiate self-criticism/contempt and shame:

1. Content expressed from the “other” chair, i.e., **when the client is using “you” language**, is self-criticism/contempt. What is activated in the other chair is an *attack* position, which is critical and contemptuous. This goes with a general conceptualization that the other chair “does” and the experiencing chair “feels.” Although we may perceive that the person also feels underlying shame while articulating self-criticism or self-contempt, if using “you” language, code SC.
2. When in the experiencing chair (i.e., **when the client is using “I” language**), the utterance is most likely shame. In the experiencing chair, the client ideally explores his or her *experience*, (e.g., “sometimes I just feel like such a failure”), and this is rated as shame. Any client statements that begin with “I feel” or “I felt” should be rated SH over SC.
 - a. In rare instances, it may be possible to code SC when the person is using “I” language, only if the following criteria are met:
 - i. **Voice/ poorly differentiated chairwork or breakdown of chairwork:** Sometimes the client is using “I” language but is expressing a perspective that rightly belongs in the other chair – either because it is the critic’s voice or because it’s the voice of a significant other from the client’s past.
 - ii. **Vocal quality.** A vocal quality is highly external, evaluative, matter-of-fact, accusatory, etc, could be self-criticism (whereas something said with a contact voice, with a wounded, sad, fragile, etc, tone, is shame.)
 - iii. **Stance.** Self-criticism and self-contempt are expressions *to* the self, whereas shame is an expression *from* the self.
3. If coders are unsure if an utterance meets criteria for SH or SC, they should note their doubt and will be referred to an expert rater.

2. Access memories of abuse

AB

Client accesses, articulates, explores and/or narrates in session memories of past abuse or maltreatment.

Criteria:

The prototypical example of this component is that in session, the person describes memories of abuse, maltreatment, or neglect (i.e., this is what happened), or describes his or her experience of the abuse, maltreatment, or neglect (i.e., this is what it felt like).

This type of process may occur within the context of exploring the historical and interpersonal roots of the client's shame and/or self-criticism. For example, the client may narrate to the therapist how his father used to ridicule his academic ambitions, which then leads to him acknowledging and articulating how inadequate his father's criticism left him feeling.

While describing his or her experience of abuse or maltreatment, the person may describe other people's actions, their own reactions or feelings, and what some of the impact was of these events in the past or present. Except for the exceptions noted below, all of these types of content would be coded here. For example, noting the impact of the abuse on their current behaviour or experience could be coded here.

For this code, there is no requirement as to what affect the person is currently experiencing in the moment or describing having felt in the past. The criterion is that the person is describing an experience of abuse or maltreatment. The person may also describe other interpersonal events that coders may judge to have involved an aspect of maltreatment, such as being bullied by peers as a child.

However, note: If the person can be rated to be demonstrating any other component in the model, code that component over AB. For example, if the person expresses a need with regards to the abuse (e.g., "I was a child who needed protection") it would be coded Adaptive Need, and "I'm angry at him for the abuse I suffered" would be coded as Adaptive Emotion – Anger. Thus, the AB code is only for utterances that do not meet criteria for another code in this manual.

Levels:

Zero: No indication of accessing abuse memories in this talkturn.

One: Some indication of accessing abuse memories, but the memories are vague, disavowed, or over-generalized, or the client talks about having difficulty accessing memories. Experiencing level 1-3. Arousal level < 3. Client uses a limited or externalizing voice.

Two: Client accesses, describes, and articulates memories of abuse, but appears to keep some distance from the experience. Experiencing level 4. Client uses a focused or contact voice.

Three: Client deeply accesses, describes, and articulates memories of abuse. Client relates a specific memory of events. Experiencing level 4-7. Contact, focused, or emotional voice.

Four: Highly aroused (almost dysregulated) accessing of abuse memories. Client seems overwhelmed by experience, and may be disassociating or going “numb.” Arousal level 7.

Examples:

Level One

C: I should be able to remember what it was like when I was little, but I really can't remember much. My parents weren't the best, but I don't really remember. *Client has difficulty accessing specific autobiographical memories. This qualifies as AB as the client is recalling memories of past experiences and painting them in a negative light, but the fact that the memory is vague and non-specific indicates Level One.*

C: It wasn't so (laugh), it wasn't so bad really. *Client is recounting in general terms the events of his childhood and the 'not so bad' implies there was a negative aspect, so qualifies as AB, but laughs as if attempting to disavow the painful aspect of experience he is narrating, so is Level One.*

Level Three

C: my father would yell and yell, it would go on and on and never seemed to stop. *Memory of abusive experience. The content of speech and the client's poignant vocal quality indicate Level Three.*

T: tell him about the hurt J. tell him how much it hurt you.

C: (sniffle) - - - I was so scared, it was awful.

Again, the content of the client's speech meets criteria for the code of AB, and the poignancy of his voice, and his evocation of strong emotion ("so scared") indicate Level Three.

3. Access, experience, acknowledge, and/or articulate maladaptive shame

SH

Access, experience, acknowledge, and/or articulate primary maladaptive shame or secondary shame.

Criteria:

Maladaptive shame can have various permutations in client process. As pertains to the content of the utterance:

1. Shame about the self or an aspect of the self, which may be described as being defective, unworthy, impotent, unlovable, deficient, a failure, ugly, etc.
2. Shame that arises when one reveals his/her emotions to another or shows excitement or interest and these expressions are not seen or responded to.
3. Shame regarding various types of exposure.
4. Kaufman highlights shame about the body (its appearance, functions, etc); about feeling need (for affection, relationship, etc); about sexual desires or orientation; about one's dreams, ambitions, or ideas; about one's abilities or competence.
5. Potter-Efron (2011) outlines five "deficiency statements" that clients use to describe their shame experiences: "a) "I am not good," b) "I am not good enough," c) "I do not belong," d) "I am unlovable," and e) "I should not be." These statements can be used as general categories of statements that clients may make in session, i.e., clients are unlikely to use these exact words, but may make statements that are particular versions of these wider schemes.

Other words that clients may use to indicate shame include: ashamed, embarrassed, humiliated, mortified, shy, improper, sheepish, demeaned, flustered, self-conscious, foolish, silly, sheepish, bashful. See discussion below re: guilt.

The action tendency in shame is to hide away from others, to want to disappear or to cease to exist. (However, note, that the action tendency in hopelessness is also to hide, and thus a wish to hide may indicate either shame or hopelessness).

Body language and facial cues that may indicate shame include eyes averted, avoidance of eye contact, head hanging down, or blushing.

Shame coded under this component would be classified in EFT theory as primary maladaptive shame. If primary adaptive shame or instrumental shame were ever seen, they should not be coded here. Primary adaptive shame is shame felt regards to one having committed genuine wrongdoing or having violated one's reasonable personal standards or values. (For example, in couples' therapy, partners who have been unfaithful might experience primary adaptive shame with regards to their actions and what this implied about them.) Instrumental shame is a false display of embarrassment used to influence or manipulate others or situations. These types of shame are unlikely to be seen frequently. Make note in margin if seen.

Guilt

Shame overlaps with guilt. Clients may use the word “guilt” but coders may still judge that he/she is in fact experiencing shame. “Guilt” can be a less painful word to use, and thus people will often use it instead of “shame” or related words to describe their inner state.

If a client uses the word “guilt” to describe their experience, consider the following:

- d. Generally, one feels shame regarding one’s whole self or person, guilt regarding specific actions or thoughts.
- e. Shame often arises from something that was done *to* the person, whereas guilt arises from actions done *by* the person. (For example, survivors of abuse and violence feel *shame*, whereas the perpetrators, if they do feel badly about their actions, often feel *guilt*.) Shame arises from powerlessness, guilt from how one acts in a situation in which one had agency.
- f. Action tendency: in shame, is to hide; in guilt, to make amends.
- g. **Note:** Notwithstanding the above differentiation, **the SH code includes primary maladaptive guilt** (i.e., guilt that is pervasive, over generalized, excessive, or contains shame undertone). Code L1 as the shame aspect is unarticulated.
- h. **Primary adaptive guilt** (guilt that the person experiences in response to genuine wrongdoing on his or her part and which motivates him/her to make pro-social or adaptive amends or repairs). Primary adaptive guilt would be coded AE-GT.
- i. **Secondary guilt** would be coded either KP-M (other secondary emotions) or SH1.

Levels:

Zero: No indication of shame in this talkturn.

One: Weak, not very heartfelt. May be talked about hypothetically, or using “you” or “one” language (“I suppose one might feel embarrassed if...”). May have quality of talking *about* experience but not from within it, e.g., talking in a distant manner. This level also includes statements that suggest to the rater underlying shame, but it is not acknowledged by client (see further explanation and examples below). Secondary shame is coded L1. Simple, passing, embarrassment about everyday events would also be coded L1 (e.g., “I felt a bit embarrassed about having spilled my drink while at my boss’ house.”) Experiencing level 1-3. Externalizing or limited voice.

Two: Indication that client feels ashamed in the moment or is describing having felt ashamed and/or can acknowledge that shameful aspect of experience to moderate degree. May also feel a high degree of shame in the moment, or describe having felt a high degree of shame, but it is not core maladaptive shame. Experiencing level 4. Most likely a focused voice.

Three: Client deeply experiences shame and/or fully acknowledges and articulates shameful feelings and experiences. Experiencing level 4-7. Focused or emotional voice. Content, nonverbals, and/or manner of expression are congruent with actively feeling shame in the moment and strongly suggest that the client has accessed and activated his or her core maladaptive shame.

Four: Highly aroused (almost dysregulated), expression of shame. Quality that client is no longer able to make meaning due to overwhelming arousal. Arousal level 7. Emotional voice. Very rare.

Note that arousal is not used to rate levels of shame, as arousal with regards to shame is very difficult to notice from video unless person is aware of it and articulates it.

Examples:

Level One:

C: (talking about playing sports). If I'm on a team, I want to perform, to show that I'm not the one letting the team down. *SH-L1. Underlying concern about competence.*

C: There's something about being graded or getting marks, it makes me feel like a child, but you know, I don't really care. *SH-L1. Statement indicates underlying shame ("like a child"), but is disavowed.*

C: When I dropped my glass, I felt so embarrassed, the wine spilt everywhere and everyone was looking at me. *Client feels embarrassment (shame), but it is situational.*

Level Two:

C: I feel really judged, like they see me and know that I don't really have it together. *Shame, but is not core shame. Not spoken with painful tone, more of an external vocal quality.*

C: I feel like an imposter at work, like I don't really have what it takes. *Focused voice, but is not core shame, doesn't refer to the person's whole self.*

Level Three:

C: When I think back on that time, I feel so ashamed. *Spoken with focused voice, speaking about an experience of abuse.*

C: You know I feel like a total nothing, that even at my age I have amounted to nothing. *Although this was said with very little arousal, it fully articulates client's sense of self as inadequate.*

C: In my darker moments, I feel like I don't deserve to exist, I should just kill myself. 'I should not be' is one of Porter-Efron's deficiency statements. *Wishing to kill the self is an iteration of the action tendency in shame to want to hide, to not be. Note that the client is still able to make meaning of this experience, says "in my darker moments." He is 'having' the emotion, it is not 'having' him.*

Further explanation of underlying shame:

As shame hides itself, it may be present in statements that are not obvious. There may be instances where particular talkturns may not be coded shame, but this content serves as a marker to the rater to be attuned to subsequent talkturns. These types of utterances can be coded at any level, depending on the extent to which the shame is acknowledged and/or experienced by the person.

4. Shame anxiety

SHX

Clients often have anxiety or fear regarding feeling shame, being shamed, being perceived by others as shameful (or worthless, weak, inadequate, etc), or being or acting shameful (i.e., worthy of shame).

Criteria

In the session the client experiences and/or expresses anxiety regarding:

- feeling shame
- being shamed
- being perceived by others as shameful
- being or acting shameful.

Anxiety is the most activated emotion in the moment, and the focus of the anxiety is feeling shame, being shamed, etc.

Prototypically, shame anxiety statements will begin with, “I’m afraid that _____,” or “I’m worried that _____,” or “I’m anxious that _____.” The client may speak of anxiety about being exposed, embarrassed, seen to be inadequate, etc.

During the process of coding, when encountering an utterance that contains anxiety, coders can look ahead to next utterance(s) to determine if the anxiety is regarding shame.

For example:

C: Yeah, and actually a feeling of dread almost too.

SHX

C: I don’t know why.

CGS

C: Um, dread because I know I’ll look like an idiot.

SHX.

Coder can look ahead from first utterance to see that client will in two utterances articulate shame as focus of the dread.

Differential:

Anxiety regarding issues other than feeling shame, being shamed, etc, are not coded SHX but rather KP-M. For example, anxiety about physical danger to the self would be coded KP-M.

A shame anxiety critic (i.e., a self-critical process that provokes or heightens the client’s shame anxiety), should be coded SC-SX. See section on SC for detail.

Levels:

Zero: No indication of anxiety regarding shame in this talkturn.

One: Weak, not very heartfelt anxiety. Experiencing level 1-3. Externalizing or limited voice.

Two: Indication that client feels anxious in the moment or is describing having felt anxious in another situation. Client can acknowledge anxiety and that the focus of the anxiety is

shame-related (even if he/she does not use the word “shame”). Experiencing level 4. Most likely a focused voice.

Three: Client experiences heightened anxiety regarding shame as per criteria (even if he/she does not use the word “shame”). Experiencing level 4-7. Focused or emotional voice. Content, nonverbals, and/or manner of expression are congruent with actively feeling anxiety in the moment.

Four: Highly aroused (almost disregulated), expression of anxiety or fear. Quality that client is no longer able to make meaning due to overwhelming arousal. Arousal level 7. Emotional voice. Very rare.

Examples:

Level One

C: Well, I worry a bit about what people might think.... *Voice trails off. Not articulated what client is concerned about.*

Level Three

C: I worry they will think I’m an idiot, just a clown.

C: I’m afraid that I will fail, and everyone will know that I’m a just a failure.

5. KP

KP

This code contains three subcodes:

One: Pain or hurt that is part of the experience of shame or self-contempt. **KP-P**

Two: The experience of secondary emotions (e.g., global distress, hopelessness, helplessness) or maladaptive emotions not captured elsewhere in the model. **KP-M**

Three: An acknowledgement or realization of the impact of shame, self-contempt, or concurrent poor sense of self (without aroused emotion). **KP-R**

Criteria – KP-P

Many clients access a deep pain as part of the experience of, or directly in reaction to, accessing shame or articulating self-contempt, which is coded KP-P. This pain may be maladaptive or adaptive, or be in between, but is usually productive. In order to code KP-P, the client's pain should relate conceptually to, or arise in reaction to, accessing shame or articulating self-criticism or self-contempt. Clients may use words such as "hurt," "sadness," "pain," etc, to describe this experience of pain. Clients may use metaphors of physical pain to refer to emotional pain, and indeed these are embedded in language (e.g., 'broken heart'). Intense pain may be described as anguish or agony. This pain experience may well be adaptive pain (which is coded AE-PN), but if it seems related to the experience of shame, self-criticism, or self-contempt the KP-P code will over-ride. In the CAMS, this state is described as "shame-sadness."

Pain which does not occur as part of the experience of shame or self-contempt would either be AE-PN (if it seems adaptive), or KP-M (if it seems to be maladaptive or secondary distress. See below.)

Example:

C: I feel like a total zero, a mistake. *SH.*

T: I imagine that must be very painful.

C: It hurts, it really hurts. *KP-P.*

Criteria – KP-M

The client experiences secondary emotions in session (other than shame anxiety). Common examples are: global distress, hopelessness, helplessness, rejecting anger, complaint (a fusion of hurt and anger).

KPM also captures clients' expression of **symptomatic distress**, i.e., describing feeling "depressed" or feeling symptoms often associated with depression, e.g., fatigued, insomniac, wanting to stay in bed all day, etc. Clients may also describe a lack of purpose, loss of meaning, etc.

KPM can also be used to describe the self “collapsing” in a two-chair intervention for self-criticism. For example, in the experiencing chair, in reaction to the critic, the self may say: “I agree with him,” or “he’s right,” or “there’s no point in arguing with that.” This process represents an accessing of hopelessness and a withdrawal, and thus can be coded under KP-M.

Re **anxiety**: note that anxiety about shame is SHX but anxiety about other issues is coded KP-M.

Examples

C: Some days I don’t even want to get up, I just want to lie in bed, do nothing.

C: What’s the point in even trying? I have always been like this, this is who I am.

T: Switch back. (after client has been in critic chair.) What does it feel to hear that?

C: It’s true. What can I even say in response?

Criteria – KP-R

This code is intended to capture the client’s acknowledgement, exploration, or realization of the impact of the shame, the self-criticism, and the concurrent self-concept and experience of the self on an intellectual level that does not involve activated emotion. The impact may be behavioural (e.g., “when I criticize myself I stay home all day), somatic (e.g., “my self-criticism makes me so tense that I get headaches”), or cognitive, (“I see now a pattern where I feel bad about myself and then I tell myself nothing will change”). Utterances coded here may have the feeling of ‘insight.’ They will start with words such as: “I see now that _____” or “I realize now that _____.”

Differentiating KPM and KPR.

Clients may make statements such as, “When I hear that criticism it makes me feel so hopeless.” If the statement has the feel of, “I notice that when I hear criticism it often makes me feel so hopeless,” then this is more likely KPR, as it has the feeling of *noticing*, or *observing*, without activated emotion. If the client’s statement has the feel of, “when I hear that criticism then right now I start feeling hopeless,” then the appropriate code would be KP-M, as hopelessness is activated in the moment.

Note:

In general, the KP codes are exploratory and to be used only if it is judged that the client is not currently experiencing another component in this model. If in doubt between KP and another model-specific code, the other code should dominate.

Levels – KP-P and KP-M.

Zero: No indication in this talkturn.

One: Some emotion, but at low arousal or experiencing. Externalizing or limited voice.

Two: Client experiences emotion, medium arousal. Contact or focused voice. Experiencing level 4.

Three: Client fully experiences emotion or describes having fully felt emotion. Intense, powerful words. Experiencing level of 4-6. Contact, focused, or emotional voice. Medium to full arousal.

Four: Highly aroused (almost dysregulated) emotion. Quality that client is no longer able to make meaning due to overwhelming arousal, is dissociating or becoming numb. Arousal level 7. Emotional voice.

Levels – KP-R

One: Some indication of realization, but is not very heartfelt or believed, or is at very concrete level. Experiencing level of 1-3. Externalizing or limited voice.

Two:
Client has realization impact of shame or self-contempt, at a medium depth of experiencing.

Three:
Client explores and/or acknowledges of the impact of the shame, self-contempt and related experiences in a complex, differentiated way. Experiencing level of 4-6. Contact, focused, or emotional voice.

6. Adaptive Need

NE

Criteria

The overall criteria for the component of adaptive need are as described in the CAMS for Existential Need (Pascual-Leone & Greenberg, 2005):

Conceptual definition:

The symbolization of a primary need often emerges as an “I” statement formulated in plain language. This is sometimes done with a sense of child-like vulnerability or simplicity. It is not uncommon for such a declaration to be embedded in some form of aroused emotion. Nevertheless, the emphasis of this code is not on the affect but rather on the distillation of meaning.

Meaning may be presented in the form of a wish, need, desire, or sense of direction. Examples may also be in the form of metaphorical images or autobiographical examples but will often be disarming and direct statements of the client’s needs relating to essentially three overarching categories: attachment (i.e. “I need love -- to feel valued, important, special, supported...”), personal agency (i.e. “I need freedom -- individuality, to feel separate, independent...”), or survival (i.e. “I need to feel safe -- protected...”).

“As a helpful hint, observers should look for the words:
I need... I want... I wish... ...or equivalent.”

Points of discrimination:

Need statements are not demands but rather self- observations, if you will, of what the organism requires to function in a healthy way. Phrases that begin with, “I want you to....” or “I need you to....” are usually not statements of an existential need. To satisfy this code the statement must be more grounded in the client’s Self. Thus, the statement of a need will more likely begin with turns of phrase like, “I want or need to feel....”, without reference to any other party on which the demand might be made. Need statements are not demands but rather self- observations, if you will, of what the organism requires to function in a healthy way.

Note that making plans or setting goals is not sufficient to be coded as a “need”. (p. 43-36)

From these criteria as described in the CAMS, this system differentiates Levels of Adaptive Need. (Existential Need as described in the CAMS would be a Level Three need in this system).

Levels.

Zero: No expression of existential need in this talkturn.

One: Expression of a need, but it is not a core adaptive need. May have the quality of disavowing the need at the same time as articulating it. May also be expressed as “I need *you* to...”, in which case it is a need mixed with demand and rejecting anger, and thus is a L1 need. May have quality of tentativeness or refusing to “own” the need. The person may express a need, but is clear does not believe that she/he deserves to have the need met. Voice may be externalized or limited. Experiencing level of 1-3.

Two: Expression of need that is clear, but the person may not feel the need is valid, or that they completely deserve to have the need met. Voice is focused or contact voice. Experiencing level 4. May include some rejecting anger in tone of voice, but client does “own” the need. If speaking towards the other chair, the person is in contact.

Three: Authentic expression of core existential, adaptive need. The person gives the sense of deserving to have the need met. Experiencing level of 5-7. Emotional arousal may be present. Contact, focused, or emotional voice. If speaking towards the other chair, the person is in contact. A level 3 need is an existential need as described in the CAMS.

Four: Highly aroused and dysregulated expression of need. Likely is fused with rejecting anger. Arousal level 7. Emotional voice.

Examples:

Level One:

(in response to therapist, “what do you need from her?”)

C: I don’t know, maybe some kindness... *Voice trails off and carries little conviction.*

C: I think that I would like you to say that you’re sorry. *“I think” contains a tentativeness, as does the client’s tone. Also, is demanding something of the other, not discovering a core need of the self.*

T: So I guess you’re saying to her, I need your help?

C: Yeah, I guess so, I’m just sort of in a difficult, I don’t know... *Client tentatively agrees with a need that the therapist articulated. She can’t then further articulate or ‘own’ this need, rather her thought trails off.*

Level Three:

C: I deserve to be accepted for who I am. *Said in strong, convicted tone of voice.*

C: [in reference to mother] To comfort me when my father died, to tell me that she would protect me. *Said in poignant tone, while starting to cry.*

C: [to mother] I wanted you to think that I was worth spending time with, not just a nuisance. To see me. *Said in strong, convicted tone of voice.*

Differentiating need (NE) from pride, anger, and pride/anger.

“I deserve...” is a prototype statement of deserving need. An adaptive need at a higher level includes a sense of deserving to have the need met, or being entitled to having the need met. Although such a statement may contain underlying pride in the self (I am worthy of having my need met), or anger that need has not been met, “I deserve” is a prototype need statement.

Pride statements are more likely to be phrased as “I am...” for example: “I am worthy of love.”

Some statements that contain the word “need” or “want” are in fact pride/anger or anger, especially if phrased in the negative, e.g., “I don’t want to hear any more criticism.” See examples under Adaptive Emotion. “I don’t need _____” is often setting a boundary and self-assertion and thus pride/anger.

Client validates their own need:

Client may make statements like: “I needed to be loved. All children need to be loved.” The first utterance is NE-L3. The second utterance is also NE-L3, as the client is validating their own need. In validating their own need, the most appropriate level is generally L3, as the client owns their need, and feeling that he/she deserves it.

7. Access and activate primary adaptive emotions.

AE

This component includes primary adaptive emotions as well as more complex states that contain both primary adaptive emotions and more complex feelings and thoughts.

Code here is AE for the general component, and then a subcode for type of primary adaptive emotion.

Note that adaptive emotion may be expressed from the “self” chair or from the other chair. For example, if the client, enacting a parent in the other chair says: “I am proud of you,” code AE-pride as the client is accessing and activating pride, even though expressed through the voice of the imagined parent.

Primary adaptive emotions are emotions that arise in direct, immediate response to situations a person encounters (thus primary) and which contain information useful to the person’s survival and well-being (thus adaptive) (Greenberg & Paivio, 1997). In addition, in the context of therapy, a primary adaptive emotion often has the attribute of being a novel experience for the client. A primary adaptive emotion is often notable for the fact that it is an emotion that the client had previously avoided experiencing or was unable to activate. For example, a client who previously blocked experiencing any painful emotions will finally openly weep, or a client who has been mired in a hopeless collapse will access assertive anger and her own sense of agency.

Review the CAMS for further description of some of the subtypes of adaptive emotion.

Types of primary adaptive emotion:

1. Pride/self-regard - **PR**
 - Pride is a primary adaptive emotion. This state may include more cognitive aspects such as self-respect and self-confidence.
 - Pride may be expressed from the critic chair, often after a shift. For example, the critic may say, “Now I see someone I can respect.”
 - Pride statements may often begin with “I am...” and a positive evaluation, e.g., “I am okay,” “I am good person,” “There is nothing wrong with me.”
2. Primary adaptive anger - **AN**
 - See below note on different types of anger.
3. Pride/Anger - Self-assertion - Determination - Agency - **PA**
 - This code corresponds to that of Pride (self-assertion) / Anger (self-assertion) on the Emotional Arousal Scale. May contain expressions of determination or agency.
 - Pride/anger often involves setting a boundary or asserting one’s agency.
 - Examples: “I won’t do that again,” “You can’t say that to me,” “I know what I need to do and I will do it.”
4. Self-compassion/ self-forgiveness - **CO**

- Self-compassion involves a client expresses compassion, understanding, or forgiveness towards his or her self.
- Examples: “You did the best you could,” “You were only a child,” “It wasn’t your fault.”
- May be expressed from the experiencing chair or from other chair (e.g., the critic softening and saying, “you’re trying your best.”)
- Self-compassion can be thought of as a type of self-soothing. Self-soothing is a broader concept that also encompasses behaviours (e.g., taking a warm bath could be self-soothing). When self-soothing is expressed through an experiential state, it may be expressed through compassion towards the self (and thus coded as self-compassion) or through soothing regarding external circumstances or future events (e.g., “Everything will be okay, nothing bad is going to happen.”) Leave code blank and note in margin if self-soothing.

5. Pain – **PN**

- If pain occurs directly after experiencing shame or self-contempt, or if the client relates the experience of pain to shame or self-contempt, then code KP-P (see above).
- If the client’s pain is unconnected from the experience of shame or self-contempt, decide if it fits better as KP-M or AE-PN. Pain is better coded KP-M if it is best described as global distress, which contains high arousal but low meaningfulness (Pascual-Leone, 2009). Adaptive pain, coded AE-PN, contains high arousal, high meaningfulness, and high experiencing. Adaptive pain has the quality of the client *moving through* or processing the affective pain, as opposed to becoming stuck in it. Pain is adaptive when it is novel experience (such as allowing oneself to feel pain regarding past abuse, whereas client had always blocked the pain).
- Adaptive pain borders on adaptive sadness/grief.

6. Primary adaptive sadness and grief - **SG**

- Primary adaptive sadness and grief often involves letting go of unmet needs, with genuine acceptance (although with sadness) that they will not be met.
- Note that as with pain (see below), sadness/grief often has the quality of being *about* or *in regards to* another affect or experience. For example, the person may experience grief about their unmet needs. If it seems that the affect that is activated in the moment is sadness/grief, then code sadness/grief. A pattern that may be seen is that the person articulates a need and this opens the door to grief.
- Examples: “It’s very sad but I can’t change it. *cries*”
- Utterances in which the person does not say words but is crying or weeping can be coded as AE-SG or AE-PN if the coder judges that this emotion is primary adaptive. On many occasions, L3 primary adaptive sadness or pain will just involve weeping.

7. Relief – **RL**

- As per the CAMS.

8. Joy, happiness. - **JH**

- As per the CAMS.

9. Primary adaptive guilt - **GU**

- Another trajectory out of maladaptive shame may be to transform that shame into primary adaptive guilt. For example, some clients may denigrate themselves in relation to past actions, without actually taking responsibility or making amends for those actions. A move to adaptive guilt, i.e., recognizing responsibility for wrongdoing and taking actions to repair damage, is adaptive.

10. Primary adaptive shame – **SH**

- Likewise, it is possible that clients may access primary adaptive shame with regards to past wrongdoing. In general, any time coders think that primary adaptive shame is observed, it should be verified by an expert judge.

Levels (for all types of adaptive emotion except anger).

Zero: No indication of primary adaptive emotion in this talkturn.

One: Some indication of primary adaptive emotion, but is weak, or not very heartfelt or believed. Externalizing or limited voice. Experiencing level of 1-3. Arousal level 1-2.

Two: Clear indication of primary adaptive emotion, although it is not at height of engagement/arousal/experiencing. Contact or focused voice. Experiencing level 4. Arousal level 3.

Three: Client fully experiences primary adaptive emotion. Intense, powerful words. Experiencing level of 4-7. Contact, focused, or emotional voice. Arousal level 4-6.

Four: Highly aroused (almost dysregulated), expression of emotion. Quality that client is no longer able to make meaning due to overwhelming arousal. Arousal level 7. Emotional voice.

Differentiating types of anger and coding levels for anger:

- Adaptive anger is expressed in language such as “I am angry at you for ____.”
- “I resent ____” can be adaptive anger as long as not a complaint that is essentially whining. Expresses, “You treated me badly, it was wrong, I resent it.”
- Adaptive anger can use “I” or “you” language.
- Differentiate primary adaptive assertive anger from other types of anger:
 - i. Primary maladaptive anger (this is chronic anger that is easily activated and excessive to situation, perhaps expressed through violence or other aggressive behaviour.)
 - ii. Secondary anger (that is secondary to an experience of pain/shame/etc).
 - If secondary anger is in response to feeling humiliated, anxious, or ashamed, consider coding as shame.
- Anger that is not adaptive should be coded **KPM**.

Levels of adaptive anger:

- With regards to anger, L1 indicates anger that is adaptive, but that may also contain some hurt, rejection, blame, etc.
- “You” language may indicate more hurt/anger fusion, and may be coded L1.
- L2 = clear primary adaptive anger, no rejection/blame, but not fully activated.
- L3 = clear primary adaptive anger with no hurt or rejection mixed in, fully activated and quite powerful.

Differentiating anger from pride/anger (self-assertion)

- A key feature of pride/anger (self-assertion) is the person has a stance of feeling like they have agency or power
- Pride/anger often involves setting a boundary.
- A common pattern is that the person starts in anger, and as they feel empowered by their anger, move to pride/anger (self-assertion).

Non-specific client codes

Use these only if none of the above model-specific codes apply. First see if any of the model-specific codes apply, and if none apply, then use one of these codes.

These are coded yes/no.

In either chair, internal process / “good process” – **CGS**

- Experiencing level 4 or above (internal focus)
- If experiencing level is not clear: emotional arousal may be used to determine if CGS or CEX. To meet criteria for CGS, client would have to demonstrate at least mild emotional arousal (3 or above on Warwar scale).
- This code also includes client agreement:
 - Client statements such as “yeah,” “uh,uh,” etc, that imply that the client agrees with the therapist, even if there is not enough information in the utterance to rate an experiencing level.
 - Although if the therapist conjectures, “I get a sense you feel sad about all you lost,” and client replies, “yeah” than this is AE-SG. See introduction.
 - If client says, “yes,” but tone suggests she/he does not in fact agree, do not use this code.
 - If the therapist asks the client to switch chairs and client does so, this is CGS as client is engaging in this task in therapy.

In either chair, external focus or poor process – **CEX**

- Experiencing level <3 (external focus)
- If experiencing level is not clear: Emotional arousal of 2 or below.
- This code also describes talkturns in which the client is not willing to engage in tasks of therapy, e.g., is not willing to explore internal experience at therapist’s invitation (or is very reluctant to do so), is reluctant to explore painful material (is “blocking”), is not willing to engage in chairwork, or expresses doubts about the therapy.

Uncodable – **CUC**

- This code is for utterances that are incomprehensible or are too short to determine a code.
- Also used for utterances that are outside the model and an experiencing level can not be determined (i.e., not enough information to assign a CGS or CEX code).

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