COMPARING NARRATIVE AND EMOTION PROCESSES IN TWO VERSIONS OF

EMOTION-FOCUSED THERAPY FOR TRAUMA: IMAGINAL CONFRONTATION VS.

EMPATHIC EXPLORATION.

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Abstract

A goal of Emotion-Focused Therapy for Trauma (EFTT) is narrative and emotion integration for trauma recovery (Paivio & Pascual-Leone, 2010). EFTT employs two re-experiencing interventions. Clients in Imaginal Confrontation (IC) imagine the perpetrator of abuse in an empty chair across from him/her and express thoughts and feelings. Clients in Empathic Exploration (EE) imagine the perpetrator in their "mind's eye" and expresses thoughts and feelings to the therapist. EE is considered a less emotionally evocative alternative to IC. EFTT-IC and EFTT-EE are equally effective (Paivio et al., 2010), and may evidence unique pathways to recovery. The Narrative-Emotion Process Coding System (NEPCS; Angus et al., 2017) is a behavioural coding system that identifies 10 markers that are clustered into Problem, Transition, and Change Markers. The NEPCS markers and subgroups represent narrative-emotion process indicators occurring within one-minute time segments from videotaped therapy sessions.

The current study investigated differences in the proportion of NEPCS markers and subgroups between the EFTT-IC and EFTT-EE conditions, and the relation to treatment outcome. The NEPCS was applied to two early, two middle and two late videotaped therapy sessions from four recovered and four unchanged EFTT-IC and EFTT-EE clients (N=16). In regard to Problem Markers, Negative Binomial Regression analysis revealed a main effect for Problem Markers, and a main effect and stage by condition interaction for Superficial Storytelling for EFTT-EE versus EFTT-IC. There was a stage by outcome interaction for Unstoried Emotion for unchanged versus recovered EFTT-IC clients. In regard to Transition Markers, there was a stage by condition interaction for the Transition Markers in EFTT-IC than EFTT-EE, and a stage by outcome interaction for Inchoate Storytelling for recovered versus

unchanged EFTT-EE clients. In regard to Change Markers, a stage by outcome interaction was present for Unexpected Outcome Storytelling and Discovery Storytelling for recovered versus unchanged EFTT-IC and EFTT-EE clients. Finally, there was a main effect and a stage by condition interaction for No Client Marker for EFTT-IC versus EFTT-EE clients, and a stage by outcome interaction for recovered versus unchanged EFTT-EE clients. Implications for EFTT therapists, limitations of the current study and directions for future research are discussed.

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Narrative expression and the interpersonal process of personal storytelling, serves the function of developing a shared understanding of lived experiences and organizing these experiences into a coherent view of self (Angus, 2012). Angus (2012) suggests that it is the dialectical dance between narrative and meaning-making processes in psychotherapy that help clients organize and symbolize the many facets of an emotional experience as an integrated, personally meaningful, and coherent story (Pennebaker & Stone, 2004; Wigren 1994).

Tuval-Mashiac, Freedman, Bargai, Boker, Hadar and Shalev (2004) suggest that while a healthy individual is able to construct a coherent, meaningful and dynamic narrative of him/herself, a client whose self-narrative is rigid, incoherent, and lacking in meaning are prone to psychological disturbances. Trauma survivors in particular have been found to produce impoverished narratives, and have been found to have a poor understanding of the traumatic events and associated emotions accompanied by emotion dysregulation (Paivio & Pascual-Leone, 2010). Thus, a key goal in the Emotion-Focused treatment of trauma disturbances (Paivio & Pascual-Leone, 2010) is the articulation of trauma experiences in which symbolized feelings and thoughts are organized into an unfolding coherent narrative, that allows trauma memories to be processed, understood and accepted as part of one's life story (Angus & Greenberg, 2011; Paivio & Angus, 2017; Paivio & Pascual-Leone, 2010).

Narrative and emotion integration in psychotherapy is a growing area of theoretical and clinical interest for both psychotherapy practitioners and researchers alike. The psychotherapy research literature has focused predominantly on examining narrative and emotion processes independently. More recently, the contribution of both narrative and emotion processes to overall treatment outcome in a clinical sample has been investigated in a complex trauma sample (Bryntwick, 2016; Carpenter, Angus, Paivio & Bryntwick, 2016). Results of these studies have

established a significant association between movement towards narrative-emotion integration processes and recovery at treatment termination (Angus, Boritz, Bryntwick, Carpenter, Macaulay & Khattra, 2017). The differential narrative and emotion integration processing patterns that occur in the context of specific intervention strategies in Emotion-Focused Therapy for Trauma (Paivio & Angus, 2017; Paivio & Pascual-Leone, 2010), however, have yet to be examined and was the focus of the current study.

To address this gap in the literature, the current study will first provide an overview of the significance of narrative and emotion processing in psychotherapy in the context of the treatment of trauma. Next, an overview of the Narrative-Emotion Process Coding System (NEPCS; Angus et al., 2017), a research and clinical tool used to assess narrative and emotion processes across varying clinical populations and psychotherapy approaches will be provided. This will be followed by a brief summary of research findings on the application of the NEPCS to a depressed sample (Boritz, Bryntwick, Angus, Greenberg, Constantine, 2014), a generalized anxiety disorder sample (Macaulay, 2014), and a complex trauma sample (Bryntwick, 2016; Carpenter et al., 2016). The rationale and purpose of the present study and the methods designed to answer the research questions will be outlined. This will be followed by an overview of the results of the analysis, a discussion of the findings and the implications for clinical practice, limitations and future research directions.

Importance of Narrative and Emotion Processes

Greenberg and Angus (2004) suggest that a life event is understood as one attends to, reflects upon, symbolizes and stories in language, the bodily felt emotional experience associated with the lived experience of that event. As such, they suggest that emotion serves an organizing and orienting role for humans, and is crucial in the creation of meaning. In turn, Angus (2012) suggests that emotions become infused with meaning when organized and understood within a coherent narrative framework that identifies what is felt, about whom, in relation to what need or issue. Therefore, when symbolized in a narrative structure, emotional responses can be more easily regulated, and promote personal and interpersonal well-being and coping (Angus, 2012).

Narrative and Emotion Disruption in Complex Trauma

Complex trauma refers to repeated, cumulative, and anticipated exposure to trauma, involving repeated exposure to abuse and/or neglect by an attachment figure during childhood. This is a form of complex trauma that may lead to deleterious, profound, and physical and mental long-term effects on an individual (Courtois, 2004; Paivio & Pascual-Leone, 2010; Terr, 1991). Of the many disturbances, complex trauma can lead to a disruption of narrative and emotion integration, contributing to maladaptive and incoherent narratives of the self, others, and the world (Paivio & Angus, 2017).

The disturbances associated with complex trauma are thought to be due to the intense emotional arousal at the time of trauma and the subsequent ongoing emotion regulation difficulties that undermined the integration of physiological arousal, emotion, narrative and memory (Herman, 1997). This disruption in narrative and emotion integration can result in trauma experiences that are relived as distressing and intrusive, bodily-felt sensations and visual images that lack narrative organization (Van der Kolk, Hopper & Osterman, 2001). As a result,

complex trauma survivors often have a poor understanding of the meaning of the events and associated emotions, which in turn perpetuate the constellation of disturbances often experienced by survivors of trauma.

Providing empirical support for the impact of trauma on narrative and emotion coherence in memory recall, O'Kearney and Perott (2006) found that the recall of traumatic events were consistently associated with disrupted temporal continuity along with a predominance of intrusive sensory and perceptual references. This may suggest that the disrupted narrative temporal coherence impairs the ability to contain the emotional experience of the event, resulting in intrusive fragments of sensations and perceptions that may manifest in the form of emotion dysregulation.

Additionally, emotion regulation difficulties, in the form of under-control or avoidance, appear to be another disturbance that may contribute to the psychological effects of complex trauma, such as depression, post-traumatic stress disorder, and substance abuse (Cloitre, Miranda, Stovall-McClough & Han, 2005; Ehring & Quack, 2010; Littleton, Horsely, John & Nelson, 2007). For instance, Paivio and McCulloch (2004) examined the relationship between complex trauma, emotion dysregulation and self-harm. In a survey of 100 female undergraduate students, they found that childhood maltreatment and self-harm were mediated by alexithymia, which was defined as difficulty identifying and expressing emotional experiences. Approximately 24% of the participants met criteria for clinical levels of alexithymia and 41% engaged in at least one method of self-harming behaviour. The participants that engaged in self-harm were twice as likely to meet criteria for child abuse and neglect, and were four times as likely to be categorized as alexithymic. This study not only underscored the link between

complex trauma and emotion dysregulation, but also highlighted the importance of using language to regulate distressing emotional experiences.

In a review of the literature, Esterling, L'Abate, Murray and Pennebaker (1999) specifically examined the benefits of translating traumatic and stressful experiences into language. The authors found that not only does writing about trauma allow for significant emotional processing of a traumatic experience, but participants who recounted the details of the trauma as a story in combination with the accompanying affective responses, evidenced the most enduring mental and physical health benefits, evidenced as decreased physician visits, improved immune system functioning, decreased autonomic arousal, and improved self-report ratings of mood. Numerous studies have established that the act of constructing a narrative account, verbally either in psychotherapy or as a story, allows for significant emotional processing of a traumatic experience, with long-term psychological and physical health benefits (Pennebaker & Segal, 1999; Pennebaker & Stone, 2004; Pennebaker & Susman, 1988; Smyth, True & Souto, 2001). As stated by Paivio and Shimp (1998), the narration of traumatic experience creates distance from the overwhelming experience of painful emotions and facilitates the tolerance and regulation of intense affect. Thus, a key goal of trauma therapy, including Emotion-Focused Therapy for Trauma (Paivio & Pascual-Leone, 2010), is to access, verbally articulate, and integrate trauma memories and emotions for the construction of a more coherent, emotionally differentiated, and personally meaningful narrative that in turn regulates affect, infuses meaning to the events and contributes to an adaptive understanding of the self, others and the traumatic events (Paivio & Angus, 2017).

Facilitating Narrative and Emotion Integration in Complex Trauma: Emotion-Focused

Therapy for Trauma

Emotion-Focused Therapy for Trauma (EFTT; Paivio & Pascual-Leone, 2010) is an evidence-based, short-term, individual therapy for men and women dealing with childhood emotional, physical, sexual abuse and neglect (Paivio & Nieuwenhuis, 2001; Paivio et al., 2010). A fundamental assumption underlying EFTT is that recovery from trauma involves the verbal symbolization and emotional processing of traumatic events for increased affect regulation, narrative coherence, and new-meaning construction (Paivio & Kunzle, 2007; Paivio & Pascual-Leone, 2010). By evoking, narrating and re-experiencing the trauma material, the client is able to reprocess their memories, differentiate emotions, and make narrative sense of their experiences (Paivio & Angus, 2017).

EFTT not only addresses trauma-related disturbances such as emotional dysregulation in the form of avoidance/over-control, self-blame, guilt, and shame, but also aims to resolve issues with perpetrators of abuse and neglect (Paivio & Angus, 2017; Paivio & Pascual-Leone, 2010). Resolution of these past interpersonal experiences involve the implementation of two re-experiencing interventions: Imaginal Confrontation (IC) and Empathic Exploration (EE), that allow the client to express previously constricted thoughts, feelings and needs regarding the imagined abusive/neglectful others. Both the IC and EE intervention involve memory work that encourage the client to re-experience the traumatic events in the form of stories that involve both external details, as well as internal details such as sensations and perceptions (Paivio & Angus, 2017). EFTT helps the client to re-experience trauma memories, in turn, relieving tension and alleviating trauma symptoms through the access and verbal expression of previously inhibited adaptive emotion (Paivio & Shimp, 1998). The IC intervention in EFTT encourages the client to

imagine the perpetrator of abuse or neglect in an empty chair across from him/her in order to facilitate the expression of previously constricted thoughts, feelings and needs to this imagined other. Research found, however, that 56% of participants in a process-outcome study of EFTT initially refused or resisted engaging in the IC intervention (Paivio et al., 2001). As such, the EE intervention was developed as a less emotionally evocative alternative to IC (Paivio et al., 2010). EE follows the same principles as IC, however in lieu of the enactment component found in IC, the client imagines the perpetrator in their "mind's eye" and expresses previously constricted thoughts, feelings, and needs directly to the therapist, within the context of the therapeutic relationship, rather than the imagined other in an empty chair (Paivio & Angus, 2017). Both the IC and EE intervention facilitate the experience and expression of feelings and needs towards the perpetrator, and accesses adaptive emotions such as anger and sadness and reflection on the personal significance of these emotions. Both the IC and EE intervention are considered to be potent interventions as they promote the engagement, exploration, and symbolization of thoughts, feelings, non-verbal behaviour and bodily experience and thus facilitates integration into a new meaning system (Paivio & Shimp, 1998; Paivio et al., 2010).

A randomized-control trial (RCT) study was conducted to examine the efficacy of the IC and EE intervention in a sample of clients with a history of childhood emotional, physical, and/or sexual abuse (Paivio et al., 2010). Treatment was identical in terms of trauma focus, the model of resolution, process steps, and intervention principles. It was hypothesized that both interventions would effectively contribute to immediate and long-term client change. Results of this study found that both treatment interventions exceeded criteria for efficacy established by Cohen (1988). Both treatment conditions produced clinically significant improvements in alleviating PTSD symptomatology and resolving issues with perpetrators of abuse/neglect, while no

significant differences were found between both intervention conditions at post-test. Clients in the IC condition had higher, non-significant, rates of clinically significant change (64%) compared to EE (52%) clients at post-test, while the EE condition had a significantly lower attrition rate (7%) compared to IC (20%), suggesting that the EE intervention may be experienced as less challenging or stressful for trauma clients. Finally, approximately 60% of the IC and EE clients evidenced maintenance of treatment gains at one-year follow-up. Furthermore, there was no significant difference between the IC and EE subgroup at one-year follow-up in regard to reliably significant change. There was a small, non significant, advantage for IC at follow-up compared to EE (79% vs. 77% improved; 67% vs. 64% recovered, 6% vs. 13% deteriorated)

In summary, while Paivio and colleagues (2010) found minimal difference between the IC and EE EFTT conditions in terms of overall treatment efficacy, the results of this study suggest different routes to clinically significant change through the use of different intervention approaches. As such, the present study sought to explore how differential narrative-emotion integration processes emerge between the IC and EE interventions in regards to the Narrative Emotion Process Coding System (NEPCS; Angus et al., 2017).

Assessing Narrative and Emotion Integration in Emotion-Focused Therapy: Narrative-

Emotion Process Coding System

To further understand the role of narrative and emotion processes in psychotherapy, Angus and Greenberg (2011) identified a set of narrative-emotion process markers that are commonly observed within therapy sessions. Each marker varies in the degree of narrative and emotion integration and identifies opportunities for therapist intervention. Evolving from Angus and Greenberg's (2011) theoretical conceptualization of narrative-emotion integration markers, the Narrative-Emotion Process Coding System (NEPCS; Angus et al., 2017) was developed as a video-based, standardized behavioural observation coding system.

The NEPCS is designed to reliably identify distinct client process markers that represent the manner and degree to which verbal narrative and emotion process indicators are represented in one-minute time-segments drawn from videotaped therapy sessions. Accordingly, each NEPCS marker varies in the quality and degree to which clients disclose specific autobiographical memories, symbolize bodily felt experiences, verbally or non-verbally express emotion, reflect on emotional experience, coherently integrate actions, emotions, and personal meaning, and also demonstrate readiness for change. Each NEPCS marker is characterized in terms of observable in-session linguistic (i.e., content, plot, coherence) and paralinguistic (i.e., emotional arousal, vocal quality, body language) indicators of an underlying narrative and/or emotional process. These markers can alert therapists to opportunities for specific therapeutic interventions to facilitate enhanced narrative-emotion integration.

Angus and Greenberg (2011) originally identified eight narrative-emotion process markers. These eight markers assessed personal storytelling and memory specificity and degree of emotional engagement in storytelling and emotion regulation capacity. In addition, these

markers also assessed a client's capacity to self-reflect and symbolize new emotional awareness, challenge maladaptive emotion schemes, and assessed a client's readiness of change. The original eight markers identified by Angus and Greenberg (2011) were divided into Problem and Change Markers. Problem Markers were found to occur more frequently with unchanged clients in a depressed sample (Bryntwick, 2008) and demonstrated under-regulated, over-regulated or un-integrated emotion within an unfolding narrative. In contrast, Change Markers evidenced emergent emotional experience that was fully expressed and reflected on through the client's personal storytelling (Angus et al., 2017). The original eight markers consisted of the Problem Markers: Same Old Storytelling in which the client expresses dominant, maladaptive, over-general views of self and relationships marked by lack of agency and stuckness; Empty Storytelling in which the client describes an event with a focus on external details and behavior, and a lack of internal referents or emotional arousal; Unstoried Emotion which captures undifferentiated, under- or over-regulated emotional arousal, without coherent narration of the experience; and Superficial Storytelling as the client talks about events, hypotheticals, the self, others, or unclear referents in a vague, abstract manner with limited internal focus. While the Change Markers consisted of Competing Plotlines Storytelling which is an alternative to a dominant, maladaptive view, belief, feeling, or action emerges, creating tension, confusion, curiosity, doubt, and/or protest; Inchoate Storytelling during which the client focuses inward, contacting emergent experience, searching for symbolization in words or images; Unexpected Outcome Storytelling during which the client describes a new, adaptive behavior (action, thought, feeling, response) and expresses surprise, pride, relief, contentment; and lastly Discovery Storytelling in which the client reconceptualizes, or articulates a new patterns, or change processes (See Table 1).

Table 1

Narrative-Emotion Process Coding System 1.0 (NEPCS 1.0).

	Markers	Process Indicators
<u>Problem</u>	Same Old Storytelling	Expressing dominant, maladaptive, over-general views of self and relationships marked by lack of agency, stuckness
	Empty Storytelling	Describing an event with a focus on external details and behavior, and a lack of internal referents or emotional arousal
	Unstoried Emotion	Experiencing undifferentiated, under- or over-regulated emotional arousal, without coherent narration of the experience
	Superficial Storytelling	Talking about events, hypotheticals, self, others, or unclear referents in a vague, abstract manner with limited internal focus
<u>Change</u>	Competing Plotlines Storytelling	An alternative to a dominant view, belief, feeling, or action emerges, creating tension, confusion, curiosity, doubt, protest
	Inchoate Storytelling	Focusing inward, contacting emergent experience, searching for symbolization in words or images
	Unexpected Outcome Storytelling	Describing a new, adaptive behavior (action, thought, feeling, response) and expressing surprise, pride, relief, contentment
	Discovery Storytelling	Reconceptualizing, or articulating a novel understanding of the self, others, key events, behavior patterns, or change processes

Through the process of intensive, rational-empirical coding analysis of transcript and video-based therapy sessions the NEPCS 1.0 was developed that consisted of eight distinct NEPCS markers (Angus Narrative-Emotion Lab, 2012; Boritz et al., 2014; Table 1). The systematic application of the NEPCS 1.0 to various clinical samples and therapeutic modalities led to several iterations and refinement of the NEPCS 1.0 that led to the development of NEPCS 2.0 which contains 10 distinct NEPCS markers (Angus, Boritz, Bryntwick, Carpenter, Macaulay & Khattra, 2017; Table 2). There were several changes in terms of the differentiation and elaboration of specific NEPCS markers based on the empirical results of previous applications of the NEPCS. Specifically, Superficial and Reflexive Storytelling are markers developed from an undifferentiated "Abstract Story" (Boritz, 2012; Carpenter et al., 2016). In addition, Experiential Storytelling had yet to be identified until the application of the NEPCS to a larger complex trauma EFTT sample and generalized anxiety disorder sample (Bryntwick, 2016; Macaulay, 2014). Lastly, the Transition Marker subgroup was created after empirical findings supported the grouping of Experiential Storytelling, Inchoate Storytelling, Competing Plotlines Storytelling, and Reflective Storytelling, which was labeled "Transition Markers" (Bryntwick, 2016; Macaulay, 2014). As mentioned, these refinements led to the current version of the NEPCS, version 2.0, that consists of 10 distinct NEPCS markers that can be conceptually and empirically clustered into three NEPCS subgroups: Problem Markers subgroup, Transition Markers subgroup, and Change Markers subgroup (Table 2). Angus and colleagues (2017) provide a detailed description of the evolution of the NEPCS from version 1.0 to 2.0, along with complete definitions and transcript examples of each NEPCS marker and subgroup.

Table 2.

Narrative-Emotion Process Coding System 2.0 (NEPCS 2.0).

NEPCS Subgroups	Marker	Process Indicators
Problem Markers Characterized by under- or over-regulated emotional states, rigid maladaptive self-narratives, and content that is abstract, external, or has limited meaning. Thought to reflect processes that maintain presenting problems.	Same Old Storytelling	Expressing dominant, maladaptive, over-general views of self and relationships marked by lack of agency, stuckness
	Empty Storytelling	Describing an event with a focus on external details and behavior, and a lack of internal referents or emotional arousal
	Unstoried Emotion	Experiencing undifferentiated, under- or over-regulated emotional arousal, without coherent narration of that experience
	Superficial Storytelling	Talking about events, hypotheticals, self, others, or unclear referents in a vague, abstract manner with limited internal focus
Transition Markers Modes of processing marked by present-centered exploration, the destabilization of dominant maladaptive self-narratives and of dominant approaches to emotional experience, and the beginnings of re-integration of experiences.	Competing Plotlines Storytelling	An alternative to a dominant view, belief, feeling, or action emerges, creating tension, confusion, curiosity, doubt, protest
	Inchoate Storytelling	Focusing inward, contacting emergent experience, and searching for symbolization in words or images
	Experiential Storytelling	Narrating an event or engaging in a task as if re-experiencing an autobiographical memory or interpersonal scheme
	Reflective Storytelling	Explaining a general pattern or specific event in terms of own or others' internal states (thoughts, feelings, beliefs, intentions)
Change Markers Articulating concrete adaptive changes, novel understanding, and meaning.	Unexpected Outcome Storytelling	Describing a new, adaptive behavior (action, thought, feeling, response) and expressing surprise, pride, relief, contentment
	Discovery Storytelling	Reconceptualizing, or articulating a novel understanding of the self, others, key events, behavior patterns, or change processes

NEPCS Problem Markers

NEPCS Problem Markers identify under-regulated, over-regulated, or un-integrated emotion, that are often incoherent, rigid, undifferentiated, or repetitive. The NEPCS Problem Markers include Same Old Storytelling, Empty Storytelling, Unstoried Emotion, and Superficial Storytelling. The NEPCS Problem Markers demonstrate long standing maladaptive, repetitive, and rigid stories (Same Old Storytelling), that are detailed and void of any emotional expression, reflection, or personal meaning of the events (Empty Storytelling), client narratives that are disrupted by emotional overflow or client's shutting down emotionally (Unstoried Emotion), or overgeneral client narratives that have a skimming quality that are not engaged with at a deeper emotional or reflective level (Superficial Storytelling).

Same old storytelling. Same Old Storytelling is defined as an unproductive, repetitive, over-general description of maladaptive interpersonal/behavioural/thought patterns or emotional states, accompanied by a sense of low personal agency and hopelessness. The Same Old Storytelling emerges from the activation of core maladaptive emotion schemes (Greenberg, Rice & Elliott, 1993).

Empty storytelling. Empty Storytelling entails the detailed description and elaboration of external events or information, accompanied by a lack of reflexivity and absent or low expressed emotional arousal (i.e., client either does not express emotions, or acknowledges emotions but there is little arousal in voice or body). The recounting of personal events is stripped of lived emotional experience and is accompanied by an externalizing voice (Rice, Koke, Greenberg & Wagstaff, 1979).

Unstoried emotion. Unstoried Emotion is the expression of undifferentiated emotional states in the form of dysregulated or unintegrated emotion (i.e. pausing, sobbing) that is disconnected from a narrative context.

Superficial storytelling. Superficial Storytelling is defined as a client's emotional state and narrative expression that is presented in a generalized, vague, or incoherent manner in which the client may talk about his or her own feelings, events, or hypothetical ideas, but with low experiencing levels (Klein, Mathieu, Gendlin & Kiesler, 1969), limited self-focus, and little or no evidence of engagement, exploration, or discovery.

NEPCS Transition Markers

In contrast to Problem Markers, NEPCS Transition Markers - Reflective Storytelling, Experiential Storytelling, Inchoate Storytelling, and Competing Plotlines Storytelling- demonstrate client movement towards greater narrative and emotion integration through heightened self-reflection and the expression of differentiated emotional responses within the context of more coherent, specific, personal narratives. NEPCS Transition Markers highlight opportunities for therapists to identify and enhance emerging readiness for change through heightened client self-reflection on emerging bodily felt experiencing (Inchoate Storytelling), episodic memory and emotion integration (Experiential Storytelling) and the identification and elaboration on alternative and/or conflicting ways of being (Competing Plotlines Storytelling) or reflecting on intra- or inter-personal patterns and themes for greater understanding (Reflective Storytelling).

Reflective storytelling. Reflective Storytelling is defined as client, in-depth self-reflection on cognitive, emotional, or behavioural patterns, or on an autobiographical memory, that emphasizes the thematic connections between experiences or events. This type of analysis is

self-focused, with client reflection on past actions, intentions and beliefs, in combination with moderate levels of emotional engagement and depth of client experiencing (Klein et al., 1969). An important distinguishing feature between Superficial Storytelling and Reflective Storytelling is that the latter provides explanatory information about intra- or interpersonal themes (i.e., the "why" or "how"); however, these explanations do not occur in the context of novel understanding (see Discovery Storytelling).

Experiential storytelling. Experiential Storytelling is similar to the concept of trauma retelling discussed by Elliott, Watson, Goldman, and Greenberg (2004), and involves experiential re-entry into a specific autobiographical memory (often of a traumatic nature, although this is not required) during which thoughts, emotions, and sensory details associated with the event are experienced in the present moment and richly described in narrative form.

Inchoate storytelling. The Inchoate Storytelling marker is intended to capture when clients access, articulate and symbolize emergent internal experiences, and heightened, self-focused experiencing levels (Klein et al., 1969), during therapy sessions. Client attention is focused on a bodily felt sense in the service of sorting through or piecing together an emergent feeling, which is then symbolized in language. This symbolization is often disjointed, and involves extensive pausing, as well as the "trying on" of various words, symbols, or metaphors in order to accurately represent the internal experience.

Competing plotlines storytelling. The Competing Plotlines Storytelling marker refers to the expression of competing or opposing emotional responses, lines of thinking, or behavioural tendencies in response to a specific event or life domain, accompanied by confusion, self-doubt, protest, anger, or frustration, and resulting in an overt sense of tension or self-incongruence. Often, the competing emotional reactions, beliefs, or action stem from a breach of

deeply-held assumptions about the word, others, and/or the self. The Competing Plotlines Storytelling marker overlaps with Emotion-Focused Therapy (EFT) Unfinished Business and Conflict Split process markers that are indicative of heightened client readiness for engagement in empty chair and two chair role-play interventions (Paivio & Pascuale-Leone, 2010).

NEPCS Change Markers

Finally, NEPCS Change Markers – Unexpected Outcome Storytelling and Discovery Storytelling - refer to client story subtypes that represent evidence of productive narrative-emotion integration. These markers can include reports of new emotional responses and actions (Unexpected Outcome Storytelling) or the emergence of a more flexible, coherent, emotionally-differentiated view of self and self-narrative reconstruction (Discovery Storytelling). Accordingly, client engagement in NEPCS Change Markers not only indicate the occurrence of tacit experiential change processes in therapy sessions and interpersonal relationships, but also represents the explicit articulation of a more compassionate, agentic view of self and adaptive self-narrative reconstruction (Angus & Kagan, 2013) that instantiate new preferred ways of being in the world.

Unexpected outcome storytelling. Unexpected Outcome Storytelling, overlaps with White and Epston's (1990) concept of "Unique Outcome Stories" and refers to descriptions of new, adaptive behavior, emotional responses, or thought patterns, which is accompanied by expressions of surprise, excitement, pride, relief, or protest. A sense of agency is additionally expressed in the narrative, as the client identifies his or her own active role in the change.

Discovery storytelling. Discovery Storytelling is a reflection or analysis of a specific event, subjective experience, and/or cognitive or behavioural pattern, which is accompanied by a sense of discovery connected to a new view of self that entails self-narrative reconstruction

(Angus & Kagan, 2014) and re-conceptualization (Innovative Moments Coding System;

Gonçalves, Matos & Santos, 2009; Gonçalves, Ribeiro, Mendes, Matos, & Santos, 2011).

Whereas Unexpected Outcome Storytelling pertains to novel, adaptive responses to a concrete

event, Discovery Storytelling captures innovative meaning-making or re-conceptualization of old

beliefs about the self and/or the world.

No Client Marker

Finally, in addition to the ten NEPCS markers, No Client Marker refers to segments in

which the therapist is doing most of the talking (i.e., psycho-education) or when client-therapist

discourse is unrelated to therapy (e.g., discussion of parking, weather etc.).

Working with NEPCS Markers in EFT

Cohering with the identification of micro-process markers in EFT (Elliott, Watson, Goldman & Greenberg, 2004), NEPCS Problem, Transition and Change Markers are intended to provide therapists with an enhanced process map to help guide the implementation of effective interventions, on a moment-to-moment basis, in EFT therapy sessions. As noted by Elliott and colleagues (2004), therapist empathic attunement to clients' personal autobiography memory storytelling can facilitate the evocation and differentiation of emotion processes in relation to different types of narrative expression, for the articulation of new meanings and perspectives on self, in EFT therapy sessions.

Specifically, EFT therapists help clients' symbolize painful emotions (Unstoried Emotion) for further reflection and new understandings (Reflective Storytelling, Discovery Storytelling). This is facilitated by a narrative retelling of troubling events that aid in the identification of specific situational contexts, and cues, to organize, contain and explain distressing emotional experiences (Experiential Storytelling). Additionally, adapting Gendlin's (1996) focusing strategies to help clients attend to an internal 'felt' space (Elliott et al., 2004), Angus and Greenberg (2011), suggest that questions such as, "Where do you feel that emotion in your body? When do you recall sensing that feeling inside you? Where were you when you felt that?", will help clients locate a narrative context for emerging emotional experiences (Inchoate Storytelling), that make those feelings more understandable, specific and controllable.

Transition NEPCS markers such as Competing Plotline Storytelling are identified when clients report shifts and changes in their Same Old Stories such that states of emotional incoherence, confusion and puzzlement emerge in therapy sessions that may be resolved

through engagement in empty chair or two-chair role-play interventions. Consistent with an EFT practice model, Rice and Saperia's (1984) Problematic Reaction Point marker represents an important subcategory of Competing Plotline Storytelling that highlights states of client self-incoherence and identifies the implementation of systematic unfolding procedures for meaning exploration and successful problem resolution in EFT sessions (Elliott et al., 2004).

NEPCS Change Markers such as Unexpected Outcome Storytelling (White, 2007) help therapists attune to, and further elaborate, clients' expression of surprise, excitement, contentment or inner peace in response to experiencing new emotional responses and/or taking positive action in the context of fulfilling intrapersonal needs and goals. It is when clients' begin to break free of the maladaptive patterns that have defined their Same Old Stories, and begin to experience and report new, more adaptive emotions and action tendencies (Unexpected Outcome Storytelling), that therapists can help clients to articulate a new view of self that highlights their role as agents of present and future change (Discovery Storytelling).

NEPCS and Client Experiencing Scale

As noted above, the criteria and indicators of the NEPCS markers take into consideration important client processes such as the depth of client experiential engagement and expressed emotional arousal. The Client Experiencing Scale (Klein et al., 1969) was developed to measure the degree to which clients focus on and explore their internal experience in-session as reflected in their verbal communications. This measure consists of a 7-point scale that ranges from low (level 1) to high levels (level 7) of client experiencing. Research has found that higher levels of client rated experiencing and expressed emotional arousal are associated with successful therapeutic outcome (Goldman, Greenberg & Pos, 2005; Pos, Greenberg, Goldman & Korman, 2003).

Specific criteria and indicators that are used to identify NEPCS Problem, Transition and Change Markers appear to be consistent with the levels of the Experiencing Scale (Klein et al., 1969). For instance, indicators of Inchoate Storytelling include heightened client self-exploration and emergent emotional experiencing, which corresponds with level five of the Experiencing Scale (i.e.. client is focused on exploring his/her internal experience). Discovery Storytelling appears to be reflective of level six or seven of the Experiencing Scale wherein a client's awareness of the self is leading to a new understanding of the self. In contrast, Empty Storytelling within the NEPCS Problem Marker subcategory is characterized by an impersonal narrative account devoid of internal referent, and low emotional expression, which is similar to level 1 of the Experiencing Scale. Taken together, these findings suggest that the constructs of experiencing appear to be embedded within the criteria and indicators of the NEPCS.

There also appears to be an important empirical relationship between client expressed emotional arousal (Warwar & Greenberg, 1999) and depth of client experiencing in EFTT therapy sessions (Paivio & Pascual-Leone, 2010). Ralston (2006) found that higher levels of emotional arousal in EFTT were associated with moderate levels of client experiencing, while higher experiencing levels were associated with relatively lower levels of expressed emotional arousal.

While the Experiencing Scale has been an important measure of client change processes in EFT treatments (Pos et al., 2003), Safran, Greenberg and Rice (1988) argue that key dimensions identified by the measure are too broad to provide clinicians with specific information regarding how and when to effectively implement therapeutic interventions, on a moment-to-moment basis, in therapy sessions. Additionally, the Experiencing Scale provides only minimal criteria addressing the quality and degree of client emotional arousal and narrative

expression in therapy sessions. As such, NEPCS Problem, Transition and Change Markers, that represent key indicators of client emotional arousal, narrative coherence and self-reflection, may address an important gap in the literature for enhanced therapist training in EFT treatment approaches.

Empirical Investigation of the NEPCS: Application to Clinical Samples

Application of NEPCS 1.0 to Treatment of Depression

Boritz and colleagues (2014) conducted the first application of the NEPCS 1.0 to a clinical sample. The purpose of the study was to examine the contribution of the NEPCS markers and NEPCS subgroups (Problem Markers, Change Markers) of the NEPCS 1.0 to therapeutic outcome in a sample of depressed clients receiving brief psychotherapy. The NEPCS 1.0 was applied to one early, one middle, and one late stage videotaped therapy session of 12 depressed clients (N=36 therapy sessions) receiving Emotion-Focused Therapy (EFT), Client-Centered Therapy (CCT), or Cognitive Therapy (CT; four clients in each treatment type). Statistical analysis examined the association between the NEPCS markers and therapeutic outcome (recovered vs. unchanged post-treatment outcome status), stage of therapy (early, middle, late), and treatment type (EFT, CCT, CT).

Boritz and colleagues (2014) found that irrespective of treatment modality, recovered clients evidenced a significantly higher proportion of Change Markers than unchanged clients, and the unchanged sample evidenced a significantly higher proportion of Problem Markers in the middle stage of therapy than the recovered sample. Among the Problem Markers, there was a significantly higher proportion of Abstract Story in the middle stage of therapy for the unchanged sample than the recovered sample. Among the Change Markers, Inchoate Storytelling and Discovery Storytelling were each significantly associated with recovered outcome status, and a trend in this direction was observed with Unexpected Outcome Storytelling. There was also a stage by outcome by treatment interaction for Competing Plotlines Storytelling. Specifically, recovered EFT clients demonstrated a significantly higher proportion of Competing Plotlines Storytelling at the middle stage of therapy compared to unchanged clients, and recovered CCT

clients evidenced significantly higher proportions of Competing Plotlines Storytelling at the early and middle stage of therapy.

Application of NEPCS 2.0 to Treatment of Generalized Anxiety Disorder

Macaulay (2014) extended the application of the NEPCS, and applied the revised version of the NEPCS (NEPCS 2.0) to a sample of participants who underwent Cognitive Behavioral Therapy (CBT) with Motivational Interviewing (MI) for severe Generalized Anxiety Disorder (GAD; Westra, Constantino, & Antony, 2015). The NEPCS 2.0 was applied to two early, two middle, and two late stage videotaped therapy sessions of three recovered and three unchanged clients. Multilevel modeling analyses demonstrated a significant effect of outcome for Reflexive Storytelling, Competing Plotlines Storytelling, Unexpected Outcome, and the Problem and Transition Markers subgroups. Specifically, recovered clients had a significantly higher proportion of Reflexive Storytelling, Competing Plotlines Storytelling, Unexpected Outcome Storytelling and the Transition Markers subgroup overall. The unchanged clients had a significantly higher proportion of the Problem Marker subgroup overall. There was a significant outcome by stage effect for Discovery Storytelling and for the Change Marker subgroup as a whole. Recovered clients had a significantly higher proportion of Discovery Storytelling and the Change Marker subgroup at the late stage of therapy when compared to unchanged clients.

Application of NEPCS 1.0 and 2.0 to Treatment of Complex Trauma

To continue the exploration of the application of the NEPCS to different clinical populations, Carpenter and colleagues (2016) conducted an exploratory study applying the NEPCS 1.0 to a pilot sample of clients with a history of childhood maltreatment who underwent EFTT (N = 4; 24 therapy sessions). Using eta-squared analyses, they found that across all stages of therapy, unchanged clients evinced higher proportions of the Problem Marker subgroup,

accompanied by a large effect size for this difference ($\eta^2=0.31$), while recovered clients had a

higher proportion of Change Markers ($\eta^2=0.18$). There also was a large effect size ($\eta^2=0.35$) for

the Unstoried Emotion marker, as the unchanged clients had a significantly higher proportion of

Unstoried Emotion than recovered clients. Proportions of Unstoried Emotion were relatively

high for trauma clients compared to the earlier sample of depressed clients (Boritz, 2012) and

Generalized Anxiety Disorder sample (Macaulay, 2014). This finding is similar to other studies,

which have found an association between complex trauma, emotion dysregulation and

alexithymia (e.g., Aust, Härtwig, Heuser, & Bajbouj, 2013; Paivio & McCulloch, 2004).

Carpenter and colleagues (2016) also reported several significant stage by outcome

interaction effects. Recovered clients had significantly higher proportions of the Competing

Plotlines Storytelling marker at the middle stage of therapy, whereas the opposite pattern

occurred at the late stage therapy for unchanged clients. Specifically, unchanged clients had a

significantly higher proportion of Competing Plotline Storytelling when compared to recovered

EFTT clients. This was consistent with Boritz and colleagues (2014) finding that higher client

engagement in Competing Plotline Storytelling during the middle stage of therapy, and lower

articulation of this marker in later sessions, appears to differently contribute to overall treatment

outcomes. In addition, Carpenter reported a significant stage by outcome interactions for the

Discovery Storytelling and Unexpected Outcome markers, with recovered versus unchanged

clients evincing significantly higher proportions of both markers at the late stage of therapy.

Bryntwick (2016) extended Carpenter and colleagues (2016) study by applying the

updated version of the NEPCS, version 2.0, to an expanded sample of 12 clients undergoing

EFTT using negative binomial and logistic regression. Bryntwick (2016) has found that

unchanged EFTT clients evidenced a significantly higher proportion of Problem Markers over

the course of therapy. In particular, there was a significantly higher proportion of Superficial Storytelling overall, and at the middle and late stage of therapy compared to recovered EFTT clients.

Bryntwick (2016) also found support for differentiating the Transition Marker subgroup as a distinct cluster of NEPCS markers. Recovered EFTT clients evidenced significantly higher proportions of Transition Markers at the early and middle stage of therapy compared to unchanged EFTT clients. Within the Transition Marker subgroup, recovered clients articulated a higher proportion of Inchoate Storytelling overall, and at the middle stage of therapy when compared unchanged clients.

Finally, recovered clients articulated a significantly higher proportion of the Change Marker subgroup in the middle and late stage of therapy when compared to the unchanged clients. Within the Change Marker subgroup, recovered clients demonstrated a higher proportion of Discovery Storytelling overall compared to unchanged clients. Furthermore, a stage by outcome interaction was also present, wherein recovered clients articulated a significantly higher proportion of Discovery Storytelling at the middle stage of therapy when compared to unchanged clients. In addition, recovered clients had a significantly higher proportion of No Client Marker overall, and specifically at the late stage of therapy when compared to unchanged clients.

Rationale for Examining Narrative-Emotion Processes in Two Versions of EFTT:

Imaginal Confrontation and Empathic Exploration

While Bryntwick's (2016) results provide an important perspective on the contributions of NEPCS Problem, Transition and Change makers in the treatment of EFTT clients, studies to date have not yet addressed the impact of EFTT with Imaginal Confrontation (IC) versus EFTT with Empathic Exploration (EE) on narrative-emotion integration processes. Specifically studies to date have not compared the predominance and pattern of NEPCS Problem, Transition and Change Marker subgroups and individual NEPCS markers, across therapy sessions in EFTT-IC and EFTT-EE.

As stated, the IC and EE intervention allow clients to express previously constricted thoughts, feelings and needs regarding the imagined abusive/neglectful others. The IC intervention in EFTT encourages the client to imagine the perpetrator of abuse or neglect in an empty chair across from him/her in order to facilitate the expression of previously constricted thoughts, feelings and needs to this imagined other. IC is a gestalt-derived imaginary dialogue that accesses trauma memories, making them available for exploration, change and new affective meaning (Paivio & Shimp, 1998). This is a potent intervention that facilitates re-experiencing and reprocessing of the interpersonal, trauma-related source of disturbance through the exploration of thoughts, feelings, needs and bodily experience in an experientially alive context (Paivio & Shimp, 1998). In contrast to the IC intervention, the EE intervention was developed as a less emotionally evocative alternative to IC (Paivio et al., 2010). The IC and EE intervention are similar in terms of the trauma focus, model of resolution, process steps, and intervention principles. However, in lieu of the enactment component found in IC, the client imagines the perpetrator in their "mind's eye" and expresses previously constricted thoughts, feelings, and

needs directly to the therapist, within the context of the therapeutic relationship, rather than the imagined other in an empty chair (Paivio & Angus, 2017).

As detailed earlier, a Randomized Control Trial study (RCT) was conducted to examine the efficacy of the IC and EE intervention in EFTT, and examine similarities and differences between these EFTT with IC and EFTT with EE in regard to process and outcome (Paivio et al., 2010). Clients were randomly assigned to receive 16 to 20 weekly sessions of EFTT-IC (IC condition) or EFTT-EE (EE condition). Treatment outcome was measured according to pre-post treatment scores on seven dependent measures: Impact of Events Scale (IES; Horowitz, 1986); State-Trait Anxiety Inventory (Spielberger, Gorusch, & Luschene, 1970); Beck Depression Inventory-II (Beck, Steer & Brown, 1996); Target Complaints (Discomfort) Scale (Battle et al., 1966); Rosenberg Self-Esteem Scale (Rosenberg, 1989); Inventory of Interpersonal Problems (Horowitz, Rosenberg, Baer, Ureno, Villasenor, 1988) and the Resolution Scale (Singh, 1994). This RCT revealed that EFTT-IC and EFTT-EE resulted in similar treatment outcomes. Specifically, there was a steady and significant improvement in both groups on all dependent measures at pre-and post-test, and clients who completed follow-up assessments in both conditions maintained treatment gains at approximately one-year follow-up. In regard to process measures, the mean working alliance client ratings as measured by the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989), the mean level of engagement with trauma material as measured by the Post-Session Questionnaire (PSQ; Paivio et al., 2010), and the mean distress as measured by the client's self-reported subjective units of distress scale (SUDS) were all similar between the two conditions. This suggested that clients in both conditions reported comparably strong alliances, levels of emotional engagement, and distress.

Despite the many similarities between EFTT-IC and EFTT-EE, Paivio and colleagues (2010) found several differences between the two conditions in terms of process and outcome. As stated, both groups evidenced significant improvement on all dependent measures. However, calculations of pre-post effect sizes indicated a small advantage for the IC condition (η^2=.91; Cohen's d=1.67) compared with the EE condition (η^2=0.81; Cohen's d = 1.24). In addition, the two interventions significantly differed in terms of client attrition rate, as EFTT-IC had a significantly higher dropout rate (20%) than EFTT-EE (7%).

A series of studies conducted on the RCT sample (Paivio et al., 2010) have extended the findings of Paivio and colleagues (2010) and examined the similarities and differences in regard to client emotional arousal, experiencing and engagement for clients in the EFTT-IC condition versus EFTT-EE condition (Chagigiorgis, 2009; Ralston, 2006). In Ralston's (2006) study, client experiencing and arousal were measured using client self-report measures and observer process ratings. The Post-Session Questionnaire (Paivio et al., 2010), a client self-report measure that contains items rating ease of verbal expression and exploration, and level of emotional expression and arousal was used. In addition, observer process ratings implemented included the Experiencing Scale (Klein et al., 1969), and the Client Emotional Arousal Scale (Machado, Beutler, & Greenberg, 1999). In terms of similarities, Ralston (2006) found no differences in client reported subjective distress between the two conditions during trauma exploration. In addition, both the IC and EE group were associated with moderate to high levels of emotional experiencing during trauma exploration and experiencing was associated with outcome in both groups. Both conditions also expressed moderate levels of emotional arousal during trauma exploration.

Furthermore, Chagigiorgis (2009) examined the contribution of emotional engagement to treatment outcome in EFTT-IC and EFTT-EE. Emotional engagement was measured using observer ratings of videotaped EFTT therapy sessions using the Levels of Engagement Scale (LES; Paivio et al., 2001) and client self-report of engagement on the PSQ (Paivio et al., 2010). The LES is measured according to a client's willingness to participate in the intervention, psychological contact with the imagined other, and expressed emotional arousal. In terms of similarities, clients in both the IC and EE condition reported moderate levels of emotional engagement that remained stable over the course of both treatment conditions, based on both the LES and PSQ measurements. In addition, client self-reported emotional engagement, as captured by the PSQ, contributed to treatment outcome in both conditions. Clients also reported moderate levels of distress throughout therapy sessions and moderate to high peaks of distress during IC and EE.

In addition to the similarities found between EFTT-IC and EFTT-EE, Ralston (2006) and Chagigiorgis (2009) found interesting differential patterns between the IC and EE interventions. Ralston (2006) found that the IC condition had higher peak ratings for emotional arousal at the late stage of therapy, whereas peak levels of client emotional arousal decreased for the EE condition at the late stage of therapy. Interestingly, higher emotional arousal was associated with a significant reduction of trauma symptoms in the EE condition only. This finding suggested that while the EFTT-EE may be less emotionally evocative than EFTT-IC, the level of emotional arousal present during EFTT-EE interventions make a contribution to positive treatment outcomes. The lack of association between emotional arousal and treatment outcome in the IC condition suggests that it was not the presence of emotional arousal alone that facilitates positive

treatment outcome, but it was the processing of emotional meaning and perhaps the emergence of new views of self that contributes to productive outcomes (Paivio & Angus, 2017).

Chagigiorgis (2009) also identified differences between EFTT-IC and EFTT-EE. Specifically, she found a steady, non-significant, decline in client self-reported distress (SUDS) in EFTT-IC from early to late stage of therapy. In contrast, distress peaked in the middle stage of therapy for EE clients and then significantly declined by late stage of therapy. In addition, clients within the EE condition engaged in the intervention more frequently, and there was a significant association between client distress (SUDS) and more frequent participation in IC. Chagigiorgis suggested that the differences in distress might be a function of the demand characteristics of the intervention. Specifically, the IC intervention can be highly evocative and activate painful feelings and memories, thus quickly activating emotional arousal. In contrast, EE may be more of a challenge to activating emotional arousal, especially in the early stage of treatment as therapists are forming an alliance and may be reluctant to "push" their clients. The peak in arousal in the middle stage of therapy for the EE condition can be explained by the more in-depth trauma work that occurs at this stage. The higher frequency of EE may be because clients more easily moved into trauma exploration given that EE is less distinct than IC.

These findings related to emotional arousal, experiencing and engagement during EFTT-IC and -EE are contextualized by the broader literature on these processes in experiential psychotherapy. Greenberg and Paivio (1997) proposed that the model for productive client process begins with the arousal of maladaptive emotion, exploring the cognitive-affective (narrative-emotion) sequences associated with those feelings to evoke the emotion scheme, followed by the emergence of a healthy adaptive emotion to transform and restructure the maladaptive emotion scheme. Greenberg and Malcolm (2002) studied the process of resolution

in unfinished business using EFT with empty chair (similar to IC) in a sample of clients struggling with interpersonal problems and who have a history of childhood maltreatment. Results of this study found that resolved clients brought into awareness and expressed intense primary emotion as opposed to unresolved clients. In addition, the authors note that clients need to go beyond simply the expression of inhibited primary emotion, towards the expression of unmet needs and new meaning-making of self and others. As such, the researchers support Greenberg and Paivio's (2007) model of activating problematic emotions, articulating the cognitive and affective components associated with the feeling, for the restructuring schemas that create them. Similarly, Pascual-Leone and Greenberg (2007) elaborated on Greenberg and Paivio's (2007) model further and found that therapeutically productive process was characterized by high experiencing after the expression of emotion. As noted earlier, experiencing is defined as the degree to which clients focus on and explore their internal experience in-session as reflected in their verbal communications (Klein et al., 2016). Supporting the significance of client experiencing, a study by Goldman, Greenberg and Pos (2005) found that in a sample of 35 clients who received experiential therapy for depression, depth of emotional experiencing predicted a reduction in symptoms and increase in self-esteem. In addition, an increase in the levels of experiencing was the strongest predictor of symptom and self-esteem change. These result support the authors hypothesis that an increase in depth of experiencing is a unique predictor of symptom change and self-esteem in therapy. Their findings buttress the theory that verbally symbolizing and integrating emotional experience is an important process for new-understandings of the self, others and the world and productive therapeutic outcome.

A related process to experiencing is emotional productivity, which refers to the client experiencing an adaptive emotion in the present moment, with the emotion in conscious awareness, symbolized and explored for new-meaning construction (Greenberg, Auszra & Herrmann, 2007). An analysis of in-session emotional productivity and degree of emotional arousal of four good and four poor outcome clients in EFT for depression found that good outcome clients expressed significantly more productive emotions, as well as significantly more productive highly aroused emotions than poor outcome clients (Greenberg et al., 2007). The researchers conclude that it was the productivity of highly aroused emotion, rather than the frequency of high emotional arousal that facilitated therapeutic change. Moreover, it appears that there was an optimal level of emotional arousal for productive process in treatment. Carryer and Greenberg (2010) provided a nuanced understanding of expressed emotional arousal within session, by examining the relationship between the amount of time clients spent in aroused emotion and treatment outcome in a sample of clients that received EFT for depression. They found that spending 25% of a session in moderate to highly aroused emotional expression predicted good treatment outcome over and above the working alliance. However, lower or higher emotional arousal predicted poor outcome. The authors postulate that moderate amounts of emotional arousal are optimal for productive therapy process, highlighting the importance of modulating emotional arousal.

Given that verbal symbolization of aroused emotion has been found to be a productive process, a series of studies have examined the interrelationship of narrative and emotional arousal to therapeutic outcome. The relationship between autobiographical memory (ABM), narrative specificity and emotional arousal was examined in a sample receiving EFT and Client Centered Therapy (CCT) for depression (Boritz, Angus, Monette & Hollis-Walker, 2008; Boritz,

Angus, Monette, Hollis-Walker & Warwar, 2011). These studies revealed that neither ABM narrative specificity, nor expressed emotional arousal alone predicted outcome. Rather, it was the relationship between ABM narrative specificity and high levels of expressed emotional arousal that differentiated between recovered versus unchanged clients. Specifically, clients who recovered from depression at therapy termination demonstrated greater ABM specificity and greater emotional arousal than unchanged clients. This study underscored the significance of not only activating emotion but also verbally articulating one's experience for positive treatment outcomes.

As noted earlier, verbal symbolization of trauma-related experiences has been found to be an important process in a trauma sample (e.g. Esterling et al., 1999; Paivio & McCulloch, 2004, Pennebaker & Stone, 2004). Mundorf and Paivio (2011) conducted a study examining the quality of pre- and post-EFTT written trauma narratives, in relation to trauma disturbances. Results of this study highlighted experiencing, which is the exploration and verbal symbolization of emotions and construction of new meaning, as an important dimension of narrative quality and trauma recovery. First, analysis revealed that narrative incoherence at pre-treatment was associated with more trauma symptoms at post-treatment. Next, clients who had a capacity to express trauma-related feelings and meanings at therapy onset had greater resolution of abuse at post-treatment, suggesting that emotional processing through verbal expression leads to better therapy outcome. Lastly, clients who achieved greater abuse resolution at treatment termination focused more on their present lives and future goals. This study suggests that contact, exploration and expression of emotion in coherent narrative form can lead to new meaning-making regarding the self and others, present- and future-centered focus and trauma recovery.

In summary, Paivio and colleagues (2010) found minimal differences between the EFTT-IC and EFTT-EE in terms of overall treatment efficacy. However, Greenberg and Malcolm (1995) raised an important question: though treatment has been demonstrated to be effective, what are the processes for change? The current study sought to contribute to the understanding of how EFTT-IC and EFTT-EE differ in regard to narrative and emotional processes, despite similarities in terms of treatment efficacy. The literature has identified the important relationship between client processes such as emotional arousal, experiencing, verbal symbolization, and meaning-making to treatment outcome in experiential therapy. Moreover, theory and research comparing EFTT-IC and EFTT-EE (Chagigiorgis, 2009; Paivio & Pascual-Leone, 2010; Ralston, 2006) demonstrated how these specific processes independently are similar or different between the two conditions. However, research has yet to explore these inter-related processes holistically in the context of EFTT-IC and –EE. Thus, further research is required to extend the understanding of the narrative-emotion processes of change within the two versions of EFTT.

The NEPCS is a tool that takes an integrative approach to understand and capture the aforementioned processes, such as client emotional arousal, engagement and experiencing. For instance, high emotional arousal and low experiencing characterize Unstoried Emotion, while Superficial Storytelling involves low to moderate emotional arousal, engagement, and experiencing. As such, the present study intended to explore the differential narrative-emotion processes that emerged between EFTT-IC and EFTT-EE in regards to the Narrative Emotion Process Coding System (NEPCS; Angus et al., 2017). This study contributes to the literature on EFTT by investigating how patterns of narrative and emotion integration markers unfold in the context of EFTT with IC or EE as the primary re-experiencing intervention, as well as identify the unique NEPCS Problem, Transitional and Change Marker pathways that lead to recovery

from complex trauma in an EFFT treatment sample. Furthermore, the study has direct clinical

implications in the refinement of the EFTT training model and enhancement of client outcomes.

By specifying productive narrative and emotion processes, as identified by the NEPCS in the

context of EFTT-IC and EFTT-EE, EFTT therapists will have a moment-by-moment process

guide map, unique to engagement in primarily IC or EE, in order to facilitate and enhance

process-diagnosing and –guiding for productive therapeutic outcome. This will not only enhance

the understanding of narrative-emotion processes in EFTT as a whole, but also help therapists

optimize and tailor treatment to clients based on the re-experiencing intervention (IC, EE)

primarily employed in EFTT.

The Present Study

The primary purpose of the current study was to further our understanding of how narrative and emotion processes unfolds in the context of EFTT employing two differing re-experiencing intervention strategies – Imaginal Confrontation (IC) versus Empathic Exploration (EE). Specifically, by investigating the differences in the overall proportion and pattern of individual NEPCS 2.0 markers and Problem, Transition and Change Marker subgroups in the context of the IC versus EE EFTT intervention overall, and by stage of treatment (early, middle, late), irrespective of treatment outcome. A further aim of the present study was to provide greater clarity regarding the role of individual NEPCS 2.0 markers and subgroups in relation to client outcome within the IC and EE condition in EFTT, for the identification of key processing pathways that are associated with recovery from complex trauma. More specifically, the current study examined if recovered and unchanged clients differ within and between the IC and EE condition, in terms of the proportion and pattern of NEPCS markers and subgroups overall, and by stage of treatment (early, middle, late).

The sample for this study was drawn from a Randomized Control Trial (RCT) study examining the efficacy of the IC and EE intervention in EFTT (Paivio et al., 2010). A total of 16 EFTT clients were selected for the present study (N=16), eight of whom were treated with the IC intervention (n=8) and eight of whom were treated with the EE intervention (n=8). Client outcome status was determined by using the Reliable Change Index (RCI; Jacobson & Truax, 1991) applied to two standardized trauma outcome measures (see Method subsection below). Four of the clients who received the IC intervention had a recovered RCI outcome status (Jacobson & Truax, 1991) and four had an unchanged RCI outcome status at treatment

termination. Similarly, four of the clients who received the EE intervention had a recovered RCI outcome status and four have an unchanged RCI outcome status.

Using Noldus Observer XT Software, the NEPCS 2.0 (Angus et al., 2017) was applied to two early, two middle, and two late stage videotaped EFTT therapy sessions selected from each of the eight EE and IC EFTT clients. The second and third session were selected as the early sessions under the assumption that the first session predominantly focuses on establishing a therapeutic alliance and discussion of the presenting problem. The middle sessions selected were session 10 to 12, as session nine is a review of therapy thus far for the client. The last sessions selected are the two sessions prior to the final session, as the final session focused on therapy termination. Selection of sessions by stage of therapy was intended to capture the development of narrative-emotion processes over the course of EFTT, from early alliance formation (stage 1), working phase of treatment (stage 2) to consolidation of gains and treatment termination (stage 3). The unit of analysis was one-minute time segments. One-minute time segments has been found to be the smallest time unit that captures a complete, identifiable NEPCS marker and reduces the occurrence of several NEPCS markers within a one-minute time segment (Angus et al., 2017). Proportions of NEPCS individual markers and NEPCS subgroups (Problem Markers, Transition Markers, Change Markers) were collated and exported to a Microsoft Excel spreadsheet for further data analyses. This data was analyzed using a negative binomial regression and compared to previous NEPCS findings, and relevant psychotherapy process-outcome literature.

Exploratory Research Questions

The primary purpose of the current study was to investigate the impact of EFTT with IC and EFTT with EE intervention on the overall differences in the proportion and pattern of NEPCS 2.0 markers and NEPCS subgroups overall, by stage of treatment (early, middle, late),

and by outcome status (recovered versus unchanged). As this was the first study investigating NEPCS markers in the context of the IC and EE EFTT intervention, exploratory research questions were developed to address the goals of the present study. Four exploratory research questions were addressed:

1.

    a) Was there a significant difference in the proportions of individual NEPCS Problem Markers for clients engaged in IC versus EE EFTT treatment condition, overall and by stage of therapy?

    b) Was there a significant difference in the proportion of the NEPCS Problem Marker subgroup as a whole, for clients engaged in IC versus EE EFTT treatment condition, overall and by stage of therapy?

    c) Was there a significant difference in the proportion of individual NEPCS Problem Markers and the NEPCS Problem Marker subgroup for recovered versus unchanged clients engaged in the IC and EE EFTT treatment condition, overall and by stage of therapy?

2.

    a) Was there a significant difference in the proportions of individual NEPCS Transition Markers for clients engaged in IC versus EE EFTT treatment condition, overall and by stage of therapy?

    b) Was there a significant difference in the proportion of NEPCS Transition Marker subgroup as a whole, for clients engaged in IC versus EE EFTT treatment condition, overall and by stage of therapy?

c) Was there a significant difference in the proportion of individual NEPCS
Transition Markers and the NEPCS Transition Marker subgroup as a whole for
recovered versus unchanged clients engaged in the IC and EE EFTT treatment
condition, overall and by stage of therapy?

3.

a) Was there a significant difference in the proportions of individual NEPCS Change
Markers for clients engaged in IC versus EE EFTT treatment condition, overall and
by stage of therapy?

b) Was there a significant difference in the proportion of NEPCS Change Marker
subgroup as a whole, for clients engaged in IC versus EE EFTT treatment condition,
overall and by stage of therapy?

c) Was there a significant difference in the proportion of individual NEPCS Change
Markers and the NEPCS Change Marker subgroup for recovered versus unchanged
clients engaged in the IC and EE EFTT treatment condition, overall and by stage of
therapy?

4.

a) Was there a significant difference in the proportion of No Client Marker for client
engaged in IC versus EE EFTT treatment condition, overall and by stage of therapy?

b) Was there a significant difference in the proportion No Client Marker for recovered
versus unchanged clients engaged in the IC and EE EFTT treatment condition, overall
and by stage of therapy

Method

Participants Within the Randomized Control Trial Study (Paivio et al., 2010)

Clients. The data used for this study was drawn from a Randomized Control Trial study (RCT; Paivio et al., 2010) conducted at the University of Windsor, Ontario, Canada.

Recruitment. Participants were recruited through newspaper advertisements, posters in community clinics, and referrals. The study was described as offering free psychotherapy for the resolution of issues related to childhood emotional, physical, and sexual abuse in exchange for research participation.

Exclusion and inclusion criteria. Exclusion criteria included severe emotion dysregulation with risk of harm to self or others, an incompatible diagnosis (i.e. psychosis, eating disorders, bipolar I disorder), current crisis (e.g. domestic violence), substance abuse with less than six months abstinence, no conscious memories of childhood abuse, suicide intent or self-harming behaviour, and global assessment of functioning less than 50. Clients were also excluded if they wished to focus on current interpersonal issues than past abuse/neglect, were younger than 18 years old, or were receiving alternative psychosocial treatment, or psychotropic treatment that was not stabilized. Clients were included to participate in the study on the basis of motivation, capacity to form a therapeutic relationship, capacity to focus on past child abuse.

Screening and selection. Individuals were screened by graduate students in clinical psychology with assessment experience. They were trained and supervised by Dr. Sandra Paivio to conduct interviews that consisted of a 30-minute structured telephone interview, and a 90-minute semi-structured selection interview for those who met screening criteria in the telephone interview. The interview assessed for compatibility with therapy, mental health, interpersonal and

abuse history, current level of functioning, symptoms, and diagnoses assigned by professionals in the community. The PTSD symptom severity interview was also conducted.

Inclusion to participate in the study was based on clinical judgment according to the inclusion and exclusion criteria listed. In particular, of the 163 individuals that were screened for suitability, 75 were accepted into the treatment program, as 85 individuals did not meet inclusion criteria. Of the 75 accepted individuals, 19 declined participation in the study, and the remaining 56 clients were allocated to therapy. In terms of attrition, eight clients withdrew from therapy, five from EFTT-IC, and two from EFTT-EE; three clients were excluded from analyses because of missing posttest data (two in IC, one in EE). In total, 45 clients with complete posttest data (IC- 20, EE-25) were included in outcome analyses.

Client characteristics. Approximately half of the clients in the original RCT sample were female. The majority of clients were in their 40's, of European descent, married with one or more children, had some education beyond high school, and were employed, with an annual household income of more than $40,000. Approximately 70% of the participants reported experiencing multiple types of childhood maltreatment (physical, sexual, emotional abuse and neglect). The primary perpetrator of abuse for the majority of the sample was the father or mother. In regard to diagnoses, 62% of the sample had a diagnosis of Posttraumatic Stress Disorder, and 33% had a personality disorder diagnosis. Approximately 25% of clients were on an antidepressant medication and 87% of the sample had previously received some form of psychosocial treatment for the treatment of depression, substance abuse, and marital distress.

Therapists in the randomized control trial study (Paivio et al., 2010). Therapists were randomly assigned to clients in the RCT according to schedule compatibility (Paivio et al., 2010). Dyads were randomly assigned to either the IC treatment intervention or EE treatment

intervention condition after session 3 and prior to session 4 when the intervention is introduced. Therapists were crossed across condition, thus each therapist was assigned an equal number of clients in both the EFTT-IC and EFTT-EE condition. There were seven female and four male therapists participating in the RCT. One was a master's student, six were doctoral students in Clinical Psychology and four were post-doctoral Psychologists. The clinical experience of the therapists ranged from masters students to over 20 years of clinical experience. All therapists had experience with this clinical population. The therapists' age ranged from 25 to 57 years.

Therapist training and adherance. Each therapist received approximately 39 hours of training, conducted by Paivio, in both versions (i.e., IC, EE) of EFTT over 26 weeks. Training involved reviewing the treatment manual and videotaped therapy sessions of expert therapists, and role-play. All therapies were monitored for quality assurance and adherence to the EFTT intervention principles. Therapists were supervised throughout the duration of the study, which involved weekly team meetings, reviewing videotaped therapy sessions, and receiving individual and group supervision from Paivio and Jarry, both of whom are registered psychologists with over 20 years of clinical experience.

An observer rated EFT Adherence Checklist (ADH; Paivio & Nieuwenhuis, 2001) was used to determine client's adherence to the EFT intervention principles. The ADH is an observer rated measure that consists of 11 mutually exclusive categories. These categories include nine general intervention principles (e.g. directing attention to internal experience, symbolizing experience), one relationship category (e.g. structuring active interventions), and one category for non-EFT interventions (e.g. provide information). The Therapist Facilitating Scale (TFS; Hall, 2007), an observer rated scale, was also used to assess therapist competence with the IC and EE re-experiencing procedure in EFTT. Competence is defined in terms of facilitating psychological

contact with the imagined other, promoting client involvement in the intervention, evoking emotional experience, structuring the procedure, and dealing with client difficulties, as well as qualitative aspects of intervention such as empathic attunement. The TFS consists of an ordinal scale that ranges from minimally to completely facilitative.

For each client, segments of videotaped therapy sessions were randomly selected (one each) from early, middle, and late sessions for rating on each measure (Paivio et al., 2010). This represented approximately 18% of all sessions. Two trained raters independently coded each therapist utterance in 20-minute time segments for ADH ratings, and assigned a single category code to 15-minutes of the selected segment for TFS ratings. A total of 5,595 therapist statements were rated on the ADH. The mean adherence rating was .91 (SD = .06) in the IC condition and .87 (SD=.08) in the EE condition. In terms of therapist competence, the mean TFS for 60 episodes of IC was 3.15 (SD = 1.09). The mean TFS for 75 episodes of EE was 2.80 (SD = 1.01). Thus, therapists achieved high levels of adherence to general EFT intervention principles (ADH) and moderate levels of competence with the specific re-experiencing IC and EE procedure used in each treatment condition. In addition, there were no significant differences between the IC and EE treatment conditions on ADH and TFS scores (Paivio et al., 2010).

Therapist effects. After attrition, in the IC condition, one therapist saw four clients, three therapists saw three clients each, two therapists saw two clients each, and three therapists saw one client each. In the EE condition, one therapist saw four clients, four therapists saw three clients each, three therapists saw two clients each, and three therapists saw one client each. To increase power and because there were no statistically significant differences between the treatment groups, Paivio and colleagues (2010) compared therapists in terms of their clients' outcomes with treatment conditions combined. First, residual change scores were calculated

from pre- to post-test on each dependent measure and used a series of one-way analyses of variance to compare the 11 therapists. Results revealed no significant therapist effects on the dependent measures, with an overall *p* of .53.

Procedure in the Randomized Control Trial Study (Paivio et al., 2010)

Participants received 16 to 20 weekly sessions of EFTT (Paivio & Pascual-Leone, 2010) and were randomly assigned to receive EFTT-IC intervention or EFTT-EE intervention for resolving issues related to childhood emotional, physical, or sexual abuse. Outcome measures were administered to participants at pre-, mid-, post-treatment and at six-month follow-up. All therapy sessions were videotaped and participants received $25 for completion of follow-up questionnaires.

Treatment and treatment conditions.

EFTT. EFTT (Paivio & Pascual-Leone, 2010) is a short term (16-20 weekly sessions), semi-structured, manualized trauma-focused therapy. EFTT consists of four phases of therapy: Phase 1: cultivating the therapeutic alliance, reducing maladaptive fear and shame; Phase 2: resolving issues with perpetrators; Phase 3: consolidation; and Phase 4: termination of therapy. The primary intervention used throughout therapy is empathic responding to client feelings and meanings. In addition, EFTT uses the IC and EE re-experiencing interventions throughout therapy for the resolution of past interpersonal experiences with perpetrators of abuse and neglect. The EE intervention is used as an alternative to the IC intervention for clients who find IC too emotionally overwhelming. Either the IC or EE intervention is introduced in session four and is implemented over the course of therapy when a marker for unresolved abuse or neglect is present in session. Both versions follow the same intervention principles and facilitate the

experience and expression of feelings and needs regarding the perpetrator of abuse and/or neglect, and accesses and reflects on adaptive emotions such as anger and sadness.

Imaginal confrontation (IC). After cultivating a strong therapeutic alliance during the first three sessions of therapy, the IC procedure is introduced during session four. An empty chair is placed across from the client, and the client is asked to imagine an abusive or neglectful other in the empty chair as they attend to their internal experience and express thoughts and feelings directly to the imagined other. The frequency and length of the IC intervention depends on the client's unique processes and therapeutic needs. The goals of the IC intervention is to promote contact with the imagined other, evoke episodic memories associated with the abuse, promote expression of feelings, help clients overcome blocks to experiencing, differentiate feelings and associated meanings, promote a sense of entitlement to unmet needs, and explore transforming views of self and others.

Empathic exploration (EE). EE also is introduced in session four after alliance cultivation during the first three sessions. This condition is identical to the IC condition in terms of goals, process steps, intervention principles and therapist operations. However, trauma issues are explored exclusively in interaction with the therapist. Empathic responding is the primary intervention. The clients are encouraged to imagine the abusive neglectful other in their "mind's eye" and express their thoughts and feelings exclusively to the therapist.

Frequency of IC and EE. The mean number of sessions containing substantial IC and EE participation (i.e. ≥ 20 minutes), within the larger RCT sample (Paivio et al., 2010), was 5.35 for IC (SD=1.63, range 2-8), or 31.7% of the total session, and 8.81 for EE (SD=2.64; range, 4-14), 52.4% of the total sessions. These results are based on observing videotaped therapy sessions of

the sample. There were significantly more sessions that contained EE than IC [t(42)=5.29, p <

001.]

Participant selection for the present study. For the purpose of this exploratory study, a

total sample of 16 clients were selected from the larger RCT consisting of eight EFTT clients

who received the IC intervention (EFTT-IC) and eight EFTT clients who received the EE

intervention (EFTT-EE) over the course of therapy, in order to equally represent the two versions

of EFTT. Given the time demanding, in-depth nature of the minute-by-minute, observational

NEPCS coding, a sample of 16 clients was deemed to be an appropriate sample size that would

maximize analysis in order to address the exploratory research questions examining differences

between EFTT-IC and EFTT-EE. Furthermore, given the success of EFTT within the RCT

(Paivio et al., 2010), there were a limited number of unchanged clients within each condition. As

such, in order to ensure a balanced sample of unchanged and recovered clients, a total of four

recovered and four unchanged clients within the IC and EE condition were selected. The current

sample of 16 had a total of 96 sessions coded, and 5333 units-of-analysis, in minutes, coded

(coding procedure detailed below). To date, this is the largest EFTT sample coded with the

NEPCS (Bryntwick, 2016; Carpenter et al., 2016).

Client outcome categorization. Clients for the present study were selected based on pre- and

post-treatment outcome measures that assess trauma resolution (Resolution Scale; Singh, 1994)

and trauma symptoms (Impact of Events Scale; Horowitz, 1986). These measures are described

in the methods section below. Therapeutic outcome was categorized using the Reliable Change

Index (RCI; Jacobson & Truax, 1991), on two outcome measures: Impact of Events Scale and

Resolution Scale. A clinical cut-off score for distress was used to establish whether a client's

post-treatment score on the Impact of Events Scale and the Resolution Scale is closer to the pre-

treatment score of a clinical population or of the general population. Reliable change is determined by calculating if pre- and post-treatment scores are beyond standard error in each measure. RCI criterion was established to determine whether the difference between the pre- and post-treatment scores on the Impact of Events Scale and the Resolution scale is clinically significant. Clients who passed both the cutoff and RCI change criteria were categorized as having a recovered outcome status, and clients who did not pass the cut off or the RCI change criteria were categorized as having an unchanged outcome status. Clients who show reliable change but do not meet the cutoff score for the normal range were considered improved but not recovered. Improved clients were not included in the sample for the current study. See Table 3 and 4 for client and therapist characteristics and client demographics.

Client characteristics. Approximately half of the clients in the current sample were female. The majority of clients were in their 40's to 50's, of European descent, married or in a common-law relationship with one or more children, had some education beyond high school, and were employed, with an annual household income of more than $20,000. Approximately half of the sample reported experiencing sexual abuse, followed by emotional abuse, then physical abuse and neglect. The primary perpetrator of abuse for the majority of the sample was the father or mother. In regard to diagnoses, 88% of the sample had a diagnosis of Posttraumatic Stress Disorder, and 31% had a personality disorder diagnosis. Approximately 25% of clients were on an antidepressant medication and 100% of the sample had previously received some form of psychosocial treatment for the treatment of depression, substance abuse, and marital distress.

The sample in the current study is comparable to the larger RCT sample (Paivio et al., 2010) in some areas and different in others. In regard to similarities, the sample was primarily of European descent, had some education beyond high school, were employed, and were married

with one or more children. In addition, both sample had similar proportions of personality diagnosis and antidepressant medication. In contrast to the larger RCT sample, approximately a third of the sample was in their 40's and a third was in their 50's, with the remaining sample in their 20's or age 65 and older and over half of the sample had a salary less than $40, 000. In addition, the current had a greater rate of PTSD than the original sample (88% vs. 62%) and 100% of the sample had received previous psychotherapy as opposed to the larger sample in which 87% of the sample had psychotherapy previously.

   Therapists in the present study. In the present study there were five female and four male therapists. All therapists were assigned an equal number of clients in the EFTT-IC condition and EFTT-EE condition in the RCT. In the current study, three therapists within the sample had clients in both the IC and EE condition, three therapists had clients in the IC condition only, and two therapists had clients in the EE condition only. When considering client treatment outcome, of these nine therapists, one therapist had two recovered IC clients, one unchanged IC client, and one recovered EE client. One therapist had one recovered IC client, and one recovered EE client. One therapist had one unchanged IC client and one unchanged EE client. One therapist had two recovered EE clients, and one unchanged EE client. One therapist had one recovered IC client, and two therapists and one unchanged IC client each. Lastly, two therapists had one unchanged EE client each. The clinical experience of the therapists ranged from 1st year doctoral students to over 10 years of clinical experience. See Table 3 for therapist characteristics.

Table 3

Client and Therapist Characteristics

Client ID	Outcome	Condition	Sessions Coded	Outcome Measures Scores				Therapist Characteristics (Initials, gender, training)	Therapist Adherence (ADH) & Competence Ratings (TFS)
				IES		RS			
				Pre	Post	Pre	Post		
018	Recovered	Imaginal Confrontation	Early: 3,4 Middle: 10, 11 Late: 18,19	31	5	46	24	KH; Female; Doctoral student	ADH: 0.92 TFS: 2.00
313	Recovered	Imaginal Confrontation	Early: 3, 4 Middle: 10, 11 Late: 14, 15	33	4	43	24	ED; Male; Doctoral student	ADH: 0.94 TFS: 1.67
304	Recovered	Imaginal Confrontation	Early: 3, 4 Middle: 10, 11 Late: 18, 19	23	7	37	14	BK; Male; 10+ years experience	ADH: 0.87 TFS: 4.00
028	Recovered	Imaginal Confrontation	Early: 3,4 Middle: 10,11 Late: 18,19	23	12	47	26	KH; Female; 10+ years experience	ADH: 0.95 TFS: 3.33
316	Unchanged	Imaginal Confrontation	Early: 3, 4 Middle: 10, 11 Late: 16, 17	32	20	35	27	KH; Female; 10+ years experience	ADH: 0.82 TFS: 3.33
021	Unchanged	Imaginal Confrontaion	Early: 3, 4 Middle: 11, 12 Late: 15, 16	26	19	43	30	IH; Female; Doctoral Student	ADH: 0.96 TFS: 4.33
312	Unchanged	Imaginal Confrontation	Early: 3,4 Middle: 10,11 Late: 14,15	35	28	51	41	JLJ; Female; 10+ years experience	ADH: 0.90 TFS: 2.67
405	Unchanged	Imaginal Confrontation	Early: 3, 4 Middle: 10,11 Late: 14,15	31	22	34	31	MC; Male; Doctoral student	ADH: 1.00 TFS: 3.67
029	Recovered	Empathic Exploration	Early: 3, 4 Middle: 10, 11 Late: 18, 19	18	6	43	18	MR; Female Doctoral Student	ADH: 0.98 TFS: 3.33
307	Recovered	Empathic Exploration	Early: 3, 4 Middle: 10, 11 Late: 14, 15	31	5	48	19	MR; Female; Doctoral Student	ADH: 0.65 TFS: 1.00

023	Recovered	Empathic Exploration	Early: 2 & 3 Middle: 10 & 11 Late: 14 & 15	35	5	47	16	BK; Male; 10 + years experience	ADH: 0.89 TFS: 4.00
308	Recovered	Empathic Exploration	Early: 3, 4 Middle: 10, 11 Late: 18, 19	26	6	34	15	KH; Female; 10+ years experience	ADH: 0.90 TFS: 1.67
010	Unchanged	Empathic Exploration	Early: 3, 4 Middle: 10, 11 Late: 13, 14	34	19	40	27	MK; Female; Doctoral Student	ADH: 0.96 TFS: 3.00
416	Unchanged	Empathic Exploration	Early: 2 & 3 Middle: 10 & 11 Late: 14 & 15	35	26	41	42	JLJ; Female; 10 + years experience	ADH: 0.94 TFS: 3.33
418	Unchanged	Empathic Exploration	Early: 3, 4 Middle: 11, 12 Late: 18, 19	27	21	42	33	AS; Male; Doctoral Student	ADH: 0.89 TFS: 4.00
305	Unchanged	Empathic Exploration	Early: 3, 4 Middle: 10, 11 Late: 14, 15	19	24	40	32	MR; Female; Doctoral Student	ADH: 0.99 TFS: 2.00

Table 4

Client Demographic Data

Client ID	Gender	Age	Marital Status	Children	Income (Thousands)	Abuse Focus (Type/Perpetrator)	Diagnoses	Previous Therapy	Medication
018	Male	41	Married	3	>60	Emotion/Mother	PTSD Personality	Yes	No
313	Female	54	Separated/Divorced	3	<20	Sexual/Other	PTSD	Yes	Yes
304	Male	38	Single	0	20-39	Emotional/Father	PTSD Personality	Yes	No
028	Female	52	Separated/Divorced	3	>60	Physical/Father	None	Yes	No
316	Male	71	Married	5	20-39	Sexual/Mother	PTSD Personality	Yes	No
021	Female	39	Married	1	40-59	Sexual/Father	PTSD	Yes	Yes
312	Male	44	Separated/Divorced	4	20-39	Sexual/Father	PTSD	Yes	No
405	Female	26	Common-law	0	>60	Sexual/Mother	PTSD	Yes	No
029	Female	47	Separated/Divorced	3	20-39	Neglect/Mother	PTSD	Yes	No
307	Male	49	Married	2	>60	Sexual/Father	PTSD	Yes	No
023	Female	29	Married	3	20-39	Emotional/Mother	None	Yes	No
308	Female	59	Separated/Divorced	4	40-59	Sexual/Other	PTSD	Yes	No
010	Male	57	Single	0	<20	Sexual/Other	PTSD	Yes	No
416	Female	41	Single	0	20-39	Emotional/Other	PTSD Personality	Yes	Yes
418	Male	69	Married	3	>60	Sexual/Father	PTSD Personality	Yes	Yes
305	Male	52	Single	0	20-39	Emotional/Father	PTSD	Yes	No

Outcome Measures

Impact of event scale (IES; M. D. Horowitz, 1986). The 15-item IES assesses intrusion and avoidance symptoms in relation to a specific trauma. Clients rate the frequency of symptoms during the past week on a 4-point likert scale (0-not at all, 3-often experienced). Subscale alphas ranged from .79 to .92 (Corcoran & Fischer, 1994), and a factor analysis (Weiss & Marmar, 1997) supported construct validity of the measure (See Appendix).

Resolution scale (RS; Singh, 1994). This 11-item scale assesses the degree to which clients feel troubled by negative feelings, unmet needs, and feel worthwhile in relation to and accepting of a specific identified other person. Clients rate items on a 6-point likert scale (0-not at all, 5-very much). Singh reported test-retest reliabilities (over 1 month) of .81 with a clinical sample and high correlations between change on the RS and change on other outcome measures. Paivio et al. (2001) reported alpha reliability with an EFTT sample of .82 (short form version in Appendix).

Process Measures

Narrative-emotion process coding system 2.0. (NEPCS 2.0; Angus Narrative-Emotion Marker Lab, Angus et al., 2017; Table 2). The NEPCS 2.0 is a research and clinical tool, designed to systematically identify client narrative and emotion process markers in videotaped therapy sessions. The NEPCS coding manual includes verbal and non-verbal criteria and indicators of narrative and emotion processes that vary in the pattern, quality, and degree of integration. The NEPCS includes ten mutually exclusive and exhaustive categories described in the Literature Review section of the present manuscript: Same Old Storytelling, Empty Storytelling, Unstoried Emotion, Superficial Storytelling, Reflective Storytelling, Experiential Storytelling, Competing Plotlines Storytelling, Inchoate Storytelling, Unexpected Outcome

Storytelling, Discovery Storytelling. In addition to these ten client markers, No Client Marker refers to segments in which the therapist is doing most of the talking (i.e., psycho-education), or when client-therapist discourse is unrelated to therapy (e.g. weather, parking).

     NEPCS training. Training on the NEPCS for research purposes involves a reliable NEPCS coder and a trainee consensually coding approximately 12 to 16 videotaped therapy sessions or until good inter-rater agreement is reached. If disagreement occurs, the time segment is re-watched and the reliable NEPCS coder assists the trainee in identifying the client's verbal and non-verbal indicators that correspond with the correct NEPCS marker criteria and indicators.

     NEPCS coders. The coding team for the present study consisted of one master's student and two doctoral students in the Clinical Psychology program at York University. Each coder completed training on the NEPCS and had approximately two years of experience with the NEPCS. Coding for the present study was completed consensually in pairs. Coding pairs consisted of the primary investigator and one other coder. Approximately half the sample was coded by each coding pair. Angus, the co-developer of the NEPCS was present for consultation. Coders were blind to client treatment outcome, but were aware of the stage of therapy and treatment condition (IC vs. EE).

     Inter-rater agreement. In consultation with a statistician, inter-rater agreement for the current study was established by averaging the weighted inter-rate agreement demonstrated in Bryntwick's (2016) study with the inter-rater agreement established for the current study. The process used to calculate inter-rater agreement is described below.

     Open consensual validation was used for 70% of the current sample (67 therapy sessions), during which the coding team viewed the videotaped sessions together, one minute at a time, and independently identified a NEPCS code for each one-minute time segment. The codes

were then reviewed and compared, before moving onto the next time bin. In the event of a disagreement, discussion took place between the raters regarding the criteria and indicators present during the time segment until consensus could be reached. In instances when disagreement among raters could not be resolved, an arbiter was consulted at a separate time in order to make the final determination. The remaining 30% of the sample (29 sessions) were coded independently in order to determine inter-rater agreement.

Bryntwick (2016) coded 15 sessions from her EFTT sample for inter-rater agreement along with one additional rater (Master's level psychology student) to determine inter-rater reliability. The raters coded the sessions independently. The codes were then compared for inter-rater agreement. Following this determination, the raters compared their codes and discussed any disagreements until consensus was achieved and the final code agreed upon, or it was decided that the arbiter should be consulted. The 15 sessions selected for reliability coding were drawn from five of the 16 clients in the current study, and included five early, six middle, and four late stage sessions; six sessions were from recovered clients, and nine were from unchanged clients. Throughout these coding session, the raters agreed that a "Consult" code could be indicated when either rater could not make a determination between two NEPCS markers. This occurred when two codes were present within the one-minute time segment and the most "salient" code was unclear. For instance, a client may be articulating a Same Old Story, however, Competing Plotlines Storytelling may emerge within the same one-minute time segment as the client begins to demonstrate narrative flexibility and articulates protest against the Same Old Story. In this case, both Same Old Storytelling and Competing Plotlines Storytelling may be equally salient within the time segment and thus a coder may assign a Consult code if he/she is unable to determine the most salient NEPCS marker. Beside the Consult code, each rater indicated the two

NEPCS markers under consideration. Consult codes were always used for less than 10% of time segments in a given therapy session. During segments in which one or both raters opted to use a Consult code, agreement was considered to have occurred if either rater had at least one identical NEPCS match to the other rater. The overall inter-rater reliability for Bryntwick (2016), as calculated based on approximately 15% of the sample (15 sessions), was found to be Kappa = 0.85, which is considered very good agreement (Hill & Lambert, 2004).

For the current study, the primary author coded all 14 sessions used for inter-rater agreement. Seven of the 14 sessions were first consensually coded by the primary author and a Doctoral level psychology student. These seven sessions were then independently coded by a Master's level Psychology Student, and compared to the original codes in order to determine inter-rater agreement. The remaining seven sessions of the 14 sessions were consensually coded with the primary author and the aforementioned Master's level rater. These seven remaining sessions were then independently coded by the aforementioned Doctoral level rater. The codes were then compared to the original codes in order to determine inter-rater agreement. The 14 sessions selected for reliability coding for the current sample were drawn from four of the 16 clients in the study, and included four early, four middle, and six late stage sessions; eight sessions were from recovered clients, and six sessions were from unchanged clients. The "Consult" code was also used when either rater could not make a determination between two NEPCS markers. The same procedure outlined above in Bryntwick's (2016) study for the application of the Consult code was used in the current study. The Consult codes were used on average for 11% of time segments in a given therapy session. The weighted inter-rater reliability for the current study, as calculated based on approximately 30% of the sample (29 sessions), was found to be Kappa = 0.75, which is considered very good agreement (Hill & Lambert, 2004).

Procedure

Session selection. Two early, two middle, and two late stage videotaped therapy sessions were selected for each of the sixteen clients in the sample for application of the NEPCS 2.0 (N=96 sessions). Two sessions from the second to the fourth session were selected as the early sessions. The first session was not selected because it predominantly focuses on providing expectations for therapy and information gathering rather than processing trauma issues. Two sessions from sessions 10 to 13 were selected to represent the middle sessions. Session nine was not selected because this focused on a review of therapy thus far and establishing goals for the remaining sessions. The late sessions selected were the two sessions prior to the final session (session 16 - 20). If a client received 20 sessions of EFTT, for example, session 18 and 19 were NEPCS coded. The final session was not selected because it focused on therapy termination. Selection of sessions by stage of therapy was intended to capture the development of narrative-emotion processes over the course of EFTT (early, middle, late stage of treatment).

Application of the NEPCS 2.0. The NEPCS 2.0 was applied to videotaped therapy sessions using Noldus Observer XT software for behavioural coding. The following coding procedure was employed: (1) Each videotaped therapy session was segmented into one-minute time segments using Observer. These one-minute time segments were small enough to reduce the occurrence of several NEPCS markers within a clip, yet can capture a complete NEPCS marker. (2) The coders watched the entire one-minute segment and then coded the client NEPCS marker that occurred for greater than 40 seconds of the time segment. In the event that two markers were equally present within a given time segment (e.g. 30 seconds Unstoried Emotion and 30 seconds Superficial Story), the marker that was most "salient" according to clinical judgement was coded. (3) In the event of a disagreement among coders, each disagreement was resolved by re-

watching the time segment the coders disagreed upon. A discussion took place amongst the coders until a consensus was reached regarding the client's linguistic and paralinguistic indicators evident in the time segment that meet criteria for the NEPCS markers in question. In the event that a code is not agreed upon, a third reliable NEPCS coder was consulted as the final arbiter.

Statistical Analysis

   Negative binomial distribution model vs. hierarchical linear model. Previous analysis has been based on the general practice that used multinomial logistic models to work with the proportion based data gathered by the NEPCS. In consultation with a statistician, however, the negative binomial model was proposed as a more useful approach for the present study given the nature of the data (negative binomial distribution), and it more accurately addressed the research questions in the current study.

   In order to evaluate the proportion of NEPCS marker occurrence, a count variable of the total number of occurrences of each individual NEPCS marker was created. These count variables were observed to be Negative Binomially distributed, the data was indicating a negatively skewed distribution due to the disparity between the probability that a particular marker will occur (e.g. Same Old Storytelling) versus that one of the other nine remaining markers will occur. As such, there will be a superfluous amount of zeros (i.e. the likelihood of occurrence of the particular marker of interest) versus the occurrence of one of the other nine remaining NEPCS markers, resulting in a negatively skewed distribution. Thus, the negative binomial was considered to be a better fit for the data.

   For the present study, the negative binomial model analyzed the data that emerged from the temporal (minute by minute), sequential NEPCS coding procedures used in this study. As a

result, the proposed model matched this time-based data well, given that the data is the product of applying the NEPCS minute-by-minute. In this model, the client is the data generator, and each NEPCS code is a product of the underlying narrative-emotion generating process of the client. Essentially, the client produces an outcome, minute-by-minute. The NEPCS coding system captures the data minute-by-minute in the form of integer codes in a pseudo-random manner (e.g. 1= Superficial Storytelling, 2 = Empty Storytelling). The data is pseudo-random, meaning that at any given moment there is no certainty what the next code may be, however it is hypothesized that patterns will emerge over-time. Statistical analysis allows the data to be analyzed retrospectively and identify patterns in the data. Taken together, the purpose of analysis was to analyze the NEPCS codes as the minute-by-minute outcome data. Thus, the outcome variable was the eleven independent NEPCS codes categories that are each a possible outcome in a particular minute for a client (1= Superficial Storytelling, 2=Empty Storytelling, 3= Unstoried Emotion and so on). The occurrence of the story (i.e. count or frequency) was captured as a count variable which is the dependent variable/outcome variable. Instead of N minute-by-minute observations, there will be 11 observations collected over n minutes, thus there will be n observations for each story per session. In addition, the absence of the occurrence of a marker is meaningful as well. Together, this creates a quantitative variable, rather than a categorical variable. The value of each count variable can range from 0 to N.

As stated, the recommended analysis in previous studies involving the NEPCS was the multinomial logistic regression (MLR). The reason MLR was typically used was that outcome data for any set of data that has $k > 2$ groups/ at least three categories, was considered to be best analyzed using MLR. In MLR, each response is a specific outcome and the regression analyses examined what is supporting or impeding the probability of one of those given outcomes from

occurring to determine the odds of occurrence of a given code relative to the other codes as a reference. The predictors in an MLR are treatment outcome, stage of therapy and other variables to determine what increases or decreases the occurrence of one code over another.

It is important to note however that there are several disadvantages to using MLR to analyze NEPCS datasets to address key research questions, as put forward in the present study. Firstly, the frequency of occurrence expected across marker categories does not occur at a relatively stable frequency, which creates a conflict for the MLR approach. This would require the NEPCS data to be summarized and collapsed into subcategories losing important, minute-by-minute, coding information when investigating key research questions. Secondly, the MLR provides a probability based on the relative, not actual proportion of NEPCS codes evidenced in therapy sessions, which was the focus of the research questions in the current study. Finally, the MLR model is difficult to interpret, report, and communicate effectively given the extent of the categorical data, and 11 outcome variables. As such, the negative binomial regression was chosen as the best fit analytic strategy for the current data, as it produces an estimate of the NEPCS proportions according to the negative binomial model, and compares observed NEPCS proportions to the estimated proportions, to determine significance.

The advantage of using the negative binomial model (NBM) is that minute-by-minute NEPCS coding data will be calculated as actual proportions making it easier to interpret, report, communicate, and address directly the key research questions. More specifically, proportions occur over a unit value, x, which then occurs over y to determine a proportion, with y being the total number and x being the segment. The data is abstracted from the minute-by-minute level to a higher level, which is the client session level represented by proportions.

Statistical analysis. Analysis of the count variable was assessed using a multilevel generalized linear model. The NEPCS marker count variable was reduced to 11 observations (1 for each NEPCS marker) per session, per stage, per dyad, resulting in 1056 observations. All analyses were performed assuming a negative binomial distribution of errors. For the NEPCS subgroup count variable, the data was reduced to four observations - one for each marker type, per session, per stage, per dyad - resulting in 384 observations. All analyses were performed assuming a negative binomial distribution of errors.

The bottom up hierarchical structure of the count data is nested, as each observation is nested within session, within stage and within dyad and cross-nested in NEPCS marker or subgroup. Estimates of the unexplained variance for session and stage were both zero and removed from the two models resulting in simple crossed random effect models with observations nested within dyad and NEPCS marker. All statistical models employed use three primary factor variables of interest. For each, the full factorial expansion of condition or outcome, by stage of therapy and by either NEPCS marker or subgroup was included in the model.

Length of therapy session and time was accounted for the same in all models regardless of the structure of the dependent variable. For all count models differences in session length was addressed using the total length of each participant specific therapy session. This time variables was log-transformed and used as an offset to transform the expected counts into estimated rates and also account for differences in proportions that might arise due to the differing lengths of each therapy session. It further generalizes the rate into an estimated proportion per session. An offset is a log-transformed variable whose parameter estimate is constrained to one within generalized linear, log-linked, models. As such, the expected value of the dependent variable can be divided by the offset to give an estimate of rate, rather than count or magnitude.

With the introduction of the fixed effect variables at level 1 of the count models the higher order variance terms were reduced to near zero and non-significant. This indicated that the between- and within-subject dependencies of the observations at the dyad level (level 2) and above were accounted for at the fixed effect or covariate level of the model. Once, the fixed factors were added to the model the remaining variance was independent of the subject and could be considered a conditionally independent random sample. Therefore, any departure from the overall process described by the fixed effects was in fact random. The majority of the fixed effect variables in the model describe differences between participants. Furthermore, the fixed effect variables included at level 1 are, with the exception of dyad, the same variable assessed at level 2 or higher. Thus, the estimated variance for the random intercepts was zero after accounting for outcome, stage of therapy, NEPCS marker, the participant-specific mean duration of storytelling, and all interactions that involve between-subject differences.

Between-subject differences are estimated mean differences that determine the location of the intercept. The estimated zero value for the random intercept variance forces the total residual variance for each model to be exactly the same, which causes the estimates of all parameters and test statistics to be the same between the multilevel and ordinary logistic models. For the Negative Binomial models the random intercepts were retained in the model as they help to model over dispersion even if the variance is small.

Model diagnostics indicated a strong fit for all assumed error distributions and link functions, as well as normally distributed errors of estimate using Anscombe residuals. All analyses are drawn from these final models with Wald tests of parameter estimates and pairwise comparisons. All p-values are Holm Sequentially adjusted for family-wise error where necessary.

Results

The present study investigated if and how the proportion and pattern of NEPCS markers differed in the context of EFTT with IC and EFTT with EE overall, by stage of therapy (early, middle, late) and by outcome status (recovered vs. unchanged) in a sample of 16 complex trauma clients who received EFTT, eight of whom were placed in the EFTT with IC condition and eight who were placed in the EFTT with EE condition. Descriptive statistics were generated by calculating the proportion of each individual NEPCS marker averaged across condition (IC versus EE), stage of therapy (early, middle, late), and/or outcome group (recovered versus unchanged). To determine the mean proportion at a particular stage of therapy (early, middle, late), the proportion for the two sessions corresponding to a stage in treatment were averaged. For example, the proportion of Superficial Storytelling at session three and four were averaged across all eight clients in the IC condition, to calculate the proportion of Superficial Storytelling at the early stage of therapy for clients in the IC condition. To calculate the overall proportion for a particular group, the proportion at the early, middle, and late stage of therapy for the group of interest were then averaged to create an overall mean. For example, the proportion of Superficial Storytelling at the early, middle and late stage of therapy for recovered IC clients were averaged to create an overall proportion of Superficial Storytelling for recovered IC clients overall.

Overall Descriptive Statistics

A total of 16 clients were coded (n=16), eight who were in the IC condition (n=8) and eight who were in the EE condition (n=8). Within each condition, four were recovered (n=4) and four were unchanged (n=4). A total of six sessions per client were coded (two early, two middle, two late; N=96). A total of 5333 NEPCS markers were coded. Of the 5333 markers, 1744 (32.7%) were coded in early stage therapy, 1828 (34.3%) were coded in the middle stage therapy,

and 1761 (33.0%) were coded in late stage therapy. In the IC Condition, 2636 NEPCS (49.4%) markers were coded, 891 NEPCS markers (33.8%) were coded in the early stage, 876 NEPCS markers (33.2%) were coded in the middle stage, and 869 NEPCS markers (33.0%) were coded in the late stage of treatment. In the EE Condition, 2697 NEPCS (50.57%) markers were coded, 853 NEPCS markers were coded in the early stage (31.6%), 952 NEPCS markers were coded in the middle stage (35.3%), and 892 markers (33.1%) were coded in the late stage of treatment. Raw frequencies and mean proportions for the IC and EE condition for all NEPCS marker overall and by stage of therapy are summarized by subgroup in Table 5. The descriptive information that were observed for each NEPCS marker by condition (IC, EE) and stage of therapy (Early, Middle, Late) and by condition (IC, EE), stage of therapy and outcome group (recovered, unchanged) can be found in Table 5, 6, and 7 and have been integrated within the results section and discussion.

Table 5

Frequency and Proportion of NEPCS Markers Total, by Condition, Overall and by Stage of therapy

	Early		Middle		Late		Total	
	Frequency	Proportion (%)	Frequency	Proportion (%)	Frequency	Proportion (%)	Frequency	Proportion (%)
IC	891	33.8	876	33.2	869	33.0	2636	100
EE	853	31.6	952	35.3	892	33.1%	2697	100
Overall	1744	32.7	1828	34.3	1761	33.0%	5333	100

Table 6

Frequency and Proportion of Individual NEPCS Markers by Condition and Stage of Therapy

	1	2	3	4	5	6	7	8	9	10	11	Total
Empathic Exploration												
Early	8.3%	6.0%	1.9%	49.1%	8.1%	4.0%	10.2%	1.1%	0.6%	0.8%	10.0%	31.6%
Middle	6.1%	8.1%	1.5%	45.2%	10.8%	3.6%	8.8%	0.5%	1.7%	3.4%	10.4%	35.3%
Late	3.0%	4.0%	3.1%	44.1%	8.3%	2.0%	9.4%	0.2%	6.2%	5.4%	14.2%	33.1%
Total	5.8%	6.1%	2.2%	46.1%	9.1%	3.2%	9.5%	0.6%	2.8%	3.2%	11.5%	100.0%
Imaginal Confrontation												
Early	9.2%	7.4%	5.8%	35.9%	8.4%	2.6%	9.8%	4.0%	0.9%	0.9%	15.0%	33.8%
Middle	7.9%	4.5%	3.2%	28.3%	11.5%	4.7%	16.7%	0.7%	3.4%	2.9%	16.3%	33.2%
Late	6.2%	4.4%	3.2%	30.0%	9.3%	4.3%	13.0%	0.5%	5.6%	6.2%	17.3%	33.0%
Total	7.8%	5.4%	4.1%	31.4%	9.7%	3.8%	13.1%	1.7%	3.3%	3.3%	16.2%	100.0%
Total												
Early	8.8%	6.7%	3.9%	42.4%	8.3%	3.3%	10.0%	2.6%	0.7%	0.9%	12.6%	32.7%
Middle	6.9%	6.3%	2.3%	37.1%	11.2%	4.1%	12.6%	0.6%	2.5%	3.1%	13.2%	34.3%
Late	4.6%	4.2%	3.2%	37.1%	8.8%	3.1%	11.2%	0.3%	5.9%	5.8%	15.7%	33.0%
Total	6.8%	5.8%	3.1%	38.8%	9.4%	3.5%	11.3%	1.2%	3.1%	3.3%	13.8%	100.0%

Note: NEPCS Code Numbers, 1 = Same Old Storytelling, 2 = Empty Storytelling, 3 = Unstoried Emotion, 4 = Superficial Storytelling, 5 = Competing Plotlines Storytelling, 6 = Inchoate Storytelling, 7 = Reflective Storytelling, 8 = Experiential Storytelling, 9 = Unexpected Outcome Storytelling, 10 = Discovery Storytelling, 11 = No Client Marker

Table 7

Frequency and Proportion of Individual NEPCS Markers by Condition, Stage of Therapy and Treatment Outcome

	1	2	3	4	5	6	7	8	9	10	11	Total
Empathic Exploration												
Unchanged												
Early	10.6%	6.6%	0.9%	57.8%	3.8%	0.9%	10.1%	0.5%	0.9%	0.5%	7.3%	32.3%
Middle	8.1%	13.6%	1.8%	58.4%	5.8%	0.0%	6.3%	0.0%	0.9%	0.0%	5.1%	34.1%
Late	4.1%	5.4%	3.6%	60.3%	8.8%	0.0%	7.3%	0.2%	2.7%	0.7%	6.8%	33.6%
Total	7.5%	8.6%	2.1%	58.8%	6.2%	0.3%	7.9%	0.2%	1.5%	0.4%	6.4%	100.0%
Recovered												
Early	6.1%	5.4%	2.8%	40.6%	12.4%	7.0%	10.3%	1.6%	0.2%	1.2%	12.6%	31.0%
Middle	4.4%	3.2%	1.2%	33.5%	15.2%	6.7%	11.1%	1.0%	2.4%	6.3%	15.0%	36.5%
Late	2.0%	2.7%	2.7%	28.2%	7.8%	4.0%	11.5%	0.2%	9.5%	10.0%	21.5%	32.6%
Total	4.1%	3.7%	2.2%	33.9%	11.9%	5.9%	11.0%	0.9%	4.0%	5.9%	16.4%	100.0%
Imaginal Confrontation												
Unchanged												
Early	5.3%	11.2%	10.1%	41.0%	5.5%	1.8%	8.5%	3.0%	0.2%	0.7%	12.8%	34.2%
Middle	6.3%	4.0%	6.3%	36.5%	11.9%	6.0%	10.0%	0.5%	1.4%	1.2%	16.0%	33.6%
Late	7.5%	3.9%	5.1%	32.0%	11.7%	5.1%	10.7%	0.5%	3.6%	1.9%	18.0%	32.2%
Total	6.3%	6.4%	7.2%	36.6%	9.6%	4.3%	9.7%	1.3%	1.7%	1.3%	15.6%	100.0%
Recovered												
Early	13.0%	3.7%	1.8%	31.1%	11.2%	3.3%	11.0%	5.1%	1.5%	1.1%	17.2%	33.5%
Middle	9.4%	4.9%	0.2%	20.4%	11.2%	3.4%	23.1%	0.9%	5.4%	4.5%	16.6%	32.9%
Late	5.0%	4.8%	1.5%	28.2%	7.2%	3.5%	15.1%	0.4%	7.4%	10.1%	16.6%	33.7%
Total	9.1%	4.5%	1.2%	26.6%	9.9%	3.4%	16.4%	2.1%	4.8%	5.2%	16.8%	100.0%

Note: NEPCS Code Numbers, 1 = Same Old Storytelling, 2 = Empty Storytelling, 3 = Unstoried Emotion, 4 = Superficial Storytelling, 5 = Competing Plotlines Storytelling, 6 = Inchoate Storytelling, 7 = Reflective Storytelling, 8 = Experiential Storytelling, 9 = Unexpected Outcome Storytelling, 10 = Discovery Storytelling, 11 = No Client Marker

Research Questions

A multilevel generalized linear model was used to address the exploratory research questions. The data was negatively binomially distributed, and so a negative binomial model was employed. The Wald χ^2 test was used to analyze the proportions of each individual NEPCS marker and NEPCS subgroup (Problem, Transition, Change) overall, by stage of therapy (early, middle, late), by condition (IC versus EE), and by outcome status (recovered versus unchanged). All p values reported are Holm Sequentially adjusted for multiple comparisons. The broad categories of significant findings will now be presented followed by the specific findings.

In terms of differences in the overall proportion of individual NEPCS markers by condition, the overall Wald χ^2 test was significant for the direct comparison of all individual NEPCS markers. This would indicate at least one NEPCS marker differed in proportion by condition, Wald $\chi^2(12) = 49.14, p < .0001$.

In terms of stage by condition interactions for individual NEPCS markers, the overall test of differences in proportions for individual NEPCS markers by condition over stage was significant, Wald $\chi^2(30) = 46.29, p = .0292$. Specifically, a stage by outcome interaction was found within the Problem Marker subgroup, as there was an overall difference between conditions and stage, Wald $\chi^2(12) = 26.97, p = .0078$, indicating that a stage by condition interaction exists for an NEPCS marker found within the Problem Marker subgroup.

In terms of the difference in proportion of individual NEPCS markers, by stage of therapy, and by outcome for clients in the EE condition, the overall Wald χ^2 test was significant for the direct comparison of all NEPCS markers over the stages. This would indicate at least one NEPCS marker differed in proportion by outcome over stage, Wald $\chi^2(30) = 90.29, p < .0001$, for clients engaged in the EE condition. In addition, differences were also found in the

proportion of individual NEPCS markers, by stage of therapy and outcome for clients in the IC condition. The overall Wald χ^2 test was significant for the direct comparison of all NEPCS markers over the stages. This would indicate at least one NEPCS marker differed in proportion by outcome over stage, Wald $\chi^2(30) = 79.83, p < .0001$, for clients engaged in the IC condition. This difference was found specifically for a NEPCS marker within the Problem Marker subgroup, as there was an overall difference found between outcome and stage for a NEPCS problem marker for clients in the IC condition, Wald $\chi^2(12) = 42.16, p < .0001$. As well as a stage by outcome interaction for NEPCS Change Markers for clients in the EE condition, Wald $\chi^2(6) = 27.85, p = .0001$, and the IC condition, Wald $\chi^2(6) = 25.49, p = .0003$.

Lastly, the overall test of differences in proportions of the NEPCS subgroups by condition was significant, Wald $\chi^2(4) = 11.71, p = .0197$. However, after Holm Sequentially adjusting none of the specific pairwise comparisons were significant. With proportions of 60.5%, 21.7%, and 6.0% respectively across, Problem, Transition, Change Marker subgroup, the EE condition was not significantly different from the IC condition 48.6%, 28.6%, and 6.6% over the same markers. However, significant differences were found for the overall proportion of the NEPCS subgroups (Problem, Transition, Change) by stage of therapy, Wald $\chi^2(9) = 18.02, p < .0350$. The specific significant findings in response to the exploratory research questions will now be discussed.

Research question 1a: was there a significant difference in the proportions of individual NEPCS Problem Markers for clients in EFTT-IC versus -EE? The difference in the overall proportions for Superficial Storytelling was found to be significantly higher for clients in the EE condition (45.2%) compared to clients in the IC condition (31.5%; Wald

$\chi^2(1) = 16.19, p = .0006$; Figure 1). In addition, a significant difference was observed for

Superficial Storytelling in the middle stage of therapy, Wald $\chi^2(1) = 9.34, p = .0270$, with

proportions of 44.7% and 27.5% respectively for clients in the EE condition and clients engaged

in the IC condition (Figure 2).
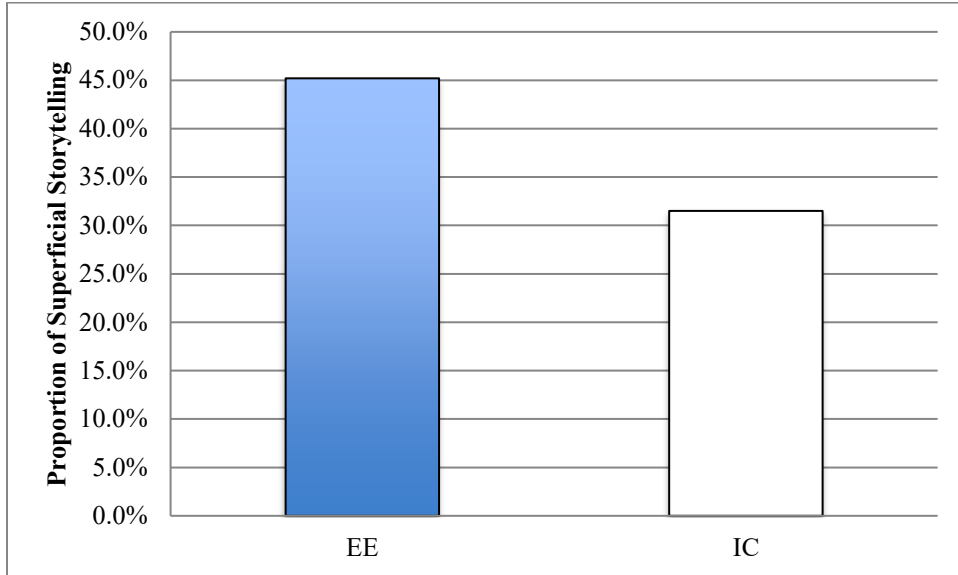
Figure 1. Overall proportion of superficial storytelling by condition. A bar graph comparing the overall proportion of superficial storytelling between empathic exploration condition (solid shaded bar) and imaginal confrontation condition (white bar).
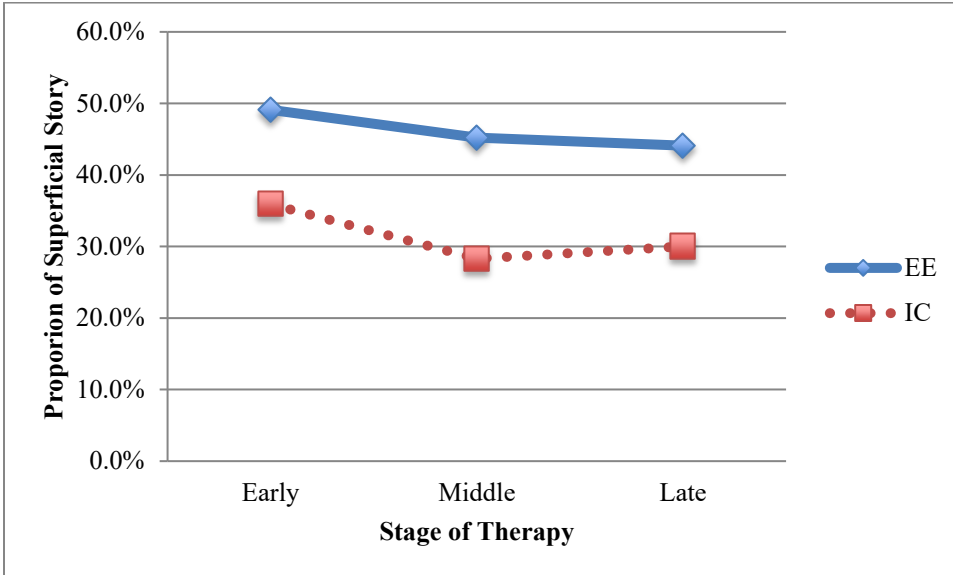
Figure 2. Proportion of superficial storytelling by condition over stage of therapy. A line graph comparing the proportion of superficial storytelling across the early, middle and late stage of therapy between the empathic exploration condition (EE; solid line) and imaginal confrontation condition (IC; dotted line).

There were no significant differences in the proportions of the remaining individual NEPCS Problem Markers (Same Old Storytelling, Empty Storytelling, Unstoried Emotion) for clients engaged in IC versus EE EFTT treatment interventions, overall and by stage of therapy.

Research question 1b: was there a significant difference in the proportion of NEPCS problem marker subgroup as a whole for clients in EFTT-IC versus -EE? Though a significant difference was not found for the overall proportion of the NEPCS Problem Marker subgroup as whole when comparing the IC (48.6%) and EE (60.5%) subgroup, a marginally significant difference was found with no Holm's adjustment, but not close enough to promote difference, Wald $\chi^2(1) = 2.84, p = .0921$. In addition, there were no significant differences in the proportion of the Problem Marker subgroup as a whole between conditions over the stage of therapy, Wald $\chi^2(3) = 6.04, p = .1098$. However, clients in both the IC and EE condition appear to decrease in their use of the Problem Markers across the three stages of therapy. The proportions were 66.0% early, 60.5% middle and 53.4% late for EE, while for the IC group the values were 59.8% early, 45.3% middle, 45.3% late (Figure 3).

Figure 3. Proportion of problem markers by condition over stage of therapy. Line graph

comparing the proportion of Problem Markers between the empathic exploration (condition EE;

solid line) and imaginal confrontation condtion (IC; dotted line) across the early, middle, and late

stage of therapy.

Research question 1c: was there a significant difference in the proportion of individual NEPCS Problem Markers and the NEPCS problem marker subgroup for recovered versus unchanged clients in EFTT-IC versus -EE? A stage by condition by outcome interaction was found for Unstoried Emotion for clients within the IC condition. For the unchanged clients the proportions estimated were 10.1% early, 6.3% middle and 5.2% late, while for the recovered clients the proportions were 1.8% early, 0.2% middle and 1.6% late. The contrast at the early stage of therapy was significant, Wald $\chi^2(1) = 9.41, p = .0237$, and the middle stage, Wald $\chi^2(1) = 11.37, p = .0089$, while the contrast at the late stage was not significant, Wald $\chi^2(1) = 4.58, p = .2918$.
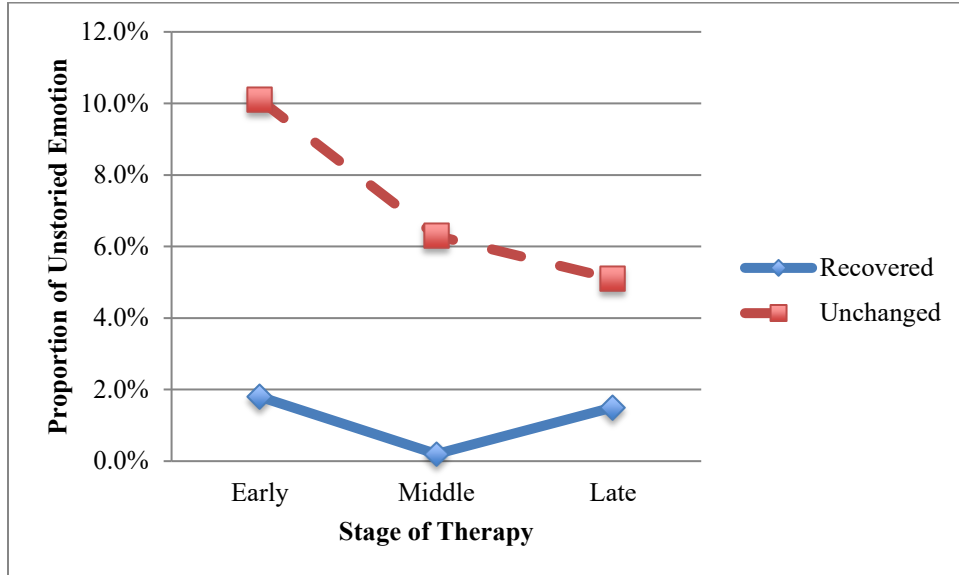
Figure 4. Proportion of unstoried emotion in IC by outcome status over stage of therapy. Line graph comparing the proportion of unstoried emotion between the recovered clients (solid line) and unchanged clients (dotted line) across the early, middle, and late stage of therapy.

There were no significant difference in the proportions of the remaining individual NEPCS Problem Markers (Same Old Storytelling, Superficial Storytelling, Empty Storytelling,) or the Problem Marker subgroup as a whole for clients engaged in IC versus EE EFTT treatment interventions, overall, by stage of therapy, and by outcome.

Research question 2a: was there a significant difference in the proportions of individual NEPCS Transition Markers for EFTT-IC versus -EE clients? There were no significant differences in the proportion of individual NEPCS Transition Markers (Competing Plotlines Storytelling, Inchoate Storytelling, Reflective Storytelling, Experiential Storytelling) for clients engaged in IC versus EE EFTT treatment interventions, overall, and by stage of therapy.

Research question 2b: was there a significant difference in the proportion of NEPCS Transition marker subgroup as a whole for EFTT- IC versus - EE clients? Though no significant difference was found for the overall proportion of Transition Markers for clients in the IC (28.6%) versus EE (21.7%) condition, it should be noted that when unadjusted (no Holm's adjustment), there are significant differences for Transition Markers, Wald $\chi^2(1) = 4.02, p = .0450$.

In addition, the overall of test of differences of Transition Markers by condition and stage of therapy was significant, Wald $\chi^2(3) = 7.97, p = .0465$. At the middle stage of therapy, the proportion of Transition Markers increased for IC clients, and this led to a significant difference between groups. EE clients exhibited proportions of 21.5% early, 22.1% middle and 21.0% late, while the IC clients' proportions estimated at 24.5% early, 34.8% middle and 28.2% late. The marginal difference occurred in the middle stage of therapy, Wald $\chi^2(1) = 5.51, p = .0568$, all other pairwise comparisons were non-significant after adjusting for familywise error.
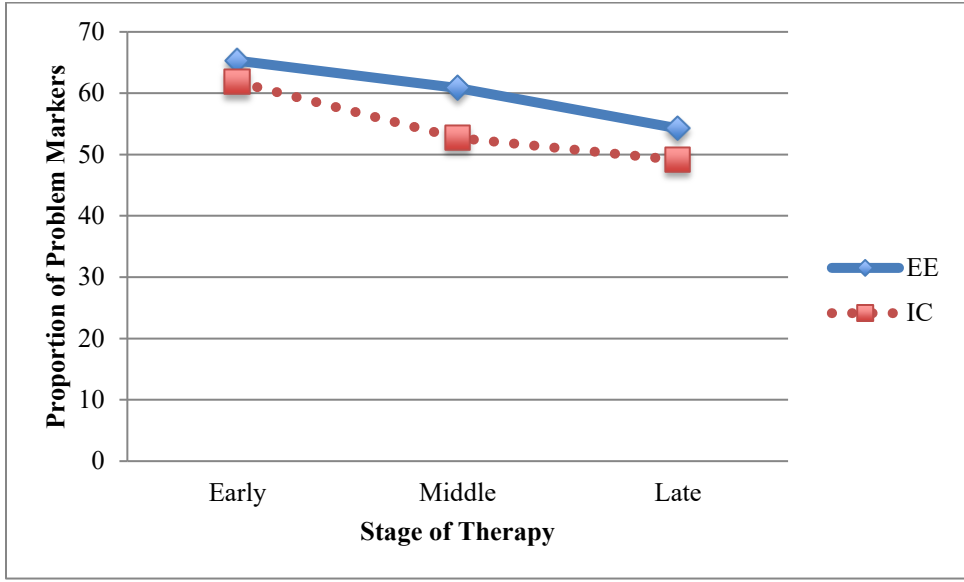
Figure 5. Proportion of transition markers by condition over stage of therapy. Line graph comparing the proportion of transition markers between the empathic exploration (EE; solid line) and imaginal confrontation (IC; dotted line) condition across the early, middle and late stage of therapy.

Research question 2c: was there a significant difference in the proportion of individual NEPCS Transition Markers and the NEPCS Transition Marker subgroup as a whole for recovered versus unchanged clients in EFTT- IC versus -EE? For the Transition Markers, there was an overall difference between outcome and stage, Wald $\chi^2(12) = 41.04, p < .0001$. Specifically, the use of Inchoate Storytelling differed between outcomes for the EE group across the stages. For the unchanged EE clients the proportions estimated were 1.0% early, 0.0% middle and 0.0% late, while for the recovered EE clients the proportions were 7.3% early, 7.0% middle and 3.9% late. The contrast at the middle stage of therapy was significant, Wald $\chi^2(1) = 9.7, p = .0221$, while the contrast at the late stage was marginally significant, Wald $\chi^2(1) = 7.74, p = .0593$.
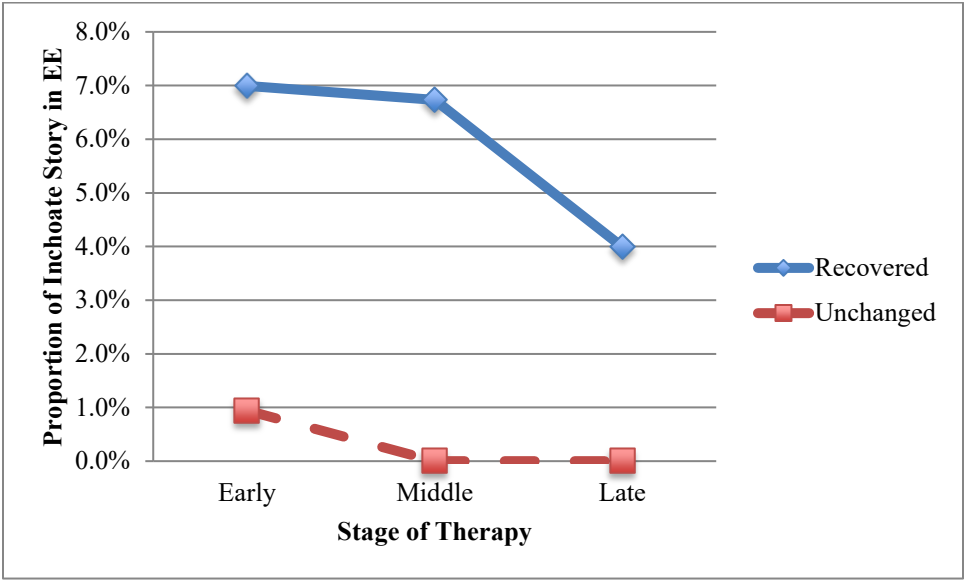
Figure 6. Proportion of inchoate storytelling in the empathic exploration condition by outcome status over the stages of therapy. Line graph comparing the proportion of inchoate storytelling expressed by the recovered group (solid line) and unchanged group (dashed line) in empathic exploration across the earl, middle, and late stage of therapy.

There were no overall differences in the proportion for the remaining NEPCS Transition Markers (Reflective Storytelling, Competing Plotlines Storytelling, Experiential Storytelling) between outcome and stage of therapy for clients in the EE condition.

For clients in the IC condition there were no overall differences in proportion for the individual NEPCS Transition Markers (Reflective Storytelling, Competing Plotlines Storytelling, Inchoate Storytelling, Experiential Storytelling) between outcome and stage, Wald $\chi^2(12) = 16.34, p = .1761$.

Research question 3a: was there a significant difference in the proportions of individual NEPCS Change Markers for EFTT- IC versus -EE clients? There were no statistically significant differences observed for the individual NEPCS Change Markers (Unexpected Outcome Storytelling, Discovery Storytelling) across the early, middle or late stages of therapy between the conditions.

Research question 3b: was there a significant difference in the proportion of NEPCS Change Marker subgroup as a whole, for EFTT-IC versus - EE clients? There were no significant differences in the proportion of the NEPCS Change Marker subgroup between conditions over the stage of therapy, Wald $\chi^2(3) = 2.24, p = .5235$. Clients in both the IC and EE condition appear to be increasing in their use of the Change Markers. The proportions were 1.8% early, 3.9% middle and 8.7% late for the EE group while for the IC group the values were 2.8% early, 5.9% middle, 11.1% late.
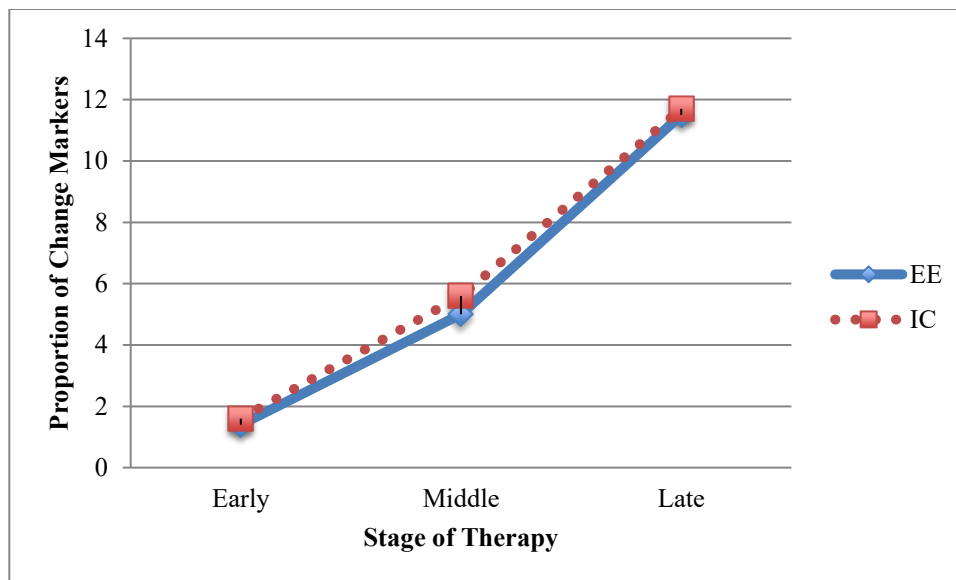
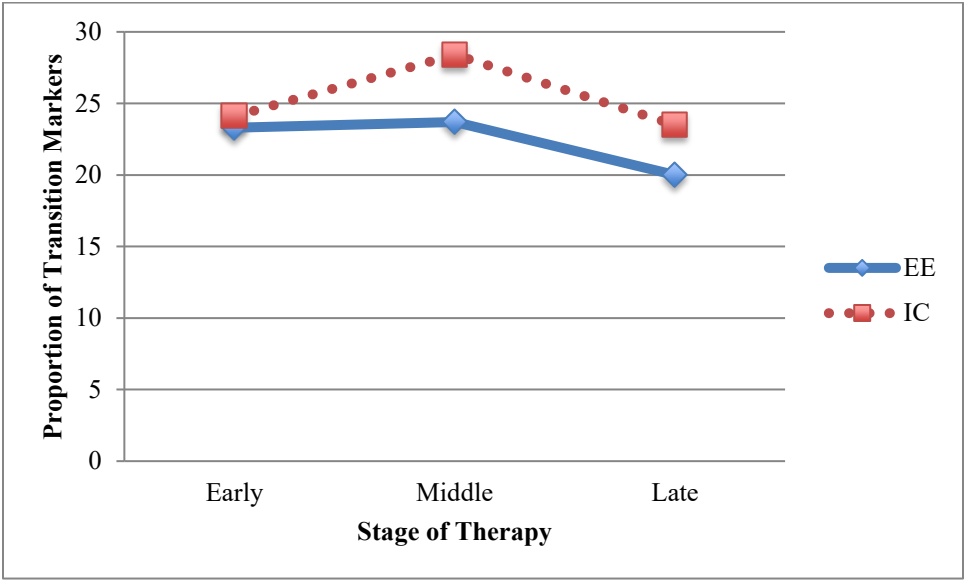*Figure 7*. Proportion of change markers by condition over stage of therapy. Line graph comparing the proportion of change markers between the empathic exploration condition (EE; solid line) and imaginal confrontation condition (IC; dotted line) across the early, middle, and late stage of therapy.

Research question 3c: was there a significant difference in the proportion of individual NEPCS Change Markers and the NEPCS Change Marker subgroup for recovered versus unchanged clients in EFTT- IC versus -EE? The use of Unexpected Outcome Storytelling differed in marginal fashion between outcomes for the EE group across the stages. For the unchanged clients the proportions estimated were 0.9% early, 0.9% middle and 2.7% late, while for the recovered clients the proportions were 0.2% early, 2.3% middle and 10.2% late. The early and middle stage comparisons were not statistically significant, while the contrast at the late stage was marginally significant, Wald $\chi^2(1) = 5.09\ p = .0962$. The use of Discovery Storytelling also differed between outcomes for the EE group across the stages. For the unchanged clients the proportions estimated were 0.5% early, 0.0% middle and 0.7% late, while for the recovered clients the proportions were 1.2% early, 5.9% middle and 10.1% late. Both the contrast at the middle stage of therapy (Wald $\chi^2(1) = 9.54, p = .0121$) and at the late stage were significant (Wald $\chi^2(1) = 8.93, p = .0140$).

In addition, the use of Unexpected Outcome Storytelling differed in marginal fashion between outcomes for the IC group across the stages. For the unchanged clients the proportions estimated were 0.2% early, 1.4% middle and 3.8% late, while for the recovered clients the proportions were 1.5% early, 5.4% middle and 7.4% late. The early stage comparison was not statistically significant, Wald $\chi^2(1) = 3.46\ p = .1882$, the contrast at the middle stage was marginally significant, Wald $\chi^2(1) = 5.52\ p = .0941$, and the contrast at the late stage was not significant, Wald $\chi^2(1) = 2.36\ p = .2493$.

The use of Discovery Storytelling also differed between outcomes for the IC group across the stages. For the unchanged clients the proportions estimated were 0.7% early, 1.2% middle and 2.0% late, while for the recovered clients the proportions were 1.1% early, 4.3% middle and

10.2% late. While the early stage comparison (Wald $\chi^2(1) = 0.38\ p = .5391$) and the contrast at the middle stage were not significant (Wald $\chi^2(1) = 4.69\ p = .1215$), the contrast at the late stage was significant (Wald $\chi^2(1) = 9.09\ p = .0154$).
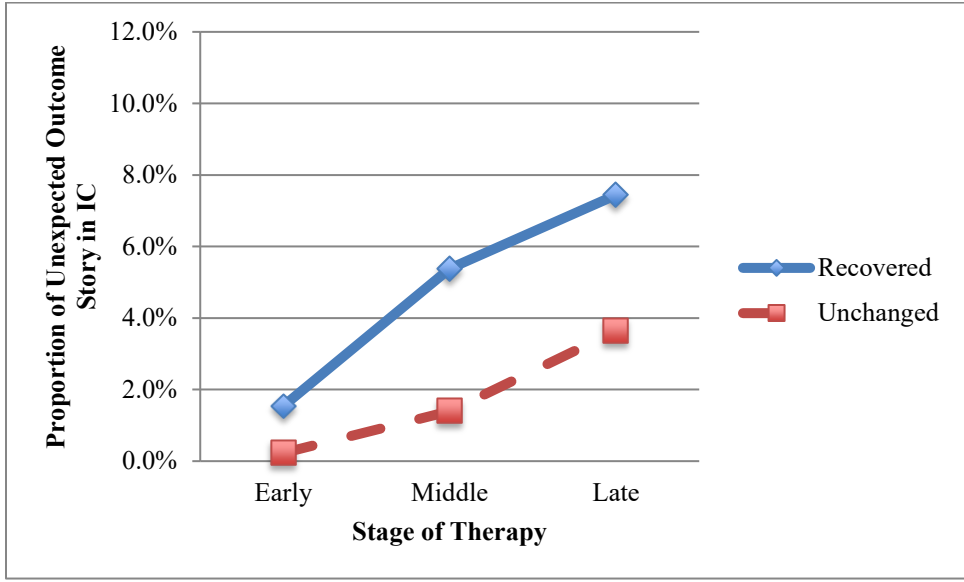
Figure 8. Proportion of unexpected outcome storytelling in IC by outcome status over the stage of therapy. Line graph comparing the proportion of unexpected outcome storytelling between the recovered group (solid line) and unchanged group (dashed line) across the early, middle, and late stage of therapy in the imaginal confrontation condition (IC).

Figure 9. Proportion of unexpected outcome storytelling in EE by Outcome Status over the

Stages of Therapy. Line graph comparing the proportion of unexpected outcome storytelling

between the recovered group (solid line) and unchanged group (dashed line) across the early,

middle and late stage of therapy in empathic exploration (EE).

Figure 10. Proportion of discovery storytelling in EE by outcome status over stage of therapy.

Line graph comparing the proportion of discovery storytelling between the recovered group

(solid line) and unchanged group (dashed line) across the early, middle, and late stage of therapy

in empathic exploration (EE).
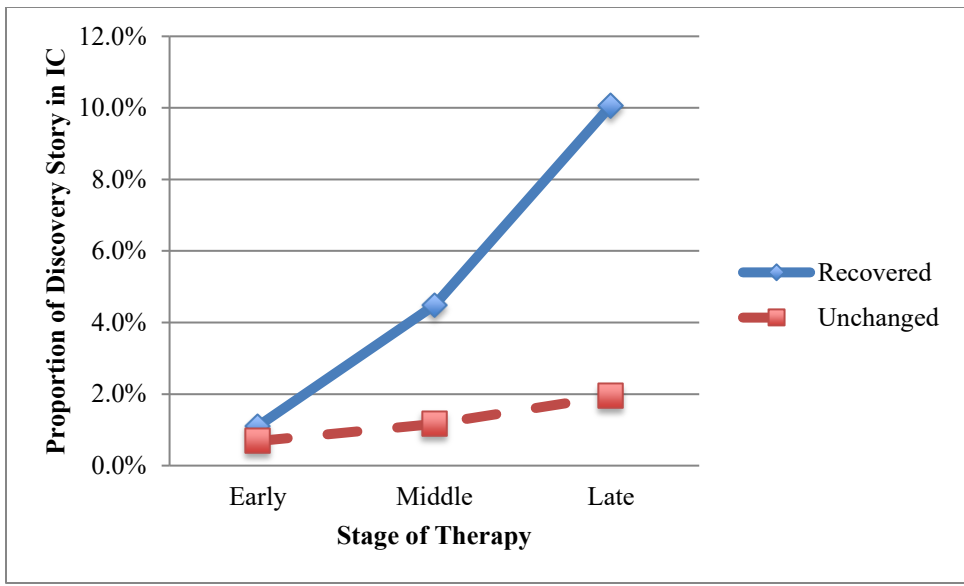
Figure 11. Proportion of discovery storytelling in IC by outcome status over stage of therapy.

Line graph comparing the proportion of discovery storytelling between the recovered group

(solid line) and unchanged group (dashed line) across the early, middle, and late stage of therapy

in imaginal confrontation (IC).

Research question 4a: was there a significant difference in the proportion of No Client Marker for EFTT-IC versus -EE clients? Comparing No Client Marker, the proportions were 10.2% for EE clients versus 16.8% IC clients, Wald $\chi^2(1) = 11.61, p = .0065$. There was an overall difference between condition and stage for No Client Marker, Wald $\chi^2(3) = 12.01, p = .0073$. There were two marginal differences and one significant difference over the stages of therapy. For the early stage of therapy, the proportions of 9.8% EE vs. 15.4% IC were not significant, Wald $\chi^2(1) = 3.10, p = 0.1568$. The difference in proportion at the middle stage of therapy was significant, Wald $\chi^2(1) = 5.91, p = .0452$, with proportions of 9.2% and 17.2% respectively for the EE clients and the IC clients. At the late stage of therapy this difference was marginally significant, Wald $\chi^2(1) = 3.01, p = .0826$, with proportions of 11.7% and 18.0% for the EE clients and the IC clients, respectively.
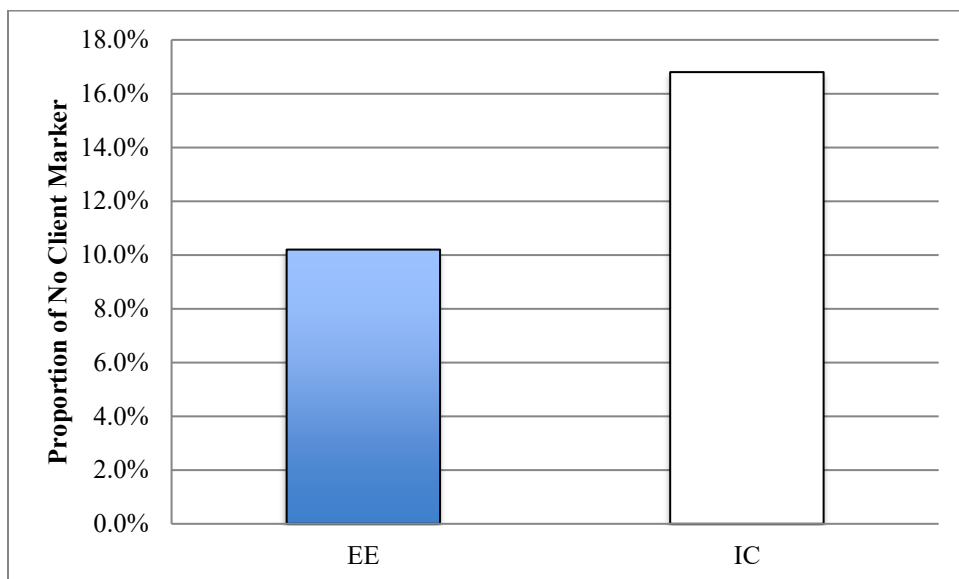
Figure 12. Overall proportion of no client marker by condition. A bar graph comparing the overall proportion of superficial storytelling between empathic exploration condition (solid shaded bar) and imaginal confrontation condition (white bar).
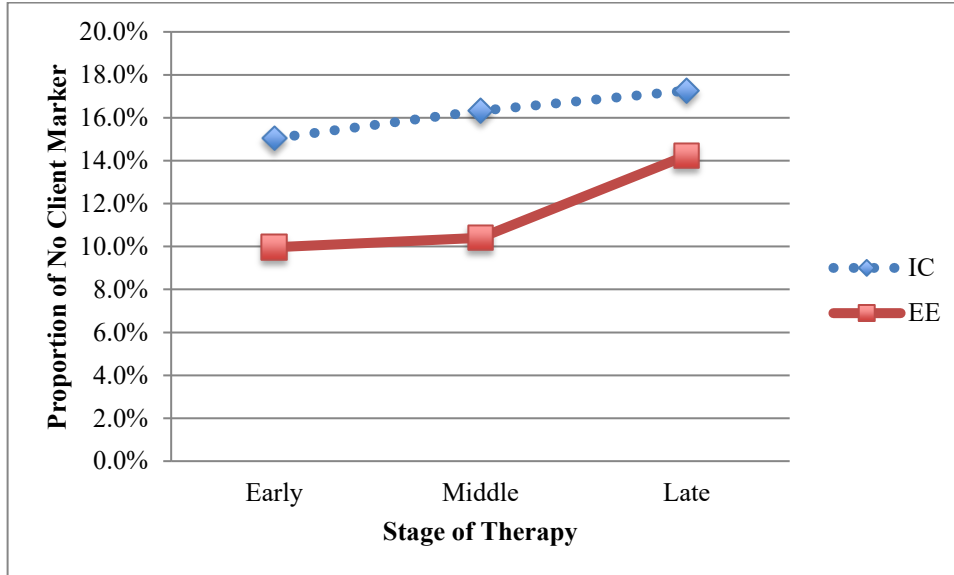
Figure 13. Proportion of no client marker by condition over stage of therapy. Line graph comparing the proportion of no client marker between the empathic exploration condition (EE; solid line) and imaginal confrontation condition (IC; dotted line) across the early, middle, and late stage of therapy.

Research question 4b: was there a significant difference in the proportion No Client Marker for recovered versus unchanged EFTT-IC versus -EE? For No Client Marker, there was an overall difference between outcome and stage in the EE condition, Wald $\chi^2(3) = 10.77, p = .0130$. The use of No Client Marker Story differed in marginal fashion between outcomes for the EE group across the stages. For the unchanged clients the proportions estimated were 7.5% early, 5.3% middle and 7.1% late, while for the recovered clients the proportions were 13.0% early, 15.8% middle and 22.4% late. The early stage comparisons were not statistically significant, while the middle stage and late stage contrasts were marginally significant, Wald $\chi^2(1) = 4.41 \; p = .0716$ and Wald $\chi^2(1) = 4.95 \; p = .0784$, respectively. For No Client Marker, there was no overall difference between outcome and stage for clients in the IC condition, Wald $\chi^2(3) = 0.73, p = .8662$
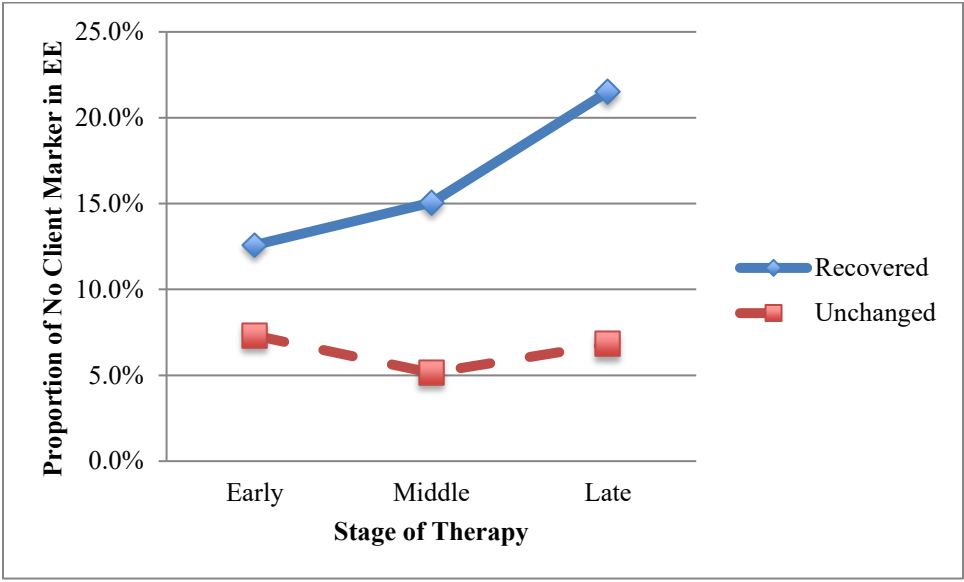
Figure 14. Proportion of no client marker in EE by outcome status over stage of therapy. Line graph comparing the proportion of no client marker between the recovered group (solid line) and unchanged group (dashed line) across the early, middle, and late stage of therapy in empathic exploration (EE).
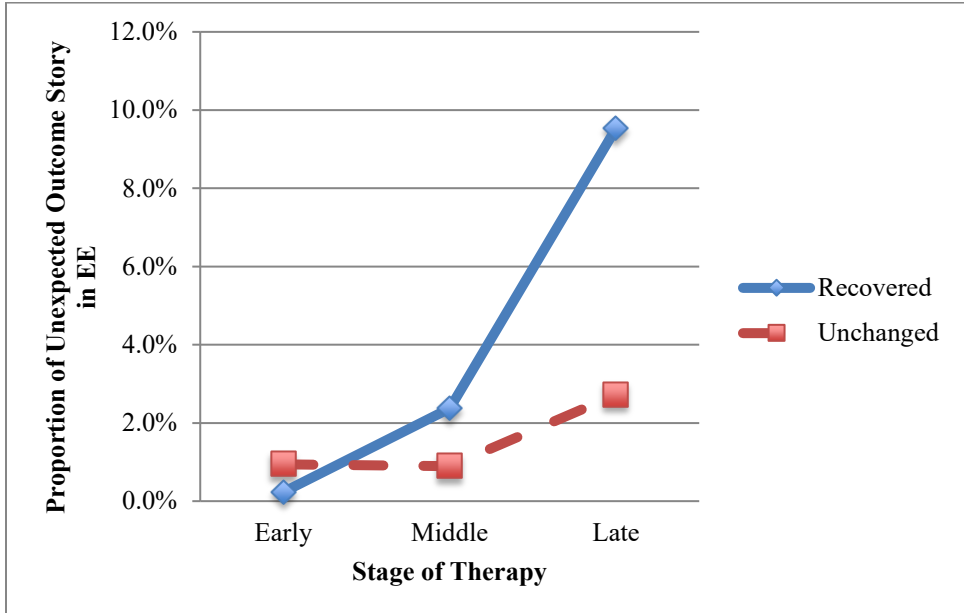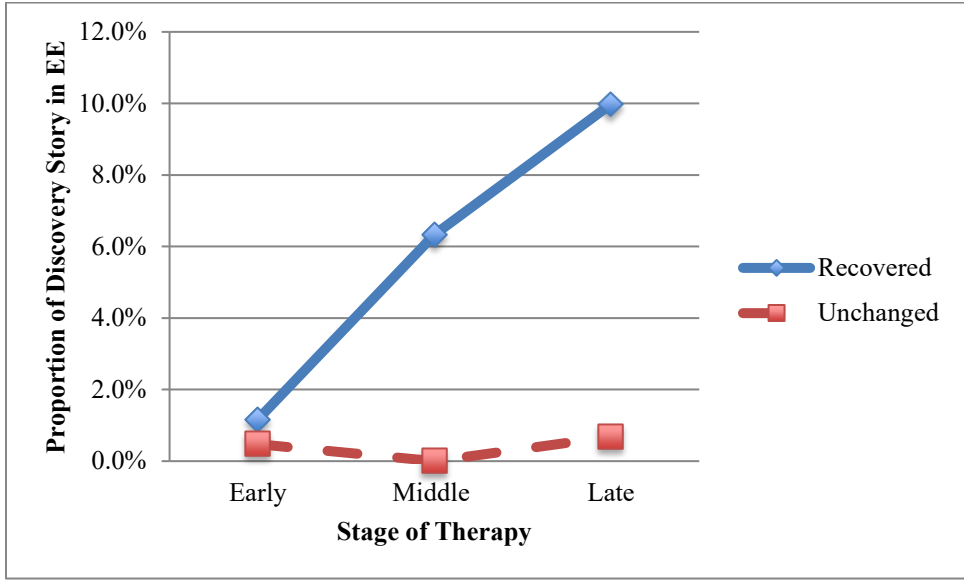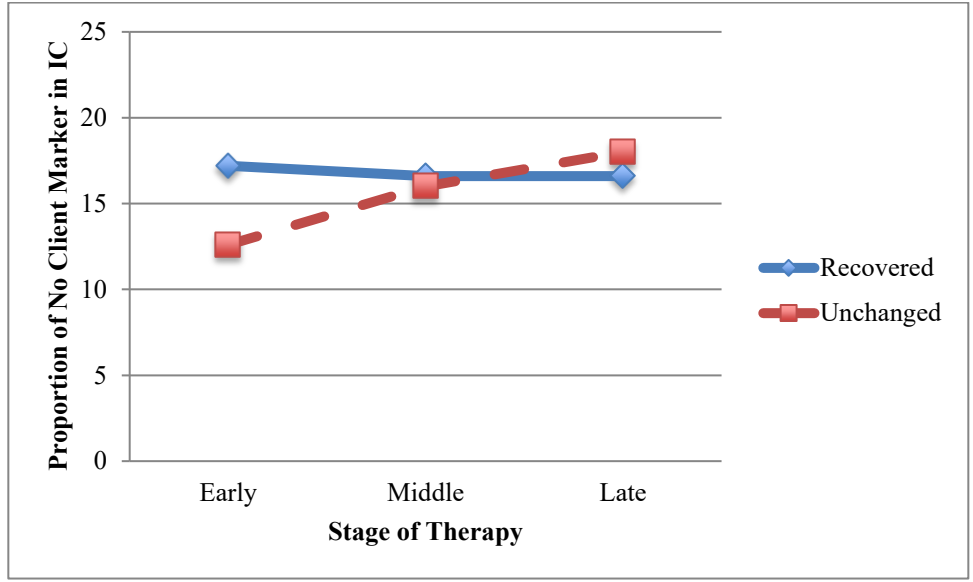
Figure 15. Proportion of no client marker in IC by outcome status over stage of therapy. Line graph comparing the proportion of no client marker between the recovered group (solid line) and unchanged group (dashed line) across the early, middle, and late stage of therapy in imaginal confrontation (IC).

Discussion

The current study is the first to examine the proportion and pattern of narrative and emotion integration processes in the context of EFTT employing two re-experiencing procedures (EFTT; Paivio & Pascual-Leone, 2010): Imaginal Confrontation and Empathic Exploration. The present study was an extension of a previous application of the NEPCS to a complex trauma EFTT sample (Bryntwick, 2016). The current study was designed to investigate differences in an increased sample between the IC and EE EFTT conditions, facilitate detection of significant results by increasing the statistical power and improve generalizability of findings. The sample for the current study consisted of eight EFTT clients in the IC condition, four recovered and four unchanged, and eight EFTT clients in the EE condition, four recovered and four unchanged.

This study not only extended the application of the NEPCS to a larger EFTT complex trauma sample, but also added to the literature investigating differences in narrative and emotion processes between EFTT-IC and EFTT-EE overall, over the course of treatment and in relation to treatment outcome. This study is significant not only in identifying productive process in EFTT, but also provides EFTT clinicians with an heuristic, process-diagnostic map of productive process unique to the primary re-experiencing intervention (IC versus EE) used in EFTT. As stated previously, IC is a powerful, gestalt-derived imaginary dialogue used to access trauma memories, making them available for exploration and change and new affective meaning (Paivio & Shimp, 1998). It creates an experientially alive context in which the client is encouraged to explore thoughts, feelings, needs and bodily experience. Due to the intensity of this re-experiencing intervention, many clients initially refused or had difficulty engaging in the intervention (Paivio et al., 2001). As such, the EE intervention was developed as an alternative to IC. It follows the same principles and model of resolution, however, thoughts and feelings are

expressed to the therapist. An RCT was conducted to compare the efficacy of EFTT with both the IC and EE intervention, and results revealed that EFTT with both interventions are similar in terms of treatment efficacy (Paivio et al., 2010).

These results were somewhat surprising as the researchers expected EFTT-IC to have advantages over EFTT-EE, as IC is considered to be a more directive, emotionally evocative approach than EE (Paivio et al., 2010). The advantage of IC was expected given that the literature has found that emotional arousal and experiencing are key processes necessary for new meaning-making and productive therapy process (Goldman et al., 2005; Greenberg & Malcolm, 2002; Greenberg & Paivio, 1997; Pascual-Leone & Greenberg, 2007). As such, a series of studies have been conducted to examine how EFTT-IC and EFTT-EE are similar and different in regard to productive therapeutic processes such as emotional arousal, and experiencing and how these processes contribute to trauma recovery in the context of these two re-experiencing interventions (Chagigiorgis, 2009; Ralston 2006). Results of these studies demonstrated significant differences between EFTT-IC and EFTT-EE in terms of these processes. The current study was designed to extend these findings further, as the NEPCS is designed to take an integrative approach to identify and capture client processes such as verbal articulation of internal experience, emotional arousal and creation of new meaning. The investigation of narrative and emotion processes in EFTT is significant as research to date has found that narrative and emotion processes are essential for new meaning-making and good therapeutic outcome, especially in a trauma sample (Esterling et al., 1999; Mundorf & Paivio, 2011; Paivio & Angus, 2017; Pennebaker & Stone, 2002). Furthermore, this study fills a gap in the literature as the role of narrative and emotion integration in the context of the IC and EE intervention in EFTT has yet to be examined.

As such, the purpose of the current study was to expand the literature on EFTT-IC and EFTT-EE and investigate the narrative and emotion integration pathways in these two versions of EFTT. More specifically, differences in the proportion and pattern of NEPCS subgroups (Problem, Transition, Change) and individual NEPCS markers, between clients in the IC and EE condition of EFTT were examined by stage of therapy (early, middle, late), and by outcome status (recovered vs. unchanged). The following discussion will highlight the significant research findings found through exploratory statistical analysis, along with interesting, non-significant trends.

These results are organized by summarizing findings established first for the EFTT-IC treatment condition followed by EFTT-EE treatment conditions for NEPCS Problem Marker, NEPCS Transition Marker, NEPCS Change Marker subgroups and No Client Marker. Results are presented according to findings that emerged for each NEPCS marker and subgroup overall, by stage and by treatment outcome. A discussion regarding the narrative-emotion process marker findings comparing EFTT-IC and EFTT-EE follow the summary of findings within each subgroup. These findings are discussed in relation to the literature on EFTT, trauma, experiential treatment, and previous applications of the NEPCS (1.0 and 2.0) to various clinical samples. The conclusions and implications of these findings for clinical practice are explored, the limitations of the current study are addressed, and the directions for future research are discussed.

NEPCS Problem Markers: EFTT-IC vs. EFTT-EE

A negative binomial model was employed to determine whether clients in the IC condition and clients in the EE condition of EFTT significantly differed in the overall proportion, proportion by stage of therapy and by treatment outcome for individual NEPCS Problem Markers and the NEPCS Problem Marker subgroup. Problem Markers are identified as under-

regulated, over-regulated, and/or undifferentiated emotional states that are often expressed through incoherent, rigid, repetitive, and maladaptive self-narratives (Angus et al., 2017). Problem Markers are considered to reflect unproductive narrative and emotion processing that may be associated with maintenance of clinical problems and unchanged outcome status at post-treatment. The NEPCS Problem Markers consist of Same Old Storytelling, Empty storytelling, Unstoried Emotion, and Superficial Storytelling.

In terms of the NEPCS Problem Marker subgroup, results from the analysis revealed that clients in the IC condition evidenced a lower overall proportion of the Problem Marker subgroup when compared to clients in the EE condition (48.6% vs. 60.5% respectively) that was marginally significant (Figure 3).

Furthermore, a significantly lower overall proportion of Superficial Storytelling was found for clients in the IC condition compared to clients in the EE condition (31.5% vs. 45.2%; Figure 1), as well as a significantly lower proportion of Superficial Storytelling at the middle stage of therapy for IC clients compared to EE clients in the middle stage of therapy (427.5%vs. 4.7%; Figure 2). Superficial Storytelling is defined as the articulation of events or hypothetical ideas related to the self and others, in a vague and abstract manner, with little focus on one's internal experience. The client approaches therapy content from a distanced, disengaged perspective, with a skimming quality in terms of depth of reflection and meaning-making. This marker is characterized as a Problem Marker as it prevents deeper reflection on one's internal experience, thus limiting the process of new meaning-making of the self, others, and the world.

Lastly, a significantly higher proportion of Unstoried Emotion was found for unchanged clients in the IC condition by stage of therapy compared to recovered IC clients. Specifically, there was a significantly higher proportion of Unstoried Emotion for the unchanged clients in the

IC condition compared to recovered clients in the IC condition in the early (10.1% vs. 1.8%), and middle (6.3% vs. 0.2%) stage of therapy (Figure 4). This suggests that there was no significant difference in the proportion of Unstoried Emotion between recovered and unchanged EE clients overall and by stage of therapy. Unstoried Emotion is identified when a client experiences undifferentiated, under-regulated, or over-regulated emotional arousal that is not connected to a coherent narrative. A client in Unstoried Emotion has difficulty modulating their emotional experience when faced with intense emotional arousal. Therefore, they may engage in emotional over-control by shutting down and numbing their emotional experience (e.g. silence), or emotional over-flow in which the client cannot contain their affect, which in turn interferes with the expression of a coherent narrative (e.g. sobbing uncontrollably).

Discussion of NEPCS problem marker findings: EFTT-IC vs. EFTT-EE. The lower proportion of the Problem Marker subgroup for clients in the IC condition compared to the EE condition, indicated that the EE condition expressed a higher proportion of the Problem Marker subgroup compared to clients in the IC condition. This could be explained by taking a closer look at the descriptive statistics. Specifically, of all the Problem Markers (Same Old Storytelling, Empty Storytelling, Superficial Storytelling, and Unstoried Emotion), clients in the EE condition only had a higher overall proportion than IC clients for Empty Storytelling (6.1% vs. 5.4%, non-significant) and Superficial Storytelling (46.1% vs. 31.4%, significant). The significant difference in the proportion of Superficial Storytelling (discussed below) may have inflated the overall proportion of the Problem Marker subgroup for the EE clients. Thus, the finding that EE clients had a higher proportion of the Problem Marker subgroup may not reflect the narrative-emotion process pathway as a whole, but may be an artifact of the significantly higher proportion of Superficial Storytelling in EE.

The significantly lower proportion of Superficial Storytelling associated with the IC condition may be a function of the nature of the IC intervention. Perhaps the empty chair used during the IC intervention may facilitate structure within the session, and serve as a stimulus to keep the client emotionally aroused, engaged, and in-contact with their internal experience and trauma focus. Without the use of the chair, however to evoke emotional arousal in EE, the therapist relies on empathic reflections as the primary intervention. This may allow clients to remain emotionally distant through abstract and vague expressions, as the EE therapist engages in the dance between following and leading the client through empathic responding. This is supported by Ralston's (2006) finding that EE clients had lower modal emotional arousal ratings over the course of therapy compared to IC clients. Superficial Storytelling is defined by low emotional to moderate emotional arousal and minimal self-reflection, and thus this marker may capture the lower emotional arousal found by Ralston.

Trauma-focused interventions, such as EFTT, can be challenging for the client due to the trauma-related memories and feelings that are focused on within session. Clients may be more likely to suppress the experience of emotions associated with psychological distress (e.g. guilt, shame, sadness) so that they feel flat or numb (Pascual-Leone et al., 2016). Evoking emotional arousal in a client who is suppressing or avoiding affective experience requires therapist skill and training (Pascual-Leone et al., 2016), especially without the use of the chairs in IC as a stimulus. Therefore, EE therapists are faced with the challenge of helping the client attend to, approach, access and tolerate distressing emotions which the client may not be experiencing due to emotional over-control. Without the use of the chair in IC to activate client's experience in session, the EE therapist must rely on their skill in empathic reflections to increase the client's awareness of their experience. Thus, it can be surmised that therapist competence in EE may

predict client experiencing and engagement in EE. Perhaps therapists who are not explicitly trained to engage affective arousal can also become anxious and abandon the task, which in turn may reinforce client suppression of negative affect (Pascual-Leone et al., 2016). As cited by Paivio and colleagues (2010), though therapists demonstrated moderate levels of competence in the IC and EE intervention, therapist's competence to EE was slightly lower than IC. This provides further support for the explanation that EE is a more challenging intervention for therapists to demonstrate to competence in.

In regard to the condition by stage interaction for Superficial Storytelling, clients may be more likely to turn to emotionally distant forms of expression during the working phase of therapy, which in EFTT typically involves the challenging process of reducing fear and shame (phase 2), and resolving trauma and attachment injuries (phase 3). During EFTT phase two and three, the client is encouraged to turn inward to gain greater access and clarity of affective experience, views of self, and others and promote the experience and full expression of these painful emotions and beliefs (Paivio & Pascual-Leone, 2010). Clients who have difficulty engaging in the task and goals of Phase 2 may avoid, minimize and gloss over their experiences (Paivio & Pascual-Leone, 2010), perhaps by engaging in Superficial Storytelling in the middle stage of therapy.

These results are supported by Chagigiorgis (2009) finding that self-reported distress peaked for clients in the EE condition at the middle phase of therapy and then significantly declined by the late stage of therapy. She suggested that the working phase of therapy involves in-depth exploration of trauma material that may have been defended against, as it is likely to evoke distress or emotional arousal. Perhaps clients in the EE condition regulate the heightened levels of distress in the middle, working phase of treatment, by engaging in more vague, distant

verbal expressions captured as Superficial Storytelling. In addition, Chagigiorgis also found that clients in the EFTT-EE condition engaged in trauma exploration using the EE intervention more frequently than the IC intervention. As such, EE clients may engage in Superficial Storytelling more often in order to regulate their emotions over the course of therapy, and especially at the middle phase of therapy when in-depth trauma exploration occurs. Boritz (2012) also hypothesized that Abstract/Superficial Storytelling may serve as an avoidance function for unchanged clients in the middle stage of therapy, a period often referred to as the "working phase" (e.g., Angus & Greenberg, 2011), during which the client and therapist work through the presenting concerns of the client in a direct manner. Clients may attempt to protect their self-image or emotional well-being by remaining vague and impersonal about topics that may be painful or threatening in some way.

It has been suggested that overgeneral, vague, and intellectualized self-narratives may serve to disconnect a client from their internal experience among clients (Macaulay, 2014), and this may be the case especially among clients with a history of childhood maltreatment (Schonfeld, Ehlers, Bollinghaus & Rief, 2007; Valentino, Toth & Cicchetti, 2009). It is understood that chronic avoidance, especially in complex trauma can perpetuate trauma disturbances (Bryntwick, 2016; Foa, Huppert & Cahill, 2006). Thus, the current findings suggest that clients engaged in EE are more likely to engage in avoidance that interfere with trauma recovery. However, this relationship was not supported in the current study as the significantly higher proportion of Superficial Storytelling for EE clients was not associated with outcome status. This is further verification that EE and IC have varying narrative-emotion processing pathways, despite similarities in treatment efficacy.

The results of Superficial Storytelling in the current study was not significantly associated with outcome status, however, a closer look at the descriptive results of Superficial Storytelling revealed that unchanged clients in both the IC and EE condition had a higher (non-significant) proportion of Superficial Storytelling compared to the recovered clients. As stated, this difference was not significant either overall or across stage. Similarly, Macaulay (2014) found a non-significant trend for unchanged clients to have a higher proportion of Superficial Storytelling overall, compared to recovered clients. The absence of an outcome effect, or stage by outcome effect for Superficial Storytelling for the current study may be surprising due to findings from prior NEPCS findings. Interestingly, previous applications of the NEPCS 1.0 to a depressed sample (Boritz et al., 2014) and NEPCS 2.0 to an EFTT complex trauma sample (Bryntwick, 2016) found a relationship between the proportion of Superficial Storytelling/Abstract Story and unchanged outcome status, which was not evident in the current study. Specifically, Boritz and colleagues (2014) found a higher proportion of Superficial Storytelling (referred to as Abstract Story in the NEPCS 1.0) in the middle stage of therapy for unchanged clients compared to recovered clients. Similarly, Bryntwick (2016) found that unchanged clients expressed a significantly higher proportion of Superficial Storytelling at the middle and late stage of therapy compared to recovered clients. The lack of significance in relation to treatment outcome for the current study, in contrast to Bryntwick's (2016) finding could be due to differences in the make-up of the sample. Bryntwick's sample consisted primarily of EE clients (9 clients) than IC clients (3 clients). Within her unchanged sample, two of the six clients were IC clients. The combination of unchanged IC and EE clients may have contributed to a preponderance of Superficial Storytelling due to the imbalanced nature of her

sample. Furthermore, the sample in the current study was distinct in regard to condition, and thus the current findings may be more representative of EFTT client process in each condition.

The absence of a relationship between outcome status and Superficial Storytelling may suggest that the occurrence of Superficial Storytelling may not be an indicator of outcome status in EFTT, rather, it may be an indicator of how emotionally evocative a treatment intervention is. Further, Superficial Storytelling may not suggest a lack of engagement with trauma material, as Paivio and colleagues (2010) and Chagigiorgis (2009) found no significant difference between IC and EE in self-reported and observer rated levels of emotional engagement and engagement to trauma material. This suggests that though clients in the EE condition may utilize Superficial Storytelling as a form of emotional avoidance, they also engage in experiential material through other narrative-emotional expression (e.g. Inchoate Storytelling). Perhaps clients articulate Superficial Stories as an emotion regulation strategy as they move between approach and avoidance of distressing emotion and memories. Boritz (2012) noted that the presence of emotionally avoidant strategies may not be maladaptive in itself, however it is the over-reliance of these strategies that may indicate poor therapeutic process. Bryntwick (2016) stated that avoidance of internal experience can provide a sense of safety for clients who are plagued by unpleasant thoughts and intrusive memories of past experiences. This may be a strategy EE clients engage in overall, especially during the working phase of therapy as coping with overwhelming affect and distressing memories. The EE intervention was designed to be a less emotionally evocative intervention than IC, thus it makes sense that clients in the EE condition would engage in more superficial, over-general storytelling, perhaps as an emotion modulation strategy (Ehring & Quack, 2010; Raes, Hermans, de Decker, Eelen & Williams, 2003).

In regard to differences in NEPCS Problem Markers for IC versus EE clients by treatment outcome, there was a significantly higher proportion of Unstoried Emotion for unchanged clients in IC at the early and middle stage of therapy compared to recovered IC clients. Descriptive results revealed that unchanged clients in the IC condition had a higher proportion of this marker compared to the recovered IC clients, whereas recovered and unchanged clients in the EE condition had similar proportions of Unstoried Emotion. In fact, unchanged IC clients had approximately six times more Unstoried Emotion than recovered IC clients.

This finding was not surprising, as with many re-experiencing procedures, confronting perpetrators of abuse and neglect in the IC intervention can be too emotionally evocative and overwhelming for the client (Paivio & Pascual-Leone, 2010). As such, engagement in the IC intervention is expected to evoke greater emotional arousal, which among clients with poorer emotion regulation capacities may be captured as Unstoried Emotion. Clients who are unable to cope with the intense emotional arousal, may respond by emotional over-control and under-control, thus diminishing their ability to access, explore, process, and make-sense of the rich network of their emotion scheme for a new understanding of the self, others, and the traumatic events, possibly resulting in an unchanged outcome status at post-treatment.

Emotional over-control, or suppression of emotional experience, is considered to be a maladaptive emotion regulation strategy often observed in trauma survivors (Ehring & Quack, 2010). As noted by Paivio & Nieuwenhuis (2001), long-term disturbances related to childhood maltreatment are associated with chronic emotional dysregulation in the form of emotional overcontrol and undercontrol. Powers, Cross, Fani and Bradley (2015) found that an inability to use emotion regulation strategies along with alexithymia are predictive of dissociation (i.e.

disengagement, depersonalization, derealization, emotional constriction, memory disturbance, and identity dissociation) among adults exposed to multiple traumas in their lifetime. Pascual-Leone, Paivio and Harrington (2016) theorized that in order to overcome emotional avoidance, a client must first approach emotion by attending to their emotional experience, then allow and tolerate being in contact with the aroused emotion. Exposure procedures, such as IC, are intended to activate emotion structures that are associated with the trauma (e.g. fear) so that the maladaptive components are available to be modified. The IC intervention is considered to be a powerful tool that involves explicitly work towards overcoming emotional over-control, and facilitates emotional expression and resolution of trauma related issues by evoking trauma material, such as shame and fear (Paivio & Shimp, 1998). Pascual-Leone and Greenberg (2007) stated that global distress, fear, shame and negative evaluations can be painful and remain stagnant, or could be developed forward into a healthy, emotionally differentiated emotional experience contributing to resolution. Perhaps the high proportion of Unstoried Emotion in the current study captures stagnant, maladaptive, undifferentiated global distress, as IC clients engage in emotional over-control or under-control, resulting in poor outcome. This indicates that EFTT-IC may not be as effective for clients who are unable to tolerate emotional intensification due to the intensive re-experiencing technique. In fact, Paivio and colleagues (2001) note that EFTT-IC is for clients who have minimum capacity to regulate intense negative affect, however, may not be recommended for individuals with severe emotion dysregulation problems. Thus, the unchanged clients in the IC condition may not have been able to effectively regulate their emotional arousal, and contextualize, process and reflect on available emotional information, possibly resulting in poor outcome status at treatment termination.

As such, it appears that processes such as client emotional arousal, emotion regulation, and verbal articulation of internal experiences are important, interrelated processes necessary for productive therapeutic outcome. This has been found to be especially true for experiential treatments of trauma and depression. Ralston (2006) qualitatively examined client utterances and found that when high emotional arousal was present, experiencing levels were lower for EFTT-IC clients. Ralston understands this to be consistent with experiencing theory (Goldman et al., 2005; Pos et al., 2003). Experiencing is the exploration and verbal symbolization of emotions and construction of new meaning, and theory posits that intense emotional arousal is required to evoke maladaptive material associated with the trauma story and make it available for reprocessing. However, decreased emotional arousal is necessary for higher levels of experiencing to occur because cognitive processes are used to explore and make sense of, and create new meaning. As stated earlier, Carryer and Greenberg (2010) found that clients who spend 25% of a session in moderate to highly aroused emotional expression predicted good treatment outcome over and above the working alliance in a depressed sample. Whereas, lower or higher emotional arousal predicted poor outcome. Thus, emotional arousal alone does not lead to productive therapy, rather, high emotional arousal is an entry point for experiencing and must subside in order to allow for productive exploratory process to occur (Greenberg & Paivio 1997; Pascual-Leone & Greenberg, 2007; Goldman et al., 2005). Taken together, it is the processing of emotional material in a reflective manner while regulating emotional arousal to an optimal, moderate level that is associated with a greater reduction in clinical symptoms, as opposed to engaging in emotional over-control (low arousal, emotional avoidance) and under-control (high arousal; Greenberg, Auszra, and Herrmann, 2007; Missirlian, Toukamanian, Warwar & Greenberg, 2005).

Studies have looked specifically at the association between emotional arousal and verbal articulation of experience. The findings by Boritz and colleagues (2008; 2011) discussed earlier, support this relationship as high levels of ABM narrative specificity and high levels of expressed emotional arousal differentiated between recovered versus unchanged clients in a depressed sample. Similarly, a study examining how emotional arousal changed over the course of three expressive writing tasks found that there was an overall decline in emotional arousal as the client engaged with painful traumatic content through the writing task (Pascual-Leone, Yeryomenko, Morrison, Arnold, & Uelo, 2016). In addition, a series of studies by Paivio and colleagues also underscored the importance of verbally articulating emotional experiences. Paivio and McCulloch's (2004) study revealed that difficulty identifying and verbally expressing emotional experiences, mediated the relationship between childhood maltreatment and self-harm in a sample of undergraduate women. Furthermore, Mundorf and Paivio's (2011) analysis of pre- and post-EFTT written trauma narratives in relation to trauma disturbances found a relationship between narrative incoherence at pre-treatment and more trauma symptoms at post-treatment. However, clients who had the capacity to verbally express trauma-related feelings and meanings at therapy onset had a greater abuse resolution at post-treatment.

This is supported by the findings in the current study that recovered IC clients expressed a lower proportion of Unstoried Emotion at the outset of therapy, and had a significantly lower proportion of Unstoried Emotion overall. This may suggest that recovered clients are better able to regulate, articulate and differentiate their internal experiences than unchanged clients. It is important to note, however that the ability to articulate internal experience in not a fixed process in clients. Goldman and colleagues (2005) found that though some individuals may be predisposed to higher levels of experiencing, which was associated positively with treatment

outcome, the depth of experiencing was influenced by the therapy process. These authors note that experiencing is not a trait variable, as clients were amenable to deeper experiencing based on what occurred during treatment. Taken together, these findings suggest that an important dimension of trauma recovery is a client's ability to modulate emotional arousal, turn inward and express their internal experience (e.g. thoughts, emotions) in narrative form. Moreover, markers such as Unstoried Emotion, may help identify clients with emotion regulation difficulties and alert therapists to engage in therapeutic intervention that facilitate down- or up-regulation of arousal, and symbolization of client experience for increased experiencing and narrative and emotion integration.

Furthermore, the stage by outcome effect makes sense at the early and middle stage of therapy given the strategic use of the IC intervention over the course of therapy. Specifically, the IC intervention is introduced at the early stage of therapy (session 4), once a therapeutic alliance has been cultivated (Phase 1). The purpose of this introduction is to begin the process of in-depth trauma exploration that will continue into the middle stage of therapy (phase 2 and 3). The second phase of therapy focuses on exploring and reducing self-related difficulties that interfere with engagement in the IC intervention, such as guilt and self-blame. This process, in conjunction with the IC procedure during the middle phase of therapy moves beyond the focus on developing an alliance, and pushes clients to directly address trauma material and self-related difficulties. Clients who have difficulty experiencing, regulating and working with this emotionally evocative intervention, may express a preponderance of Unstoried Emotion (unchanged clients), in comparison to clients who are able to modulate their emotions at a level allowing for client engagement to the task (recovered clients), consequently resulting in a significant difference in the proportion of Unstoried Emotion at the early and middle stage of

therapy. At the late stage of therapy (Phase 4) the client is expected to be better able to confront the imagined other during the IC procedure now that self-related disturbances have been explored and reduced, thus possibly resulting in lower emotional intensity and arousal. During this phase, the focus is on resolution, integration of therapy experiences and termination, as IC is used to support the emergence and articulation of a new, adaptive understanding of the self, others, the world – in essence, a revised self identity narrative – which may be less emotionally evocative.

The lack of findings in the late stage of therapy has been supported by Paivio and colleagues (2001), who suggested that a habituation process may occur in EFTT with IC, in which repeated exposure to trauma-related feelings and memories over the course of therapy gradually reduces distress, and in turn, clients may be better able to engage in the task. As such, it may not be surprising that there were no significant differences in the occurrence of Unstoried Emotion at the late stage of therapy between recovered and unchanged IC clients. Furthermore, Ralston's (2006) comparison of EFTT with IC to EFTT with EE found that modal emotional arousal levels were significantly higher in IC than EE condition at the early stage of therapy and decreased by the late stage of therapy. Whereas emotional arousal developed more slowly for EE clients from the early and middle stage of therapy until they were equal with the IC clients at the late stage of therapy. Ralston believed that the significantly higher levels of emotional arousal in IC compared to EE at the early stage of treatment can be explained by the gentler and less emotionally evocative intervention of EE compared to IC. In addition, Ralston also hypothesized that the lower arousal at the late stage of therapy is due to the client's desensitization to the trauma material and trauma resolution at the late stage of therapy, just as Paivio and Nieuwenhuis (2001) suggested.

The findings of the current study are similar to results found from the pilot application of the NEPCS 1.0 to a complex trauma EFTT sample (Carpenter et al., 2016). Carpenter found that unchanged clients in EFTT expressed a significantly higher proportion of Unstoried Emotion overall compared to recovered clients. Furthermore, a 35% variance in proportion of Unstoried Emotion was attributed to therapeutic outcome status. This finding makes sense, as emotion dysregulation is a common disturbance among trauma survivors.

Interestingly, Bryntwick (2016) did not find a significant outcome effect or stage by outcome effect for Unstoried Emotion in an EFTT sample, though unchanged clients evidenced a higher proportion of Unstoried Emotion across all stages of therapy in comparison to recovered clients. A possible explanation for the absence of significant findings in Bryntwick's study could be the unbalanced ratio of clients in the EE versus IC condition in her sample. Specifically, Bryntwick's sample consisted of nine clients in the EE condition and three clients in the IC condition. Thus, it is possible that there was a limited occurrence of Unstoried Emotion in Bryntwick's sample overall, as the majority of the clients in her sample engaged in the less emotionally evocative EE intervention. In support of this explanation, a closer look at the descriptive results in the current study revealed that the modal percentage of engagement in Unstoried Emotion was 10.1% (unchanged IC clients, early stage of therapy), whereas the modal percentage of engagement in Unstoried Emotion for Bryntwick's study was 5% (unchanged clients, late stage of therapy). Furthermore, the occurrence of Unstoried Emotion in a depressed and GAD sample were low as well (1.2% and 2.1% total, respectively), when compared to unchanged clients (1.6% and 3.1%, respectively; Boritz et al., 2014; Macaulay, 2014). Taken together, this suggests that the presence of Unstoried Emotion may be a key marker of emotion dysregulation in a complex trauma population.

No significant differences were found between EFTT-IC and EFTT-EE for the remaining individual NEPCS Problem Markers including Same Old Storytelling, and Empty Storytelling. The lack of significant findings may suggest that clients in EFTT-IC and EFTT-EE are similar in the expression of these markers overall, and when stage and treatment outcome are considered.

NEPCS Transition Markers: EFTT-IC vs EFTT-EE

A negative binomial model was employed to determine whether clients in the IC condition and clients in the EE condition significantly differed in the overall proportion and proportion by stage of therapy for individual NEPCS Transition Markers and the NEPCS Transition Marker subgroup. NEPCS Transition Markers are identified by client's demonstration of heightened reflectivity, the expression of differentiated emotional responses, and narration of more specific, exploratory personal stories. Transition Markers represent movement towards greater narrative and emotion integration, and are characterized by the expression of emerging bodily felt experience; significant episodic memories; emerging alternative or conflicting action tendencies and views of the self; and reflection on important intra- or inter-personal patterns and themes. Transition Markers consist of Reflective Storytelling, Experiential Storytelling, Competing Plotlines Storytelling, and Inchoate Storytelling (See Table 2).

In terms of the Transition Marker subgroup, after Holm's Sequential adjustment for multiple comparisons, no significant difference was found between the IC (21.7%) and EE (28.6%) condition for the Transition Marker subgroup overall. However, there was a marginally significant higher overall proportion of the Transition Marker subgroup at the middle stage of therapy for clients in the IC condition (34.8%) versus clients in the EE condition (22.1%).

Furthermore, when treatment outcome was considered results revealed no significant difference in the proportion of individual NEPCS Transition Markers for IC clients. However,

recovered clients in the EE condition compared to the unchanged EE clients articulated a significantly higher proportion of Inchoate Storytelling at the middle stage of therapy (7.0% vs. 0%) and late stage (marginally significant) of therapy (3.8% vs. 0%; Figure 6). Descriptively, recovered clients in EE expressed Inchoate Storytelling approximately 20 times more than unchanged clients overall. Whereas, unchanged IC clients expressed Inchoate Storytelling approximately 1.2 times more than recovered IC clients. These finding are surprising given narrative-emotion process theory and previous empirical findings that Transition Markers, including Inchoate Storytelling, are associated with recovery (Angus et al., 2017; Boritz et al., 2014; Bryntwick, 2016; Macaulay, 2014).

Discussion of NEPCS transition marker findings: EFTT-IC vs. EFTT-EE. The Transition Marker subgroup is a cluster of markers that capture movement towards narrative-emotion integration. The client is engaged in the process of turning inward, accessing and articulating internal experiences through a reflective process in the presence of moderate emotional arousal. It has been suggested that the evocation of emotional arousal activates a client's maladaptive emotion scheme, consisting of affect, emotions, bodily sensations, images, thoughts, and beliefs, thus making these facets of the client's experience available to be accessed, explored and reflected upon (Greenberg & Malcolm, 2002; Greenberg, Rice & Elliot 1993; Paivio & Greenberg 1997). As the IC intervention is designed to evoke greater emotional arousal and emotion-focused meaning-making, it makes sense that IC clients would be more likely to engage in Transition Marker storytelling as opposed to clients in the EE condition. Ralston's (2006) finding supports this explanation because clients in the IC condition had consistently higher peak emotional arousal over the course of treatment and higher modal emotional arousal at the early stage of therapy compared to client in the EE condition. In

addition, IC clients evinced higher ratings of engagement from the early to middle stage of therapy, as well as brief moments of peak experiencing at the late stage of therapy compared to EE clients. As discussed above, moderate emotional arousal, moderate to high engagement with material, and moderate to high experiencing levels are characteristics of the NEPCS Transition Marker subgroup, and are consistent with current findings.

The stage by outcome effect for Inchoate Storytelling for EFTT-EE clients was not surprising, as the middle stage of EFTT therapy focuses on reducing fear and shame and resolving attachment injuries with the perpetrator of abuse. The treatment focus at this stage of therapy is likely to activate emotional arousal, verbal symbolization of internal experience, and higher experiencing, which can be captured by the Transition Marker subgroup and Inchoate Storytelling in particular. In addition, Inchoate Storytelling is considered to be a fundamental process in trauma resolution (Bryntwick, 2016). Trauma memories associated with traumatic experiences are often vague, overgeneral, and incoherent (van der Kolk et al., 2003) resulting in disjointed narratives. Researchers have found that increased narrative coherence, namely a sense of continuity and meaning, is associated with trauma resolution (Pennebaker, 1997; Tuval-Maschiac et al., 2004). Specifically, the ability to become aware of, reflect on and symbolize emotional responses is believed to create a reflective working distance from affective experience, which promotes self-regulation and meaning-making capacities (Bryntwick, 2016; Paivio & Pascual-Leone, 2010). Thus, it is understandable that Inchoate Storytelling would be associated with recovered outcome status. In addition, it is not surprising that there was a higher proportion of Inchoate Storytelling in the middle and late stage of therapy as recovered clients move towards their internal experience, and into the lived story of their trauma to engage in Inchoate Storytelling (Bryntwick, 2016; Damassio, 1999). Supporting the stage by outcome findings, the

study on experiencing by Goldman and colleagues (2005) with a sample that received experiential treatment for depression, found that the depth of experiencing in the second half of treatment independently predicted improvement at treatment termination. These researchers postulate that therapeutic processes that promotes an internal focus, orient clients to emotionally experience problems, make new-meaning of their experience, and can lead to an increase in self-esteem. The use of Inchoate Storytelling, which is characterized by a higher levels of experiencing, may differentiate between recovered and unchanged clients in EFTT-EE due to the productive processes identified by Goldman and colleagues in the middle and late stage of treatment.

It was perplexing, however, that this stage by outcome effect was found only for clients in the EE condition rather than the IC condition, especially since clients in the IC condition had a higher proportion of the Transition Marker subgroup overall when compared to the EE group. Moreover, this finding is in contrast to the understanding that higher emotional arousal evoked by the IC intervention would facilitate greater articulation of Transition Markers, especially markers such as Inchoate Storytelling which capture the act of re-processing and making sense of internal experience, a crucial process in trauma recovery. However, a closer look at the Inchoate Storytelling descriptive results provide a more nuanced explanation for this finding.

It appears that both recovered and unchanged IC clients express relatively similar proportions of Inchoate Storytelling (3.4% vs. 4.3% respectively), thus perhaps precluding the detection of a significant difference perhaps. In contrast, there appears to be a relatively large difference in proportion of Inchoate Storytelling for recovered and unchanged EE clients (5.9% vs. 0.3%), thus leading to a significant difference. Ralston (2006) also found that emotional arousal was only associated with outcome for clients in the EE condition. She suggested that the

level of arousal in EE may make a notable contribution to recovery from trauma among EE clients. Furthermore, clients in the EE condition had higher ratings of engagement measured by the PSQ (Paivio et al., 2010) in the early phase of therapy compared to IC, and had a trend for higher engagement across the middle and late stage of therapy. Ralston believes these findings can be explained by the less stressful nature of the EE intervention, which may facilitate increased engagement and reprocessing of trauma material.

Taken together, these findings suggest differential pathways of change for the IC and EE condition. Perhaps the presence of Inchoate Storytelling for both recovered and unchanged IC clients is not a defining occurrence due to the emotionally evocative nature of the IC intervention. As stated previously, the EE intervention is not designed to evoke high emotional arousal, and so perhaps the presence of Inchoate Storytelling among clients in the EE condition may be a potent marker that distinguishes clients who demonstrate moderate emotional arousal, moderate experiencing and are engaged in productive therapeutic process, compared to clients who predominantly engaged in more distanced, unproductive narrative-emotion process. It may be the case that EFTT clients in the EE condition felt safer to turn inward, and explore their internal experience through Inchoate Storytelling due to the gentler EE procedure that may be more conducive for self-reflection, compared to the heightened state of arousal evoked by IC. This is supported by the current finding that recovered clients in IC spent an average of 3.5% of therapy in Inchoate Storytelling, while recovered clients in EE spent an average of 5.9% of therapy in Inchoate Storytelling overall.

Previous applications of the NEPCS also supported the current findings. Boritz and colleagues (2014) found that within a depressed sample, recovered EFT clients evinced a significantly higher proportion of Inchoate Storytelling overall. Boritz suggested that the

presence of Inchoate Storytelling may indicate a willingness and ability to access, explore, and symbolize emerging internal experiences as new-meaning is constructed. Pascual-Leone and colleagues (2016) noted that the construction of new meaning making is an evocative process that can elicit increased arousal. A micro-examination of the moment-by-moment emotional arousal pattern in his study observed brief periods of increased emotional arousal, which the authors interpreted as reflecting moments in which the participant is engaged with the personally evocative content and generating new meaning.

No significant findings were found for the remaining individual NEPCS Transition Markers including Reflective Storytelling, Experiential Storytelling, and Competing Plotlines Storytelling. The lack of significant findings may suggest that clients in EFTT-IC and EFTT-EE are similar in the expression of these markers overall, and when stage and treatment outcome are considered.

NEPCS Change Markers: EFTT-IC vs. EFTT-EE

A negative binomial model was employed to determine whether clients in the IC condition and clients in the EE condition significantly differed in the overall proportion and proportion by stage of therapy for individual NEPCS Change Markers and the NEPCS Change Marker subgroup. Change Markers are identified by descriptions of actual adaptive change, reports of new emotional or cognitive responses and action tendencies, or the emergence of a more coherent, adaptive understanding of the self and relationships (Angus et al., 2017). Change Markers indicate the occurrence of change in action, evident through the articulation of new understanding, meaning, and action tendencies. The two Change Markers within the NEPCS consist of Unexpected Outcome Storytelling and Discovery Storytelling.

There was no significant difference in the proportion of the Change Marker subgroup between EFTT-IC and EFTT-EE overall, by stage or by treatment outcome. However, there appeared to be a differential pattern in the expression of Unexpected Outcome Storytelling and Discovery Storytelling between the IC and EE condition. First, in regard to the clients in the IC condition, there was a marginally significant higher proportion of Unexpected Outcome Storytelling at the middle stage of therapy for recovered clients in the IC condition (5.4%) compared to unchanged clients in the IC condition (1.4%; Figure 8). Unexpected Outcome Storytelling refers to a client's narrative of a new, concrete change in action accompanied by a positive emotion. It seemed that recovered clients within the IC condition exhibited concrete changes in their day-to-day ways of thinking, feeling, and behaving earlier on in the course of therapy (middle stage) than recovered clients in the EE condition, who exhibited these changes in the late stage of therapy. In regard to Discovery Storytelling, there was a significantly higher proportion of Discovery Storytelling at the late stage of therapy for recovered IC clients (10.2%) compared to unchanged IC clients (2.0%; Figure 11). Discovery Storytelling refers to a clients articulation of a new understanding of the self, others, or events. In summary, clients in the IC condition expressed more concrete changes outside of session (Unexpected Outcome Storytelling) before they arrive at a new understanding of the self, others or events in the late stage of treatment (Discovery Storytelling).

In contrast, recovered EFTT-EE clients had a marginally significant higher proportion of Unexpected Outcome Storytelling at the late stage of therapy (9.5%) versus unchanged EE clients (2.7%; Figure 9). In regard to the Discovery Storytelling Change Marker, there was a significantly higher proportion of Discovery Storytelling for recovered clients in the EE condition when compared to unchanged clients in the EE condition at the middle (5.9% vs. 0%)

and late (10.1% vs. 0.7%; Figure 10) stage of therapy. Once again there appeared to be a differential pattern of recovery for clients in the IC condition compared to the EE condition. In contrast to EFTT-IC, clients in EFTT-EE appeared to express new understandings of the self, others, the world, and events earlier than clients in the IC condition and sustain articulation of new views of self towards the late stage of therapy. This was then followed by expression of new ways of being in the world for EE clients outside of therapy sessions at the late stage of treatment.

  Discussion of NEPCS change marker findings: EFTT-IC vs. EFTT-EE. The distinct pattern between Unexpected Outcome Storytelling and Discovery Storytelling between the two conditions perhaps can be explained by the different intervention approaches used by therapists in the IC and EE intervention and the phenomenon of Corrective Emotional Experiences. Paivio and Nieuwenhuis (2001) stated that EFTT provides a corrective interpersonal experience with the therapist and fosters reprocessing of specific interpersonal sources of disturbance. A Corrective Emotional Experience, as defined by Alexander and French (1946), is to "re-expose a patient, under more favourable circumstances, to emotional situations which he could not handle in the past. The patient, in order to be helped, must undergo a corrective emotional experience suitable to repair the traumatic influence of previous experiences." Though both the IC and EE intervention have a similar model of resolution, the nature of the IC intervention itself may more quickly evoke a Corrective Emotional Experience as the client is directly confronting the imagined perpetrator of abuse or neglect in order to resolve the traumatic experience. It is possible that the powerful, potent, and emotionally evocative IC intervention facilitates Corrective Emotional Experiences that may quickly propel change outside of session.

Lane, Ryan, Nadel and Greenberg (2015) believe that Corrective Emotional Experiences may be a critical moment in which an autobiographical episode has the potential to modify underlying semantic structures and associated emotional responses. They state that Corrective Emotional Experiences increase the likelihood that similar situations that occur outside of therapy may be interpreted and responded to differently by the client than old ways of being (Unexpected Outcome Storytelling). A primary EFTT task is accessing maladaptive aspects of the memory system and previously inhibited adaptive emotional responses to promote new meaning construction for a new understanding of the self, others and the world (Paivio & Shimp, 1998; Paivio et al., 2001). As stated, the IC intervention quickly evokes painful emotions and autobiographical memories related to the trauma, and thus may more quickly lead to a Corrective Emotional Experience and change outside of session earlier than EFTT-EE. These changes may be captured as Unexpected Outcome Storytelling in the middle phase of therapy followed by the processing of these changes and integration with the self later in therapy (Discovery Storytelling). Research has supported the relationship between the use of the gestalt-derived, empty chair exercise and the development of new meaning-making. As noted earlier, Malcolm and Greenberg (2002) found that clients with a history of childhood maltreatment who engaged in an empty chair dialogue similar to IC, experienced a shift in the view of others and affirmations of the self. This finding provides support for the expression of Discovery Storytelling for clients in the EFTT-IC condition. In addition, a task analytic study that examined EFT with empty chair for resolving interpersonal issues (Greenberg & Foerster, 1996) revealed that resolvers experienced new views of self and others compared to clients who remained unresolved at treatment termination.

Furthermore, Corrective Emotional Experiences also occur with the therapist, when the client experiences the therapist responding in a different way than expected (Lane et al., 2015). Perhaps Corrective Emotional Experiences occur as the EFTT-EE therapist empathically responds to a client's memories, thoughts and feelings related to the trauma, which may be different from how others in the client's life had responded to his/her trauma-related disclosures (e.g. denying, minimizing). Due to the gentler approach taken by EE, it is possible that the Corrective Emotional Experiences are slower to develop than IC and occur later in therapy. The higher proportion of Unexpected Outcome Storytelling in the late stage of therapy for EE clients may reflect the "delayed" development of a Corrective Emotional Experience compared to IC clients. The use of empathic responding in EE may encourage a sustained, deeper processing mode of internal experience, which could foster the development of new understandings of the self, others and the world earlier than the IC intervention, which may explain the higher proportion of Discovery Storytelling in the middle and late stage of treatment. Corroborating this theory, a study conducted by Levitt, Butler and Hill (2006) on client's self-reported significant experiences in treatment, revealed that therapists questioning, paraphrasing, and reflecting, guided clients in self-discovery as it promoted a self-reflexive process of inquiry. Clients noted that these interventions reformulated problems and connected issues for heightened self-awareness. As such, perhaps the reliance on empathic reflection in the EE condition encouraged self-reflection and new understandings, which were captured as Discovery Storytelling earlier in therapy (middle stage of treatment) than clients in the IC condition.

The significance of emotional processing and new, adaptive meaning-making of trauma towards a more nuanced understanding of the events (Discovery Storytelling) was evident in a study by Margola, Facchin, Molgora, and Revenson (2010). This study examined the written

narratives of students who experienced the sudden suicide of a classmate. Students who remained distressed at four months post-study demonstrated incomplete cognitive and emotional processing of the trauma, evident by a lack of reference to the deceased student, which suggests emotional inhibition. However, students who exhibited low distress at the four-month follow-up evidenced a more nuanced understanding of the events, demonstrated by a greater ability to explicitly refer to the death and confront their emotional response. This group also demonstrated evidence of insight, causation and movement towards integrating the events into their worldview, which together suggest an attempt to make new-meaning of the emotional experience and integrate their experience into their worldview. This study suggests that recovery from a traumatic event involves new-meaning making to facilitate the construction of a coherent, integrated narrative of the events that are reflected by Discovery Storytelling.

The findings for Discovery Storytelling in the current study are aligned with previous research with the NEPCS. Bryntwick (2016) found that recovered clients expressed a significantly higher proportion of Discovery Storytelling at the middle stage of therapy compared to unchanged clients in an EFTT complex trauma sample. As mentioned, Bryntwick's sample consisted of more EE clients (nine clients) than IC clients (three clients), and thus this particular pattern in the stage by outcome interaction is similar to the pattern found among the recovered EE clients in the current study. The association between recovered outcome status and Discovery Storytelling is similar to other clinical population as well. Boritz and colleagues (2014) found that in a depressed sample, recovered clients had a higher overall proportion of Discovery Storytelling. While Macaulay (2014) found that recovered clients in a GAD sample had a significantly higher proportion of Discovery Storytelling at the late stage of therapy than unchanged clients.

Surprisingly, Bryntwick (2016) did not find statistically significant results for Unexpected Outcome Storytelling in an EFTT sample, which was unexpected given that previous research with the NEPCS has consistently found an association between Unexpected Outcome Storytelling and recovery. Specifically, Boritz and colleagues (2014) and Macaulay (2014) found that recovered clients had a significantly higher overall proportion of Unexpected Outcome Storytelling in a depressed sample and GAD sample. Despite Bryntwick's (2016) lack of significant findings for Unexpected Outcome Storytelling, the descriptive statistics were in the expected direction and were also similar to the results of the current study. Specifically, there was a 17-fold increase in Unexpected Outcome Storytelling from the early to middle stage of therapy for the recovered clients, and a three-fold increase from the middle to late stage. Bryntwick made sense of the lack of significance by suggesting that trauma-focused therapies emphasize processing and making-sense of the traumatic events, rather than encouraging concrete changes in cognitive, behavioural, and emotional functioning, like a CBT-oriented approach may emphasize. In contrast to Bryntwick's speculation, the current finding that Unexpected Outcome Storytelling is associated with recovery in both IC and EE clients suggested that concrete changes are important and evident in EFTT as well. However, these changes may occur at different stages of therapy between the IC and EE clients.

Taken together, it appears that clients in the IC condition reported changes in their daily life earlier in therapy (Unexpected Outcome Storytelling at middle stage of therapy) before translating and integrating these changes into a new view and understanding of the self evidenced by a higher proportion of Discovery Storytelling in the late stage of therapy. Whereas, the path to recovery for EE clients involved changes in the view of self at the middle stage of therapy (Discovery Storytelling), followed by reported change in the clients' day-to-day life in

the late stage of therapy (Unexpected Outcome Storytelling) along with continued expressions of the new view of self (Discovery Storytelling). Bryntwick (2016) suggested that the higher proportion of Discovery Storytelling at the middle phase of therapy indicate that the seeds of change may have been planted early in therapy and change takes root and comes to life for clients toward a recovered trajectory path by the late stage of therapy. This may be the case for clients in the EE condition. However, among clients in the IC condition, the presence of Unexpected Outcome Storytelling at the middle stage of therapy may be an indicator of a newly emerging understanding of the self, others, and/or the traumatic events.

The increase in Unexpected Outcome Storytelling and Discovery Storytelling in both recovered IC and EE clients at the middle and late stage of therapy, is aligned with the narrative-emotion process model and theory postulated by Angus and Greenberg (2011). These authors suggest that successful therapy is a process that involves clients coming to know and understand their own lived stories, articulating their lived experience as told stories, and consequently changing their life narrative. Angus and Greenberg (2011) identified a five-step process for narrative and emotion integration for productive change in psychotherapy, which begins with the awareness and contextualization of emotion and works toward new self-identity reconstruction. The process of successfully attending to, symbolizing and providing a coherent narrative to emotion, facilitates shifts in emotional processing and the construction of a new sense of self, or ways of viewing the self and others by treatment termination (Angus & Greenberg, 2011). This process was evident in the recovered IC and EE EFTT clients, though the path towards the development of a new sense of self and others differ between these two conditions. In addition, Paivio and Pascual-Leone (2010) state that successful treatment involves attending to and exploring a client's positive experiences, which may include his/her past and present

accomplishments, successes, and pleasures inside and outside of therapy. These researchers argue that a focus on the client's positive feelings are important targets that deepen experience, contribute to increased self-awareness and self-development, which may be captured as Discovery Stories and Unexpected Outcome Stories. Therapists who are attuned to these markers may help clients, elaborate and differentiate these stories further within session.

No client marker: EFTT-IC vs. EFTT-EE

A negative binomial model was employed to determine whether clients in the IC condition and clients in the EE condition significantly differed in the overall proportion and proportion by stage of therapy for No Client Marker. No Client Marker is identified when the therapist engages in more than 40 seconds of the therapy minute (e.g. psychoeducation, setting-up role-play intervention), or if content discussed is unrelated to the presenting issue (e.g. scheduling next appointment).

First, in regard to EFTT-IC clients, there was a higher overall proportion of No Client Marker for clients in the IC condition (16.8%) compared to clients in the EE condition (10.2%; Figure 12). In addition, there was a significant stage by outcome interaction at the middle and late stage of therapy. Specifically, there was a significantly higher proportion of No Client Marker at the middle stage of therapy (17.2%), as well as at the late stage of therapy (marginally significant) for clients in the IC condition (18.0%) compared to clients in the EE condition (9.2% and 11.7% respectively; Figure 13).

However, when comparing recovered and unchanged clients, recovered EE clients had a marginally significant higher proportion of No Client Marker at the middle (15.8% vs. 5.3%) and late stage of therapy (22.4% vs. 7.1%) than unchanged EE clients (Figure 14). There was no significant difference between outcome status and stage of therapy for the IC clients (Figure 15).

Discussion of no client marker findings: EFTT-IC vs. EFTT-EE. EFTT clients in the
IC condition evidenced higher proportions of No Client Marker (NCM) codes overall, and an
increase in the proportion of this marker at the middle and late stage of therapy. However, the
association between outcome status and proportion of NCM was only evident for EE clients.
Together, this suggested a differential route to recovery for IC and EE clients. Though clients in
the IC condition evidenced a higher proportion of NCM overall and at the middle and late stage
of therapy compared to EE clients, it is the higher proportion of NCM at the middle and late
stage of therapy for EE clients that was associated with trauma recovery.

The high proportion of NCM for the IC clients could be explained by the nature of the IC
intervention itself, which is employed more frequently in the middle and late stage of therapy.
The IC intervention is a more structured, role-play intervention that requires the therapist to
reflect the marker for chair-work to the client, provide rationale to engage in chair-work, direct
the client to move between the chairs, and provide psycho-education and empathic reflections to
help client regulate their emotions, and facilitate productive process in IC. This process-directive
intervention thus may lead IC therapists to speak more in session than EE therapists.
Consequently, the nature of the IC intervention itself may evoke more therapist talk, and thus
may not discriminate between recovered and unchanged IC clients who both engage in the task.
In contrast, the high proportions of NCM in the EE intervention for recovered clients at the
middle and late stage of therapy, may suggest that EE therapists for recovered clients spend more
time engaging in empathic reflections and conjectures and highlighting "change talk," which
elicit the articulation of a clients desire, ability, reasons and need for change (Hettema, Steele,
Miller, 2005). Paivio and Pascual-Leone (2010) posit that a fundamental task of an EFTT
therapist is to facilitate a reflective inquiry regarding the meaning of a client's emotional

experience, in addition to establishing a good therapeutic alliance, and helping to modulate access, explore, differentiate and regulate emotion in EFTT sessions. This appears to be especially true for clients in the EE condition. Due to the differing results across the IC and EE condition, future research could closely examine how NCM differ qualitatively between these two conditions.

The finding that No Client Marker was associated with recovery from trauma is aligned with findings from previous applications of the NEPCS to other clinical populations. For instance, recovered clients who received client centered therapy, EFT, and cognitive therapy for depression had a slightly higher (non significant) proportion of NCM at the middle (14.8%) and late (20.1%) stage of therapy, compared to unchanged clients (12.7% and 18.7%, respectively). In addition, a consistent proportion of NCM (30% to 33%) was evidenced across early, middle and late stage sessions for unchanged GAD clients, whereas Macaulay (2014) reported an increasing proportion of NCM from early (13.7%), to middle (25.7%), and late (20%) stage sessions of clients who recovered from GAD. Thus, it appears that modulating therapist talk tailored to clients' moment-to-moment processing may be important for recovery, rather than consistent therapist talk as seen with the unchanged GAD sample. Perhaps the presence of NCM facilitates trauma recovery when it is responsive and sensitive to client expression, evident by the stage by outcome interaction in the current study. Future research will have to explore this relationship further.

Previous research has found that content of therapist talk plays an important role in client's treatment outcome and ratings of the therapeutic alliance. A study by Truax (1970) found a positive relationship between the proportion of therapist talk, therapist empathy, and patient outcome. Moreover, a study by Nakash, Nagar, and Kanat-Maymon (2015) found that clients

rated the alliance higher among therapists that discussed more personal history and sociocultural background than purely diagnostic symptoms during an intake interview. A study by Hills and colleagues (1988) compared a taxonomy of therapist responses, and client and therapists ratings of helpfulness and client experiencing scale ratings. Results of this study revealed that various therapist responses elicited varying client reports of helpfulness and client experiencing. For example, therapist's paraphrasing was rated as moderately helpful by clients and elicited moderate client experiencing, whereas therapist's posing open questions was rated low by clients in terms of helpfulness, but led to a high increase in client experiencing. Together these studies suggest that therapist talk within session is crucial to modulating the therapeutic alliance, client experiencing, and subsequently therapy outcome. It may have been the case that the EFTT therapists of recovered EE clients were using reflection, paraphrasing, and conjecture during NCM moments to strengthen change-related talk or psychoeducation to reduce anxiety and regulate emotion. Thus, future research could take a closer examination at what occurs during No Client Marker in order to further understand how therapist talk contributes to trauma recovery.

Conclusion

The purpose of the current study was to examine the differential narrative-emotion processes found within EFTT employing two versions of a re-experiencing intervention: Imaginal Confrontation (IC) and Empathic Exploration (EE). This goal was addressed by applying the NEPCS 2.0 to an extended EFTT sample (Bryntwick, 2016; Paivio & Pascual-Leone, 2010) of recovered and unchanged clients who received either EFTT with IC or EFTT with EE. The NEPCS markers and marker subgroups were present in both recovered and unchanged EE and IC clients. This suggested that the narrative-emotion processes captured by

the NEPCS are present in an EFTT for complex trauma sample, thus providing further support for the pan-theoretical, trans-diagnostic utility of the NEPCS as a research and clinical tool. Moreover, the results of the current study provide a more nuanced understanding of narrative-emotion processes occurring within an IC and EE EFTT sample.

In terms of the Problem Markers, results revealed that IC clients had a lower overall proportion of the Problem Marker subgroup and engaged in less Superficial Storytelling overall and at the middle stage of therapy compared to the EE clients. Conversely, it appeared EE clients tend to engage more in Problem Markers overall and Superficial Storytelling in particular. However, when treatment outcome was considered, unchanged IC clients had a higher proportion of Unstoried Emotion at the early and middle stage of therapy compared to recovered IC clients.

The finding for the Problem Marker subgroup and Superficial Storytelling is likely due to the challenge EFTT-EE therapist's face with deepening client emotional experience through the use of empathic reflections alone, as opposed to IC therapists who can utilize the chair as a stimulus to quickly evoke emotional arousal. Though Superficial Storytelling is a marker of unproductive process in other clinical populations (Boritz et al., 2014), this marker may serve as a helpful emotion regulation process for EFTT complex trauma clients in the EE condition when used in moderation. Furthermore, results of the study highlighted the importance of monitoring client's emotional arousal when engaged in EFTT with IC intervention, as this approach may risk the production of Unstoried Emotion, which was associated with poor outcome in the current study. As such, perhaps EFTT-IC therapists should monitor for Unstoried Emotion, and bolster emotion regulation capacities through encouraging symbolization of a client's internal

experience and emotional state, and move a client towards a more productive therapeutic process promoting trauma recovery.

In regard to the Transition Marker Subgroup, IC clients had a higher proportion of the Transition Marker subgroup overall and at the middle stage of therapy compared to EE clients. Which subsequently demonstrated that EE clients had a lower proportion of the Transition Marker subgroup overall and at the middle stage of treatment. In contrast, recovered EE clients engaged in more Inchoate Storytelling telling compared to unchanged EE clients at the middle and late stage of therapy. This finding revealed that EFTT-IC may facilitate the production of Transition Markers perhaps due to the activation of emotion schemes and emotional arousal using the intensive re-experiencing IC intervention. Surprisingly, it appears that only Inchoate Storytelling for EE clients was predictive of outcome. The occurrence of Inchoate Storytelling in EE might be a potent, productive therapeutic process differentiating recovered versus unchanged EFTT-EE clients perhaps due to the higher levels of experiencing, engagement and emotional arousal that is captured within this marker. Therefore, it may be especially beneficial for EFTT-EE therapists to encourage engagement in Inchoate Storytelling to promote positive outcome.

In terms of Change Markers, recovered IC clients articulated more Unexpected Outcome Stories at the middle stage of therapy and more Discovery Storytelling at the late stage of therapy compared to unchanged IC clients. In contrast, recovered EE clients articulated more Discovery Storytelling at the middle and late stage of therapy, in addition to a higher proportion of Unexpected Outcome Storytelling at the late stage of therapy compared to unchanged EE clients. Though both EFTT-IC and EFTT-EE evoke both Change Markers, it appears that these markers emerge at differing times over the course of treatment. EFTT-IC and EFTT-EE therapists may need to be sensitive to Corrective Emotional Experiences that can emerge in the context of client

engagement in memory work using the chair (IC) or with the therapist (EE), as these experiences may be translated within the session as Discovery Storytelling and outside of session as Unexpected Outcome Storytelling. Perhaps EFTT therapists can be attuned to narrative-emotion indicators of Change Markers, and highlight, elaborate, and differentiate these changes when they occur, especially in the middle and late stage of treatment. Furthermore, for enhanced client outcomes, EFTT can facilitate the elaboration of change markers while taking into consideration the intervention the client is receiving (IC vs. EE) as well as the stage of therapy. For instance, EFTT therapists who are primarily engaging their client in IC, may need to listen for the emergence of Unexpected Outcome Storytelling by the middle stage of treatment and encourage reflection on these markers which may in turn generate new views of the self, others and the world, captured as Discovery Stories. While the occurrence of Discovery Storytelling at the middle stage of therapy for an EE client could be highlighted and elaborated to facilitate the emergence of Unexpected Outcome Storytelling and continued Discovery Storytelling at the late stage of therapy.

Lastly, IC clients had a higher overall proportion of No Client Marker overall and at the middle and late stage of therapy compared to the EE clients. This conversely reveals that EE clients had a lower proportion of No Client Marker overall and at the middle and late stage of treatment. However, when treatment outcome was considered, recovered EE clients had a higher proportion of No Client Marker at the middle and late stage of therapy compared to unchanged EE clients.

It was not surprising that EFT-IC had a higher proportion of NCM overall and at the middle and late stage of treatment, as the intervention itself requires therapists' process-directive engagement in session (e.g. provide rationale for IC, facilitate movement between chairs). What

was notable was that No Client Marker at the middle and late stage of treatment distinguished between recovered and unchanged clients for EFTT- EE only. A closer look at what occurs during NCM in the EE condition will further delineate how therapists can facilitate productive process with therapist talk. Perhaps it was the extensive use of empathic reflections, conjectures, and psychoeducation that facilitated productive process in EE clients.

In summary, results from the current study suggest that it might be helpful for EFTT therapists to be cognizant of the unique narrative-emotion process pathways to recovery when primarily employing either the IC or EE intervention in EFTT. Taken together, these results provide a nuanced and specific narrative-emotion process diagnostic map for EFTT therapists that employ the IC and EE intervention in treatment. Furthermore, the results suggest that EFTT-IC and EFTT-EE demonstrate some differences in regard to narrative-emotion processing overall and over the course of therapy. Moreover, the results of the current study contributed to the understanding of the differing narrative-emotion pathways toward recovery from complex trauma in EFTT using two versions of a re-experiencing procedure: IC and EE.

Limitations

While the current study expanded on the sample size of previous applications of the NEPCS to an EFTT sample (Bryntwick, 2016; Carpenter, 2012), it was still relatively small (n=16) and may have precluded the detection of significant findings due to low power and also limit the generalizability of the findings to a larger EFTT sample. Conversely, due to the small sample size, one or a few clients (i.e. outliers) who articulated a preponderance of specific markers may have influenced some findings, as opposed to being reflective of the sample as a whole. Furthermore, the NEPCS 2.0 was applied to a subset of sessions for each client in the current sample (i.e., two early, two middle, and two late stage therapy sessions). Thus, not all

narrative-emotion process markers occurring during a client's course of therapy were coded in the current study. In addition, the frequency of the IC and EE intervention in the full RCT sample was identified by Paivio and colleagues (2010), however, the frequency of IC and EE in the subsample for the current study was not identified. Though this study examined the impact of engagement in EFTT-IC and EFTT-EE on the narrative-emotion processes overall, the frequency of these two interventions within this subsample may have provided additional context and may have contributed to the interpretation of the results of the current study. In addition, the coders were not blind to treatment condition and stage of treatment, which may have biased the NEPCS coding process. Another limitation was that the current study did not take into consideration client pretreatment characteristics such as abuse type, PTSD symptom severity, and a personality disorder diagnosis in sample selection, which may have influenced the findings. For instance, Ralston (2006) found that severity of childhood abuse was associated with higher levels of emotional arousal in the IC group and Jongsma (2014) found that pre-treatment PTSD severity was associated with increased emotional arousal in EFTT overall. Perhaps client pretreatment characteristics, such as abuse severity, also influences narrative-emotion integration processes as well, given that emotional arousal is a defining characteristic of several NEPCS markers (e.g. Empty Storytelling characterized by low emotional arousal). This association could be an important research question or variable to control for future studies. Furthermore, the current sample was not identical to the larger RCT sample from which the data was drawn. For instance, there was a higher rate of PTSD in the current sample and the majority of clients had a lower salary than the RCT sample. As such, this limits the generalizability of the findings to the larger EFTT RCT sample. Next, as the NEPCS was only applied to EFTT-IC and EFTT-EE, the findings from this study cannot be generalized to other trauma-focused approaches such as

Cognitive Processing Therapy. In regard to therapists, in the current sample therapists were not matched in regard to the IC and EE condition. For instance, three therapists had clients in the IC condition only, whereas three therapists had clients in both conditions. As such, the influence of therapists is an uncontrolled variance. This may be a limitation given the finding that No Client Marker differs between the IC and EE condition and can influence treatment outcome. Lastly, the therapists in the RCT study (Paivio et al., 2010) were assigned clients in both the IC and EE condition. This may raise allegiance effects, as a therapist's potential bias towards a particular intervention could influence his/her skill and adherence to the interventions within IC versus EE. However, adherence to EFT and competence in IC and EE were measures in the current study and therapists demonstrated high to moderate levels of adherence and competence respectively.

Future Directions

The results from the current study not only expanded on the literature and understanding of narrative-emotion processes in trauma recovery, but also identifies areas for future research directions. Specifically, the NEPCS was applied to a subset of the larger RCT dataset (Paivio et al., 2010; sample of 16 EFTT clients). To take full advantage of the dataset available, future research can apply the NEPCS to a larger sample size or the complete dataset for enhanced generalizability of findings, which may also facilitate the detection of significant findings. Future research can also apply the NEPCS to all session of a client in order to provide a more continuous, rich, and comprehensive understanding of the narrative-emotion processes associated with complex trauma in an EFTT sample. In addition, it would be interesting to examine the same hypotheses in the context of a dimensional range of outcomes rather than categorical (recovered vs. unchanged). Furthermore, the results of the current study, along with previous NEPCS studies within the Angus Narrative-Emotion Marker Lab can be used to inform

clinical practice. A manual can be developed that help guide therapist process-diagnosis and therapist intervention that not only aid in the identification of unproductive narrative-emotion processes, but also facilitate productive narrative-emotion client process for enhanced client outcomes. Future research can undertake a task analysis approach (Greenberg, 2007) to examining therapist interventions facilitating client shifting of NEPCS markers. This will contribute to the existing literature on narrative informed treatment manuals for depression and complex trauma (Angus & Greenberg, 2011; Paivio & Angus, 2017). Additionally, future research can examine client shifting processes among NEPCS markers in recovered and unchanged clients in IC and EE. This future direction will build on the existing shifting research conducted on recovered and unchanged EFTT clients (Bryntwick, 2016).

Furthermore, as a research tool, the NEPCS can be applied to other trauma-focused modalities (e.g. Cognitive Processing Therapy with and without the written trauma account). The NEPCS has been compared theoretically to overlapping research measures examining client narrative-emotion processes (Boritz et al., 2014), such as the Experiencing Scale (Klein et al., 1969) and The Innovative Moments Coding System (Goncalves et al., 2009). Perhaps these measures can be applied along with the NEPCS to videotaped therapy sessions of clients of different clinical populations and modalities, to further understand the unique, and overlapping contributions of the NEPCS compared to these measures. Comparing other narrative psychotherapy process measures to capture related and/or distinct narrative-emotion process can expand the proposed idea further. For instance the NEPCS can be applied to videotaped therapy sessions along with a narrative-based attachment style measure like the Patient Attachment Coding System (Talia, Miller-Bottome, Daniel, 2017). In addition, client pre-treatment characteristics, such as abuse type (e.g. physical, sexual, emotional), PTSD symptom severity,

and personality disorders, have not been considered in sample selection and analysis. Future research could examine how narrative and emotion processes may differ based on client characteristics or control for the influence of pre-treatment characteristic influence for a further nuanced understanding of psychotherapy process and outcome. Lastly, future research could continue to apply the NEPCS to various client populations and modalities (e.g. Borderline Personality Disorder, Dialectical-Behaviour Therapy) for an enhanced and expanded understanding of client narrative-emotion process and further exploration of the NEPCS as a pan-theoretical, trans-diagnostic tool.

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APPENDIX

Impact of Events Scale

On _____ you experienced _____
        (date)   (life event)

Below is a list of comments made by people after stressful life events. Please check each item indicating how frequently these comments were true for you during the past 7 days or other agreed time period. If they did not occur during that time, please mark the "not at all" column.

Frequency

not at all	rarely	sometimes	often
0	1	3	5

   For each question score 0 for "not at all", 1 for "rarely", 3 for "sometimes" and 5 for "often."

a.   I thought about it when I didn't mean to
b.   I avoided letting myself get upset when I thought about it or was reminded of it
c.   I tried to remove it from memory
d.   I had trouble falling asleep or staying asleep, because of pictures or thoughts about it that came into my mind
e.   I had waves of strong feelings about it
f.   I had dreams about it
g.   I stayed away from reminders of it
h.   I felt as if it hadn't happened or it wasn't real
i.   I tried not to talk about it
j.   pictures about it popped into my mind
k.   other things kept making me think about it
l.   I was aware that I still had a lot of feelings about it, but I didn't deal with them
m.   I tried not to think about it
n.   any reminder brought back feelings about it
o.   my feelings about it were kind of numb

Intrusion total comes from adding the scores for questions a, d, e, f, j, k, n; avoidance total from adding scores for questions b, c, g, h, i, l, m, o. Add intrusion and avoidance for the full total.

Intrusion total =   Avoidance total=

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Resolution Scale

Client No: Primary Identified Other:
Date:

Instructions: Here is a list of questions that asks you how you feel now in terms of your unfinished business with the person(s) identified as a focus for therapy at the beginning of treatment.

1. I feel troubled by my persisting unresolved feelings (such as anger, grief, sadness, hurt, resentment) in relation to this person.

1	2	3	4	5
Not at all				Very much

2. I feel frustrated about not having my needs met by this person.

1	2	3	4	5
Not at all				Very much

3. I feel worthwhile in relation to this person.

1	2	3	4	5
Not at all				Very much

4. I see this person negatively.

1	2	3	4	5
Not at all				Very much

5. I feel comfortable about my feelings in relation to this person.

1	2	3	4	5
Not at all				Very much

6. This person's negative view or treatment of me made me feel badly about myself.

1	2	3	4	5
Not at all				Very much

7. I feel okay about not having received what I needed from this person.

1	2	3	4	5
Not at all				Very much

8. I feel unable to let go of my unresolved feelings in relation to this person.

1	2	3	4	5
Not at all				Very much

9. I have a real appreciation of this person's own personal difficulties.

1	2	3	4	5
Not at all				Very much

10. I have come to terms with not getting what I want or need from this person.

1	2	3	4	5
Not at all				Very much

11. I feel accepting towards this person.

1	2	3	4	5
Not at all				Very much

Adapted from: Singh, M. (1994). *Validation of a measure of session outcome in the resolution of unfinished business*. Unpublished doctoral dissertation, York University.